

APPEAL FOR TRUE-UP FOR THE FY 2019-20
&
ANNUAL PERFORMANCE REVIEW FOR THE FY 2020-21
&
REVISED AGGREGATE REVENUE REQUIREMENT FOR FY 2021-
22
&
DETERMINATION OF TARIFF FOR FY 2021-22
TO
ASSAM ELECTRICITY REGULATORY COMMISSION



Prepared by
ASSAM POWER GENERATION CORPORATION LTD
Bijulee Bhawan, Paltanbazar
Guwahati – 781 001

Table of Contents

1. Legal and Regulatory Framework	13
1.1. Background	13
2. Background	17
2.1. Introduction	17
2.2. APGCL Project Summary	18
2.3. Annual accounts.....	18
2.4. True-up of FY 2019-20.....	19
2.5. Regulatory provisions	19
2.6. Installed and Effective Capacity in FY2019-20	19
3. Norms of operations	19
3.1. Regulatory provisions	19
3.2. Snapshot of plant wise performance for FY 2019-20	19
3.3. Normative Annual Plant Availability Factor (NAPAF).....	21
3.4. Normative Annual Plant Load Factor (NAPLF)	24
3.5. Gross Station Heat Rate (SHR)	25
3.6. Auxiliary Energy Consumption	26
4. Fixed Cost of the Plant	28
4.1. Annual fixed cost for FY 2019-20	28
4.2. Return on Equity (ROE)	28
4.3. Interest on Loan Capital	31
4.4. Depreciation.....	32
4.5. Interest on Working Capital	35
4.6. Operation and Maintenance Expenses (O&M Expenses).....	37
4.7. Actual Tax Claim.....	39
4.8. Impact of ROP (Revision of Pay).....	39
4.9. Special R&M.....	40
4.10. Capacity building.....	41
4.11. Non-Tariff income	48
4.12. Total Fixed Cost.....	48
5. Energy Charges.....	52
5.1. Fuel Price and Calorific Value.....	52
5.2. Fuel cost	52
5.3. Incentives	53
6. Summary of submissions for True-up of FY 2019-20.....	55
6.1. Net Annual Revenue Requirement	55
6.2. Summary	60



6.3.	Revenue from sale of power	61
6.4.	Adjustment of Revenue Gap / Surplus.....	61
7.	Revised Capital Investment Plan for FY 2020-21 to FY 2021-22 for NTPS, LTPS and KLHEP.....	64
7.1.	Regulatory provisions	64
8.	Capital Expenditure – Existing Projects.....	65
8.1.	Capital Expenditure Plan of Existing Projects	65
8.2.	Revised Capital Expenditure Plan of Namrup Thermal Power Project	66
8.3.	Revised Capital Expenditure Plan of Lakwa Thermal Power Project	68
8.4.	Revised Capital Expenditure Plan of KLHEP	70
9.	Asset valuation and ERP implementation.....	71
9.1.	Asset valuation.....	71
9.2.	ERP implementation and consultancy	72
10.	SUMMARY OF THE REVISED CAPITAL EXPENDITURE PLAN	73
10.1.	Proposed Capex	73
11.	Present status of NTPS, LTPS, KLHEP and LRPP	77
12.	Annual Performance Review of FY 2020-21	79
12.1.	Regulatory provisions.....	79
13.	Norms of operations	80
13.1.	Regulatory provisions.....	80
13.2.	Installed and Effective Capacity in FY2020-21	80
13.3.	Snapshot of plant wise performance for FY 2020-21	80
13.4.	Normative Annual Plant Availability Factor (NAPAF).....	82
13.5.	Normative Annual Plant Load Factor (NAPLF)	84
13.6.	Gross Station Heat Rate (SHR)	85
13.7.	Auxiliary Energy Consumption	86
14.	Fixed Cost of the Plant	88
14.1.	Annual fixed cost for FY 2020-21	88
14.2.	Return on Equity (ROE)	88
14.3.	Interest on Loan Capital	89
14.4.	Depreciation.....	91
14.5.	Interest on Working Capital	95
14.6.	Operation and Maintenance Expenses (O&M Expenses)	96
14.7.	Impact of AERC (Payment of Fees etc.) Regulations, 2020.....	97
14.8.	Incentives	98
14.9.	Special R&M.....	98
14.10.	Capacity building.....	100
14.11.	Non Tariff Income	100
14.12.	Total Fixed Cost.....	101

15.	Energy Charges.....	104
15.1.	Fuel Price and Calorific Value.....	104
15.2.	Fuel cost	104
16.	Summary of submissions for Annual Performance Review of FY 2020-21.....	107
16.1.	Net Annual Revenue Requirement	107
16.2.	Summary	111
17.	Revised ARR for FY 2021-22	116
17.1.	Regulatory provisions for Revised ARR	116
18.	Norms of operations	117
18.1.	Regulatory provisions.....	117
18.2.	Installed and Effective Capacity in FY2021-22	117
18.3.	Snapshot of performance projection for FY 2021-22	117
18.4.	Normative Annual Plant Availability Factor (NAPAF).....	118
18.5.	Normative Annual Plant Load Factor (NAPLF)	118
18.6.	Gross Station Heat Rate (SHR)	119
18.7.	Auxiliary Energy Consumption.....	119
19.	Fixed Cost of the Plant	120
19.1.	Annual fixed cost for FY 2021-22	120
19.2.	Return on Equity (ROE)	120
19.3.	Interest on Loan Capital	121
19.4.	Depreciation.....	121
19.5.	Interest on Working Capital	123
19.6.	Operation and Maintenance Expenses (O&M Expenses).....	123
19.7.	Impact of AERC (Payment of Fees etc.) Regulations, 2020.....	124
19.8.	Incentives	124
19.9.	Special R&M.....	125
19.10.	Capacity building.....	125
19.11.	Non-Tariff income	126
19.12.	Total Fixed Cost.....	126
20.	Energy Charges.....	127
20.1.	Fuel Price and Calorific Value.....	127
20.2.	Fuel cost	127
21.	Summary of submissions for Revised ARR of FY 2020-21.....	128
21.1.	Summary	128
21.2.	Net Annual Revenue Requirement	129
21.3.	Tariff for NTPS for FY 2021-22	129
22.	Revised ARR for FY 2021-22	133
22.1.	Regulatory provisions for Revised ARR.....	133

23.	Norms of operations	134
23.1.	Regulatory provisions.....	134
23.2.	Installed and Effective Capacity in FY2021-22	134
23.3.	Snapshot of performance projection for FY 2021-22	134
23.4.	Normative Annual Plant Availability Factor (NAPAF).....	135
23.5.	Normative Annual Plant Load Factor (NAPLF)	135
23.6.	Gross Station Heat Rate (SHR)	135
23.7.	Auxiliary Energy Consumption	136
24.	Fixed Cost of the Plant	137
24.1.	Annual fixed cost for FY 2021-22	137
24.2.	Return on Equity (ROE)	137
24.3.	Interest on Loan Capital	138
24.4.	Depreciation.....	138
24.5.	Interest on Working Capital	140
24.6.	Operation and Maintenance Expenses (O&M Expenses).....	141
24.7.	Impact of AERC (Payment of Fees etc.) Regulations, 2020.....	142
24.8.	Incentives	142
24.9.	Special R&M	142
24.10.	Capacity building.....	143
24.11.	Non-Tariff income	144
24.12.	Total Fixed Cost.....	144
25.	Energy Charges.....	146
25.1.	Fuel Price and Calorific Value.....	146
25.2.	Fuel cost	146
26.	Summary of submissions for Revised ARR of FY2021-22.....	147
26.1.	Summary	147
26.2.	Net Annual Revenue Requirement	147
26.3.	Tariff for LTPS for FY 2021-22	148
27.	Revised ARR for FY 2021-22	152
27.1.	Regulatory provisions for Revised ARR.....	152
28.	Norms of operations	153
28.1.	Regulatory provisions.....	153
28.2.	Installed and Effective Capacity in FY2021-22	153
28.3.	Snapshot of performance projection for FY 2021-22	153
28.4.	Normative Annual Plant Availability Factor (NAPAF).....	154
28.5.	Normative Annual Plant Load Factor (NAPLF)	154
28.6.	Auxiliary Energy Consumption.....	154
29.	Fixed Cost of the Plant	155

29.1.	Annual fixed cost for FY 2020-21	155
29.2.	Return on Equity (ROE)	155
29.3.	Interest on Loan Capital	156
29.4.	Depreciation.....	156
29.5.	Interest on Working Capital	158
29.6.	Operation and Maintenance Expenses (O&M Expenses)	158
29.7.	Incentives	159
29.8.	Special R&M	159
29.9.	Capacity building.....	160
29.10.	Non-Tariff income	160
29.11.	Total Fixed Cost.....	161
30.	Summary of submissions for Revised ARR of FY2021-22.....	162
30.1.	Summary	162
30.2.	Net Annual Revenue Requirement	162
30.3.	Tariff for KLHEP for FY 2021-22.....	163
31.	Revised ARR for FY 2021-22	167
32.	Norms of operations	168
32.1.	Regulatory provisions.....	168
32.2.	Installed and Effective Capacity in FY2021-22	168
32.3.	Snapshot of performance projection for FY 2021-22	168
32.4.	Normative Annual Plant Availability Factor (NAPAF).....	169
32.5.	Normative Annual Plant Load Factor (NAPLF)	169
32.6.	Gross Station Heat Rate (SHR)	169
32.7.	Auxiliary Energy Consumption.....	169
33.	Fixed Cost of the Plant	170
33.1.	Annual fixed cost for FY 2020-21	170
33.2.	Return on Equity (ROE)	170
33.3.	Interest on Loan Capital	171
33.4.	Depreciation.....	171
33.5.	Interest on Working Capital	172
33.6.	Operation and Maintenance Expenses (O&M Expenses)	173
33.7.	Impact of AERC (Payment of Fees etc.) Regulations, 2020.....	174
33.8.	Incentives	175
33.9.	Non-Tariff Income	175
33.10.	Total Fixed Cost.....	175
34.	Energy Charges.....	177
34.1.	Fuel Price and Calorific Value.....	177
34.2.	Fuel cost	177

35.	Summary of submissions for Revised ARR of FY2021-22.....	178
35.1.	Summary	178
35.2.	Net Annual Revenue Requirement	178
35.3.	Tariff for LRPP for FY 2021-22	179
36.	Directives	180
36.1.	Compliance of Directives issued in the Tariff Order for 2020-21	180

List of Tables

Table 1: Installed & Effective Capacity for FY2019-20	19
Table 2: Operating Performance for FY 2019-20 of NTPS.....	19
Table 3: Operating Performance for FY 2019-20 of LTPS	20
Table 4: Operating Performance for FY 2019-20 of KLHEP.....	20
Table 5: Operating Performance for FY 2019-20 of LRPP	21
Table 6: Generation loss of NTPS due to Grid unavailability and Grid disturbance in FY 2019-20	21
Table 7: Availability for 2019-20 of NTPS.....	23
Table 8: Availability for 2019-20 of LTPS	23
Table 9: Availability for 2019-20 of KLHEP.....	23
Table 10: Availability for 2019-20 of LRPP	23
Table 11: Plant Load Factor for 2019-20 of NTPS	24
Table 12: Plant Load Factor for 2019-20 of LTPS	24
Table 13: Plant Load Factor for 2019-20 of KLHEP	24
Table 14: Plant Load Factor for 2019-20 of LRPP.....	24
Table 15: SHR for 2019-20 of NTPS.....	25
Table 16: SHR for 2019-20 of LTPS.....	25
Table 17: SHR for 2019-20 of LRPP	25
Table 18: Auxiliary energy consumption for 2019-20 of NTPS	26
Table 19: Auxiliary energy consumption for 2019-20 of LTPS.....	26
Table 20: Auxiliary energy consumption for 2019-20 of KLHEP	27
Table 21: Auxiliary energy consumption for 2019-20 of LRPP.....	27
Table 22: Additional Capital Expenditure incurred in FY2019-20 Post COD for LRPP	29
Table 23: FERV loss for LRPP in FY2019-20	29
Table 24: Computation of Plant wise Return in Equity for 2019-20	30
Table 25: Computation of Plant wise Interest and finance charges for 2019-20	31
Table 26: Depreciation for 2019-20 of NTPS	32
Table 27: Depreciation for 2019-20 of LTPS	33
Table 28: Depreciation for 2019-20 of KLHEP.....	33
Table 29: Depreciation for 2019-20 of LRPP	34
Table 30: Summary of Depreciation claimed for FY 2019-20	34
Table 31: Summary of Interest on working capital claimed for FY 2019-20	
Rs. Cr	35
<i>Table 32: Operation and Maintenance claimed for FY 2019-20</i>	<i>37</i>
Table 33: Station-wise details of head-wise O&M expenses claimed for FY 2019-20.....	38
Table 35: Plant wise Tax on income claimed for FY 2019-20.....	39
Table 36: Revision of pay and payment of arrears for FY 2019-20.....	39
Table 37: Plant wise Special R&M for FY 2019-20	41
Table 38: Expenses under Capacity building.....	47
Table 39: Station-wise details of Non tariff income for FY 2019-20.....	48
Table 40: Annual Fixed charges for 2019-20 of NTPS	48
Table 41: Annual Fixed charges for 2019-20 of LTPS.....	49
Table 42: Annual Fixed charges for 2019-20 of KLHEP	50
Table 43: Annual Fixed charges for 2019-20 of LRPP	
Rs. Cr	50
Table 44: Actual Plant wise GCV and Price for FY 2019-20.....	52
Table 45: Fuel cost for NTPS for FY 2019-20.....	52
Table 46: Fuel cost for LTPS for FY 2019-20.....	52
Table 47: Fuel cost for LRPP for FY 2019-20	53
Table 48: Secondary Charge for KLHEP in FY2019-20.....	53
Table 49: Incentive claim for KLHEP for FY 2019-20.....	54



Table 50: Net Annual Revenue Requirements for NTPS for FY 2019-20	55
Table 51: Net Annual Revenue Requirements for LTPS for FY 2019-20	56
Table 52: Net Annual Revenue Requirements for KLHEP for FY 2019-20.....	58
Table 53: Net Annual Revenue Requirements for LRPP for FY 2019-20	
Rs. Cr	59
Table 54: True-up for FY 2019-20 for AGPCL (in Crores)	60
Table 55: Plant wise Revenue from Sale of Power for FY 2019-20.....	61
Table 56: Revenue Gap / Surplus amount for APGCL for FY 2019-20.....	61
Table 61: Total True-up Claim for APGCL for FY 2019-20	62
Table 62: R&M plan proposed for Namrup TPS for FY 2020-21 to FY 2021-22.....	66
Table 63: R&M plan proposed for Lakwa TPS for FY 2019-20 to FY 2021-22.....	68
Table 64: R&M plan proposed for KLHEP for FY 2020-21 to FY 2021-22.....	70
Table 65: Financial impact of Asset valuation.....	71
Table 66: Financial impact of Asset valuation and ERP implementation.....	72
Table 67: Financial impact of ERP implementation and Asset Valuation plant wise.....	72
Table 68: Summary of capital expenditure plan for FY 2020-21 to FY2021-22	
Rs. Cr	73
<i>Table 69: Present Status of NTPS Units.....</i>	<i>77</i>
<i>Table 70: Present Status of LTPS Units.....</i>	<i>77</i>
<i>Table 71: Present Status of KLHEP Units.....</i>	<i>78</i>
<i>Table 72: Present Status of LRPP Unit.....</i>	<i>78</i>
Table 1: Installed & Effective Capacity for FY2020-21	80
<i>Table 73: Operating Performance for FY 2020-21 of NTPS.....</i>	<i>81</i>
<i>Table 74: Operating Performance for FY 2020-21 of LTPS.....</i>	<i>81</i>
<i>Table 75: Operating Performance for FY 2020-21 of KLHEP.....</i>	<i>81</i>
<i>Table 76: Operating Performance for FY 2020-21 of LRPP.....</i>	<i>82</i>
<i>Table 77: Availability for 2020-21 of NTPS.....</i>	<i>82</i>
<i>Table 78: Availability for 2020-21 of LTPS.....</i>	<i>83</i>
<i>Table 79: Availability for 2020-21 of KLHEP.....</i>	<i>83</i>
<i>Table 80: Availability for 2020-21 of LRPP.....</i>	<i>83</i>
<i>Table 81: Plant Load Factor for 2020-21 of NTPS.....</i>	<i>84</i>
<i>Table 82: Plant Load Factor for 2020-21 of LTPS.....</i>	<i>84</i>
<i>Table 83: Plant Load Factor for 2020-21 of KLHEP.....</i>	<i>84</i>
<i>Table 84: Plant Load Factor for 2020-21 of LRPP.....</i>	<i>85</i>
<i>Table 85: SHR for 2020-21 of NTPS.....</i>	<i>85</i>
<i>Table 86: SHR for 2020-21 of LTPS.....</i>	<i>85</i>
<i>Table 87: SHR for 2020-21 of LRPP.....</i>	<i>86</i>
<i>Table 88: Auxiliary energy consumption for 2020-21 of NTPS.....</i>	<i>86</i>
<i>Table 89: Auxiliary energy consumption for 2020-21 of LTPS.....</i>	<i>86</i>
<i>Table 90: Auxiliary energy consumption for 2020-21 of KLHEP.....</i>	<i>87</i>
<i>Table 91: Auxiliary energy consumption for 2020-21 of LRPP.....</i>	<i>87</i>
Table 92: Computation of Plant wise Return in Equity for 2020-21	88
Table 93: Computation of Plant wise Interest and finance charges for 2020-21	90
Table 94: Depreciation for 2020-21 of NTPS	92
Table 95: Depreciation for 2020-21 of LTPS	92
Table 96: Depreciation for 2020-21 of KLHEP.....	93
Table 97: Depreciation for 2020-21 of LRPP	93
Table 98: Summary of Depreciation claimed for FY 2020-21	
Rs. Cr	94
Table 99: Summary of Interest on working capital claimed for FY 2020-21	
Rs. Cr	95



Table 100: O&M Expenses for FY2020-21	97
Table 110: Plant wise Special R&M for FY 2020-21	99
Table 111: Expenses under Capacity building.....	100
Table 101: Station-wise details of Non tariff income for FY 2020-21.....	100
Table 102: Annual Fixed charges for 2020-21 of NTPS Rs. Cr	101
Table 103: Annual Fixed charges for 2020-21 of LTPS	101
Table 104: Annual Fixed charges for 2020-21 of KLHEP	102
Table 105: Annual Fixed charges for 2019-20 of LRPP	102
Table 106: Actual Plant wise GCV and Price for FY 2020-21	104
Table 107: Fuel cost for NTPS for FY 2020-21	104
Table 108: Fuel cost for LTPS for FY 2020-21	105
Table 109: Fuel cost for LRPP for FY 2020-21.....	105
Table 116: Net Annual Revenue Requirements for NTPS for FY 2020-21	107
Table 117: Net Annual Revenue Requirements for LTPS for FY 2020-21	108
Table 118: Net Annual Revenue Requirements for KLHEP for FY 2020-21.....	109
Table 119: Net Annual Revenue Requirements for LRPP for FY 2020-21.....	110
Table 120: APR for FY 2020-21 for APGCL	111
Table 121: Net Annual Revenue Requirements for APGCL for FY 2020-21	111
Table 1: Installed & Effective Capacity for FY2020-21	117
Table 122: Projected Operating Performance for FY2021-22 of NTPS	117
Table 123: Projected Availability for FY2021-22 of NTPS.....	118
Table 124: Projected PLF for FY2021-22 of NTPS.....	118
Table 125: Projected SHR for FY2021-22 of NTPS	119
Table 126: Auxiliary Energy Consumption for FY2021-22 of NTPS	119
Table 127: Projected Return on Equity capital for FY2021-22 (Rs Cr.)	120
Table 128: Projected Interest and Finance charges for FY2021-22 for NTPS	121
Table 129: Projected Depreciation for FY2021-22 of NTPS	122
Table 130: Summary of projected Depreciation for FY2021-22	122
Table 131: Summary of Interest on working capital projected for FY2021-22.....	123
Table 132: Operation and Maintenance projected for FY2021-22.....	123
Table 137: Expenses under Special R&M.....	125
Table 138: Expenses under Capacity building.....	125
Table 133: Station-wise Non tariff income projected for FY2021-22	126
Table 134: Annual Fixed charges for FY2021-22 of NTPS	126
Table 135: Projected GCV and Price for FY2021-22	127
Table 136: Fuel cost for NTPS for FY2021-22	127
Table 140: Revised ARR for FY2021-22 for NTPS	128
Table 141: Net Annual Revenue Requirements for NTPS for FY2021-22	129
Table 142: tariff proposed for NTPS for FY 2021-22	129
Table 1: Installed & Effective Capacity for FY2020-21	134
Table 143: Projected Operating Performance for FY2021-22 of LTPS	134
Table 144: Projected Availability for FY2021-22 of LTPS	135
Table 145: Projected PLF for FY2021-22 of LTPS.....	135
Table 146: Projected SHR for FY2021-22 of LTPS.....	135
Table 147: Auxiliary Energy Consumption for FY2021-22 of LTPS	136
Table 148: Projected Return on Equity capital for FY2021-22.....	137
Table 149: Projected Interest and Finance charges for FY2021-22	138
Table 150: Projected Depreciation for FY2020-21 of LTPS	139
Table 151: Summary of projected Depreciation for FY2021-22	139
Table 152: Summary of Interest on working capital projected for FY2021-22.....	140

Table 153: Operation and Maintenance projected for FY2021-22	
Rs. Cr	141
Table 158: Expenses under Special R&M.....	143
Table 159: Expenses under Capacity building.....	143
Table 154: Station-wise Non tariff income projected for FY2021-22	144
Table 155: Annual Fixed charges for FY2021-22 of LTPS	144
<i>Table 156: Projected GCV and Price for FY2021-22</i>	<i>146</i>
<i>Table 157: Fuel cost for LTPS for FY2021-22</i>	<i>146</i>
Table 161: Revised ARR for FY2021-22 For LTPS	147
Table 162: Net Annual Revenue Requirements for LTPS for FY2021-22	148
Table 163: tariff proposed for LTPS for FY 2020-21.....	148
Table 1: Installed & Effective Capacity for FY2020-21	153
<i>Table 164: Projected Operating Performance for FY2021-22 of KLHEP.....</i>	<i>153</i>
<i>Table 165: Projected Availability for FY2021-22 of KLHEP.....</i>	<i>154</i>
<i>Table 166: Projected PLF for FY201-22 of KLHEP</i>	<i>154</i>
<i>Table 167: Auxiliary Energy Consumption for FY2021-22 of KLHEP.....</i>	<i>154</i>
Table 168: Projected Return on Equity capital for FY2021-22.....	155
Table 169: Projected Interest and Finance charges for FY2021-22	156
Table 170: Projected Depreciation for FY2021-22 of KLHEP	157
Table 171: Summary of projected Depreciation for FY2021-22	157
Table 172: Summary of Interest on working capital projected for FY2020-21.....	158
Table 132: Operation and Maintenance projected for FY2021-22.....	158
Table 176: Expenses under Special R&M.....	160
Table 177: Expenses under Capacity building.....	160
Table 174: Station-wise Non tariff income projected for FY2021-22	160
Table 175: Annual Fixed charges for FY2020-21 of KLHEP	161
Table 179: Revised ARR for FY2021-22 For KLHEP.....	162
Table 180: Net Annual Revenue Requirements for KLHEP for FY2020-21	163
Table 181: Tariff proposed for KLHEP for FY 2020-21	163
Table 1: Installed & Effective Capacity for FY2021-22	168
<i>Table 182: Projected Operating Performance for FY2021-22 of LRPP.....</i>	<i>168</i>
<i>Table 183: Projected Availability for FY2021-22 of LRPP</i>	<i>169</i>
<i>Table 184: Projected PLF for FY2021-22 of LRPP</i>	<i>169</i>
<i>Table 185: Projected SHR for FY2021-22 of LRPP</i>	<i>169</i>
<i>Table 186: Auxiliary Energy Consumption for FY2020-21 of LRPP.....</i>	<i>169</i>
<i>Table 187: Projected Return on Equity capital for FY2021-22</i>	<i>170</i>
<i>Table 188: Projected Interest and Finance charges for FY2021-22.....</i>	<i>171</i>
Table 189: Projected Depreciation for FY2021-22 of LRPP.....	172
Table 190: Summary of projected Depreciation for FY2021-22	172
Table 191: Summary of Interest on working capital projected for FY2021-22.....	173
Table 153: Operation and Maintenance projected for FY2021-22	
Rs. Cr	173
Table 193: Station-wise Non tariff income projected for FY2021-22	175
Table 194: Annual Fixed charges for FY2021-22 of LRPP	175
<i>Table 195: Projected GCV and Price for FY2021-22</i>	<i>177</i>
Table 196: Fuel cost for LRPP for FY2021-22	177
Table 198: Revised ARR for FY2021-22 For LRPP.....	178
Table 199: Net Annual Revenue Requirements for LRPP for FY2021-22.....	178
Table 200: Tariff proposed for LRPP for FY 2021-22.....	179

List of Annexures

- Annexure No. 1 – Annual accounts for FY 2019-20
- Annexure No. 2 – CAG Comments on Accounts of FY2019-20
- Annexure No. 3 – Statutory auditor report for FY 2019-20
- Annexure No. 4 – SLDC certificate for FY 2019-20
- Annexure No. 5 – NTPS – Loss due to Grid Constraints Certificate for FY2019-20
- Annexure No. 6 – SLDC certificate for FY 2020-21
- Annexure No. 7 - Order for the Payment of Generation Allowance Arrear
- Annexure No. 8 – Letter from CEA confirming decommissioning of Unit 4 and Unit 5 of NTPS
- Annexure No. 9 – Regulatory formats



1. Legal and Regulatory Framework

1.1. Background

- 1.1.1. Under the provisions of Electricity Act 2003 (hereinafter referred to as "Electricity Act") the Assam Electricity Reforms First Transfer Scheme, 2004 (hereinafter referred to as "Transfer Scheme") was notified by Government of Assam on 10th December 2004. Under Section 5 (2) of the transfer scheme the functions and undertakings as set out in Schedule-A of the transfer scheme stands transferred to Assam Power Generation Corporation Limited (APGCL). The final transfer scheme was notified by Govt. of Assam vide notification No: PEL/151/2003/Pt.349 dated 16th Aug' 2005 w.e.f 1st April'05.
- 1.1.2. Section 131 (2) of the Electricity Act provides "...Any property, interest in property, rights and liabilities vested in the State Government under sub-section (1) shall be re-vested by the State Government in a Government company or in a company or companies, in accordance with the transfer scheme so published along with such other property, interest in property, rights and liabilities of the State Government as may be stipulated in such scheme, on such terms and conditions as may be agreed between the State Government and such company or companies being State Transmission Utility or generating company or transmission licensee or distribution licensee,..."
- 1.1.3. Section 62 of the Electricity Act 2003 requires the generating company to furnish details as may be specified by the Commission for determination of tariff.
- 1.1.4. As per AERC Tariff Regulation, 2018 APGCL is now filing the Petition for Truing-up for FY2019-20, Annual Performance review for the FY 2020-21 and Revised Aggregate Revenue Requirement and Determination of Tariff for FY2021-22 for the following plants
 - i. Namrup Thermal Power Station
 - ii. Lakwa Thermal Power Station
 - iii. Karbi Langpi Hydro Electric Project
 - iv. Lakwa Replacement Power Plant
- 1.1.5. The various data formats and forms, as required by the Hon'ble Commission, are furnished in Annexure -9.

APPEAL FOR TRUE-UP FOR THE FY 2019-20
To
ASSAM ELECTRICITY REGULATORY COMMISSION



Prepared by
ASSAM POWER GENERATION CORPORATION LTD
Bijulee Bhawan, Paltanbazar
Guwahati – 781 001

AFFIDAVIT – TRUE-UP

BEFORE THE ASSAM STATE ELECTRICITY REGULATORY
COMMISSION, GUWAHATI.

Petition No. –

Case No.
(to be filed by the Office)

IN THE MATTER OF

Filing of Petition for True-up of the FY 2019-20

AND

IN THE MATTER OF
Assam Power Generation Corporation Limited
Bijulee Bhawan, Paltanbazar,
Guwahati-781 001.

Petitioner

I, Sri Ashok Kalita, son of Late Sarbeswar Kalita, age 59 years, residing at Narengi, Guwahati-781026, do solemnly affirm and say as follows:

I am the Chief General Manager (Gen) of Assam Power Generation Corporation Limited, the petitioner in the above matter and am duly authorized by the said Petitioner to make this affidavit for and on behalf of the Assam Power Generation Corporation Limited.


The Statement made in the Petition based on information received from official records and I believe them to reflect truly and no material has been concealed from the statements so made or documents or supporting data etc. attached.

Solemnly affirm at Guwahati on 27th November' 2020 that the contents of this affidavit are true to my knowledge, no part of it is false or no material has been concealed therefore and misleading material included therein.

Place: Guwahati

Date: 27th November' 2020

Deponent


(Ashok Kalita)
Chief General Manager (Gen),
Assam Power Generation Corporation Ltd.



PRAYER FOR TRUE-UP

BEFORE THE HON'BLE ASSAM ELECTRICITY REGULATORY COMMISSION

FILINGNO

CASENO.....

IN THE MATTER OF:

Petition for Truing-up for FY 2019-20

AND IN THE MATTER OF:

Assam Power Generation Corporation Limited incorporated under the provisions of the Companies Act, 1956 and having its registered office in the State of Assam

THE HUMBLE APPLICANT ABOVE NAMED MOST RESPECTFULLY SHEWETH:

- i. That the Assam Power Generation Corporation Limited, hereinafter named as APGCL, is a successor corporate entity, formed in pursuant to the notification of the Government of Assam, notified under sub-sections (1), (2), (5), (6) and (7) of Section 131 and Section 133 of the Electricity Act 2003(Central Act 36 of 2003), for the purpose of transfer and vesting of functions, properties, interests, rights, obligations and liabilities, along with the transfer of Personnel of the Board to the successor corporate entities.
- ii. That the APGCL is a company incorporated with the main object of generation of electricity in the state of Assam.
- iii. That the APGCL is a generating company under the provisions laid down in Section 14 Proviso 5, read with Section 131 (2) of the Electricity Act 2003.
- iv. That the APGCL submitted petitions for Revised ARR and Determination of tariff for the FY 2020-21 to the AERC on 30/11/2019.
- v. That the AERC declared tariff for FY 2020-21 on 07/03/2020 with effectuation date from 01/04/2020.
- vi. That the licensee is now submitting the Petition for True-up for the FY 2019-20 as per the relevant Regulations.

Place: Guwahati

Date: 27th November' 2020

Deponent



(Ashok Kalita)
Chief General Manager (Gen),
Assam Power Generation Corporation Ltd.



2. Background

2.1. Introduction

2.1.1. Assam State Electricity Board (ASEB) was constituted under section 5 of the Electricity (supply) Act 1948. The announcement of Indian Electricity Act 2003 has made a compulsion to restructure State Electricity Boards. With a view to implementing the reorganization of ASEB, the Govt. had adopted the following sector structure:

- a. One Generating Company to take over the generating functions of the State Electricity Board,
- b. One Transmission Company to take over transmission functions along with the functions of the State Transmission Utility and State Load Dispatch Centre: and
- c. Three Distribution Companies later amalgated to one for the areas in the State of Assam (later merged into one distribution company).

2.1.2. The Assam Power Generation Corporation Limited (APGCL), registered under the Companies Act (1956) on 23rd October 2003, is a successor Company of erstwhile Assam State Electricity Board (ASEB). APGCL was formed as per the Electricity Act, 2003 for the purpose of running the already installed generating capacity of ASEB and utilising the resources available in the State of Assam to add more generating capacity by constructing new power projects to cater to the energy need of the people of Assam.

2.2. APGCL Project Summary

- 2.2.1. NTPS: Generation of NTPS was hampered due to the frequent shutdowns of the old units and auxiliaries of NTPS in the FY 2019-20. Due to the ongoing NRPP, APGCL is doing only regular repair & maintenance works at NTPS and not investing in capital intensive high cost O&M. This means, the units of NTPS are not being overhauled for past few years. This is contributing to the frequent breakdowns of the units and auxiliaries. NTPS lost 12.40 MU due to transmission/evacuation constraints in the FY 2019-20. As of now, NTPS is generating around 38 MW. There are two Transformers of capacity 20 MVA each to evacuate the power generated from NTPS. In view of upcoming NRPP, APGCL is in the view that no further investment in NTPS for evacuation of power will be made.
- 2.2.2. LTPS: The generation of LTPS also suffered due to low gas supply in the financial year 2019-20. LTPS received only 0.67 MMSCMD of gas on average in the FY 2019-20 against the contracted quantity of 0.9 MMSCMD . There were also some planned and force shut downs of the units in FY 19-20. At present, HRSG #2 & #3 is in running condition. HRSG #1 is under forced shut down since 9th Feb 2018 due to overheating because of high exhaust temperature. The Residual Life Assessment Study of HRSG #1 was done by M/s Wartsila from 19/04/2019 to 4/05/2019. The final RLA Study Report was submitted to APGCL in the last week of June 2019. Work Order was given to M/s Erector on 4th of Nov'19 for Restoration of the HRSG#1 based on the RLA Study conducted by M/s Wartsila (Under R&M 2019-20). Restoration work was completed on 24th Feb 2020 as per Work Order. The average generation of LWHRP is around 20MW (Depending upon the generations of the mother units.) LTPS is also suffering from higher auxiliary consumption due to power consumption by the compressors. The auxiliary consumption of LTPS as approved by the Hon'ble AERC is 5.5%, whereas the power consumption by the compressors is around 5.0 %.
- 2.2.3. KLHEP: KLHEP overachieved the gross generation target for the FY 2019-20 on by 8.5 MUs. The overall availability of the plant was also 85.03% against the approved availability of 85.00% in FY2019-20.
- 2.2.4. LRPP: LRPP managed to generate 504 MUs in FY2019-20 against the Hon'ble Commission's approved generation target of 520.82 MUs mainly on account of low gas supply. The plant's availability, auxiliary power consumption and Gross Station heat Rate were better than the targets set by Hon'ble Commission for FY2019-20

2.3. Annual accounts

- 2.3.1. The audited Annual accounts of APGCL for FY 2019-20, CAG Comments and Statutory Audit Report are attached as Annexure No. 1, Annexure No. 2 and Annexure No. 3 respectively as required under AERC Tariff Regulations, 2018



2.4. True-up of FY 2019-20

2.5. Regulatory provisions

2.5.1. The Hon'ble Commission in its regulation has stated the provisions on true-up of various costs under the regulations section 10 of Assam Electricity Regulatory Commission (Terms and Conditions for determination of Multi Year Tariff) Regulations, 2018 which has been followed while preparing this True Up Petition.

2.6. Installed and Effective Capacity in FY2019-20

2.6.1. APGCL submits the following Installed & Effective Capacity for FY2019-20

Table 1: Installed & Effective Capacity for FY2019-20

Station	Installed Capacity (MW)	No. of Units	Units Decommissioned	Units Available for Generation & Capacity in MW	Effective Capacity
NTPS	119.5	6	1	2, 3(21MW), 4 (11 MW), 5 (24 MW), 6 (22.50 MW-WHRU)	99.5
LTPS	142.2	8	1,2,3,4	5,6,7(20 MW Each),8 (37.20 MW-WHRU)	97.2
KLHEP	100	2	0	1 (50), 2(50)	100
LRPP	69.755	7	0	1-7 (9.965 each)	69.755

3. Norms of operations

3.1. Regulatory provisions

3.1.1. The Hon'ble Commission had set norms of operations under Tariff Regulations 2018 Section 47 and 49 for Thermal Generating Stations and Hydro Generating Stations respectively which has been followed for preparing this petition.

3.1.2. The actual performance vis-a-vis norms of operations set is discussed below:

3.2. Snapshot of plant wise performance for FY 2019-20

3.2.1. The following table shows the operating performance parameters of Namrup thermal power station for FY 2019-20.

Table 2: Operating Performance for FY 2019-20 of NTPS

NTPS	Approved as per order of March 2019	Actual
Gross Energy in MU	173.73	252.86
Aux. Power Cons. (%)	4.50%	5.94%



NTPS	Approved as per order of March 2019	Actual
Net Energy in MU	165.91	237.85
Availability (%)	50.00%	33.93%
PLF (%) for incentive	50.00%	28.50%
Gross Station Heat Rate on GCV (kcal/ kWh)	3900	4583.58
Wt. Avg. Price of Gas (Rs./1000 SCM)	6076.99	6390.70

3.2.2. The following table shows the operating performance parameters of gas based Lakwa thermal power station for FY 2019-20

Table 3: Operating Performance for FY 2019-20 of LTPS

LTPS	Approved as per order of March 2019	Actual
Gross Energy in MU	425.74	362.01
Aux. Power Cons. (%)	5.50%	10.39%
Net Energy in MU	402.32	324.39
Availability (%)	50.00%	53.92%
PLF (%) for incentive	50.00%	40.21%
Gross Station Heat Rate on GCV (kcal/ kWh)	"3200 for Closed cycle 3900 for Open cycle"	3397
Wt. Avg. Price of Gas (Rs./1000 SCM)	7758.11	8263.04

3.2.3. The following table shows the operating performance parameters of Karbi Langpi hydro electric power station for FY 2019-20.

Table 4: Operating Performance for FY 2019-20 of KLHEP

KLHEP	Approved as per order of March 2019	Actual
Gross Energy in MU	390.00	398.528
Aux. Power Cons. (%)	0.50%	0.42%
Net Energy in MU	388.05	396.85
Availability (%)	85.00%	85.03%
PLF (%)	44.50%	45.41%

3.2.4. The following table shows the operating performance parameters of Lakwa Replacement Power Project for FY 2019-20

Table 5: Operating Performance for FY 2019-20 of LRPP

LRPP	Approved as per order of March 2019	Actual
Gross Energy in MU	520.82	504.20
Aux. Power Cons. (%)	3.50%	2.92%
Net Energy in MU	502.59	489.48
Availability (%)	85.00%	88.63%
PLF (%) for incentive	90.00%	82.78%
Gross Station Heat Rate on GCV (kcal/ kWh)	2150	2144
Wt. Avg. Price of Gas (Rs./1000 SCM)	7758.11	8263.04

3.2.5. The performance parameter certificate showing plant wise availability, generation, auxiliary consumption etc. issued by SLDC is attached as Annexure No. 4.

3.3. Normative Annual Plant Availability Factor (NAPAF)

3.3.1. NAPAF for NTPS: As per Regulation 47.1 of the MYT Regulations, 2018 the Normative Plant Availability factor for recovery of full fixed charges, is 50% for FY 2019-20 for NTPS.

3.3.2. We submit that NTPS faced Force Majeure conditions in the form of grid disturbance and auto transformer constraints. We submit that as per Tariff Regulations, 2018, Force Majeure is any event or circumstance, which is not within the reasonable control of, and is not due to an act of omission or commission of that party. As per the regulation, the shutdown or the interruption of the grid is also a Force Majeure condition.

3.3.3. We submit that in FY 2019-20 APGCL has lost the opportunity to generate 12.40 MU of electricity due to Grid unavailability and Grid disturbance. The month on month generation loss due to the two factors is shown below:

Table 6: Generation loss of NTPS due to Grid unavailability and Grid disturbance in FY 2019-20

MU lost for NTPS in 2019-20	MU lost due to grid disturbance	MU lost due to Auto transformer constraints
Apr-19	0.13	0.23
May-19	0.24	0.02
Jun-19	-	-
Jul-19	0.30	0.03
Aug-19	0.26	-



MU lost for NTPS in 2019-20	MU lost due to grid disturbance	MU lost due to Auto transformer constraints
Sep-19	0.17	-
Oct-19	-	-
Nov-19	-	-
Dec-19	0.01	3.21
Jan-20	0.44	4.96
Feb-20	0.33	1.78
Mar-20	0.19	0.09
Total	2.07	10.32
Grand total		12.40

3.3.4. APGCL has lost 2.07 MU due to breakdown of various transmission lines and other grid disturbance from time to time as shown above.

3.3.5. APGCL has in total lost 10.32 MU in FY 2019-20 due to evacuation constraints faced due to issues with the auto transformers used for evacuation of power from NTPS.

3.3.6. Both of the above reasons for loss of generation are uncontrollable events for APGCL. The Tariff Regulations 2018 define the event pertaining to grid interruption as a Force Majeure Event as follows:

“Force Majeure Event” means, with respect to any party, any event or circumstance, which is not within the reasonable control of, and is not due to an act of omission or commission of, that party and which, by the exercise of reasonable care and diligence, could not have been prevented, and without limiting the generality of the foregoing, would include the following events:

- a. acts of God, including but not limited to lightning, storm, action of the elements, earthquakes, flood, torrential rains, drought and natural disaster;
- b. strikes, lockouts, go-slow, bandh or other industrial disturbances not instigated by any party;
- c. acts of public enemy, wars (declared or undeclared), blockades, insurrections, riots, revolution, sabotage, vandalism and civil disturbance;
- d. unavoidable accident, including but not limited to fire, explosion, radioactive contamination and toxic dangerous chemical contamination;
- e. any shutdown or interruption of the grid, which is required or directed by the State or Central Government or by the Commission or the Assam State Load Despatch Centre; and
- f. any shut down or interruption, which is required to avoid serious and immediate risks of a significant plant or equipment failure.

3.3.7. In view of the above, APGCL has claimed availability lost due to uncontrollable factors. The summary of the approved and actual availability claimed for FY 2019-20 are shown in the table below.

Table 7: Availability for 2019-20 of NTPS

NTPS	Approved as per order of March 2019	Availability achieved	Availability lost due to uncontrollable factors	Total Availability claimed for FY 2019-20
Plant Availability Factor (%)	50.00%	32.44%	1.49%	33.93%

3.3.8. The certificate for Generation Loss of NTPS due to Grid Restrictions and Auto Transformer Constraints is attached in Annexure 5

3.3.9. NAPAF for LTPS: As per Regulation 47.1 of the MYT Regulations, 2015 the Normative Plant Availability factor for recovery of full fixed charges, is 50% for FY 2019-20 for LTPS. The approved and actual numbers are shown in the table below.

Table 8: Availability for 2019-20 of LTPS

LTPS	Approved as per order of March 2019	Actual
Plant Availability Factor (%)	50.00%	53.92%

3.3.10. NAPAF for KLHEP: Further, Regulation 49 specifies normative PAF for KLHEP as 85%. The approved and actual numbers are shown in the table below.

Table 9: Availability for 2019-20 of KLHEP

KLHEP	Approved as per order of March 2019	Actual
Plant Availability Factor (%)	85.00%	85.03%

3.3.11. NAPAF for LRPP: As per Regulation 47.1 of the Tariff Regulations, 2018 the Normative Plant Availability factor for recovery of full fixed charges, is 85% for new plants The Hon'ble Commissioned had approved the same. The approved and estimated numbers are shown in the table below.

Table 10: Availability for 2019-20 of LRPP

LRPP	Approved as per order of March 2019	Actual
Plant Availability Factor (%)	85.00%	88.63%

3.4. Normative Annual Plant Load Factor (NAPLF)

3.4.1. NAPLF for NTPS and LTPS: As per Regulation 47.2 of the MYT Regulations, 2018 the Normative Plant Load factor is 50% and 66% for FY 2019-20 for NTPS and LTPS respectively. The approved and actual numbers are shown in the table below.

Table 11: Plant Load Factor for 2019-20 of NTPS

NTPS	Approved as per order of March 2019	Actual
Plant Load Factor (%)	50.00%	28.50%

Table 12: Plant Load Factor for 2019-20 of LTPS

LTPS	Approved as per order of March 2019	Actual
Plant Load Factor (%)	66.00%	40.21%

3.4.2. NAPLF for KLHEP: Further, Regulation 49 of the MYT Regulations, 2018 specifies normative PLF for KLHEP as 44.5% for FY 2019-20. The approved and actual numbers are shown in the table below.

Table 13: Plant Load Factor for 2019-20 of KLHEP

KLHEP	Approved as per order of March 2019	Actual
Plant Load Factor (%)	44.50%	45.41%

3.4.3. NAPLF for LRPP: As per Regulation 47.2 of the Tariff Regulations, 2018 the Normative Plant Load factor, is 90% for new plants commissioned. The Hon'ble Commissioned had approved the same. The approved and estimated numbers are shown in the table below.

Table 14: Plant Load Factor for 2019-20 of LRPP

LRPP	Approved as per order of March 2019	Actual
Plant Load Factor (%)	90.00%	82.78%

3.5. Gross Station Heat Rate (SHR)

3.5.1. SHR for NTPS: As per Regulation 47.4 of the MYT Regulations, 2018 the Normative Station Heat Rate, is 3900 kCal/kWh for FY 2019-20 for NTPS in Partial combined cycle mode of operation.

3.5.2. We submit that the SHR of NTPS is higher than the approved SHR in FY 2019-20 due to part loading of units resulting due to lower gas supply and evacuation constraints and old nature of the plant equipments and machinery.

3.5.3. The approved and actual numbers are shown in the table below.

Table 15: SHR for 2019-20 of NTPS

NTPS	Approved as per order of March 2019	Actual
Station Heat Rate (kCal/kWh)	3900	4583.58

3.5.4. SHR for LTPS: As per Regulation 47.4 of the MYT Regulations, 2018 the Normative Station Heat Rate for FY 2019-20 for LTPS, is 3200 kCal/kWh in closed cycle mode of operation.

3.5.5. The actual SHR is higher than the approved SHR for LTPS for FY 2019-20 as shown below.

Table 16: SHR for 2019-20 of LTPS

LTPS	Approved as per order of March 2019	Actual
Station Heat Rate (kCal/kWh)	3200 for Closed cycle 3900 for Open cycle	3397

3.5.6. SHR for LRPP: The Hon'ble Commission had approved the Gross Station Heat Rate for LRPP at 2,150 kCal/kWh in the Tariff Order dated March 01, 2019 for LRPP.

3.5.7. The actual SHR is lower than the approved SHR for LRPP for FY 2019-20 as shown below.

Table 17: SHR for 2019-20 of LRPP

LRPP	Approved as per Order of March 2019	Actual
Station Heat Rate (kCal/kWh)	2,150	2144

3.5.8. APGCL prays to AERC to approve the actual SHR numbers.

3.6. Auxiliary Energy Consumption

3.6.1. Auxiliary consumption for NTPS: As per Regulation 47.3 of the MYT Regulations, 2018 the Normative Auxiliary energy consumption, is 4.50% for FY 2019-20 for NTPS.

3.6.2. We submit that the auxiliary consumption of NTPS is higher than the approved auxiliary consumption in FY 2019-20 due to part loading of units. In view of the above, APGCL prays to the Hon'ble Commission to approve the actual auxiliary consumption as it has increased due to uncontrollable factors.

3.6.3. The approved and actual numbers are shown in the table below.

Table 18: Auxiliary energy consumption for 2019-20 of NTPS

NTPS	Approved as per order of March 2019	Actual
Auxiliary energy consumption (%)	4.50%	5.94%

3.6.4. Auxiliary consumption for LTPS: As per Regulation 47.3 of the MYT Regulations, 2018 the Normative Auxiliary energy consumption, is 5.50% for FY 2019-20 for LTPS.

3.6.5. We submit that the Auxiliary consumption of LTPS is higher than the approved values due to low gas pressure in supply of gas. Due to low gas pressure in supply, the usage of gas compressors has increased resulting in high auxiliary consumption of LTPS. The auxiliary consumption of LTPS is also higher than the approved auxiliary consumption in FY 2019-20 due to part loading of units. Further the lower gas supply constraints simultaneous operations of all 3 GTs most of the time. As the WHRU is designed to run with 3 HRSGs, non-availability of one HRSG increases the percentage of APC as gross power generation reduces. However, same number of auxiliaries have to be run to operate the WHRU.

3.6.6. The approved and actual numbers are shown in the table below.

Table 19: Auxiliary energy consumption for 2019-20 of LTPS

LTPS	Approved as per order of March 2019	Actual
Auxiliary energy consumption (%)	5.50%	10.39%

3.6.7. Auxiliary consumption for KLHEP: As per Regulation 49.1 of the MYT Regulations, 2018 the Normative Auxiliary energy consumption, is 0.5% for FY 2019-20 for KLHEP. The approved and actual numbers are shown in the table below.

Table 20: Auxiliary energy consumption for 2019-20 of KLHEP

KLHEP	Approved as per order of March 2019	Actual
Auxiliary energy consumption (%)	0.50%	0.42%

3.6.8. Auxiliary consumption for LRPP: As per Regulation 47.3 of the Tariff Regulations, 2018 the Normative Auxiliary energy consumption, is 3.50% for gas engine based generating station in open cycle mode of operation with gas booster compressor.

3.6.9. The approved and actual numbers are shown in the below table

Table 21: Auxiliary energy consumption for 2019-20 of LRPP

LRPP	Approved as per order of March 2019	Actual
Auxiliary energy consumption (%)	3.50%	2.92%

3.6.10. APGCL prays to AERC to approve the actual auxiliary consumption numbers.

4. Fixed Cost of the Plant

4.1. Annual fixed cost for FY 2019-20

- 4.1.1. The fixed cost of APGCL's power plants has been approved by AERC via MYT order in Case No. 14 and 18 of 2018 dated 1st March 2019, subsequently via Revised ARR order in Case No. 10 of 2019 dated 7th March 2020.
- 4.1.2. As per regulation 42.1 of the AERC Tariff regulations, 2018 the following components of fixed cost have been considered for True-up of the tariff for the power plant:
- (a) Return on Equity
 - (b) Interest on Long Term Loan
 - (c) Depreciation
 - (d) Operation and Maintenance Expenses
 - (e) Interest on Working Capital
 - (f) Less: Non-Tariff Income
- 4.1.3. For the computation of the fixed components, the Petitioner has considered the principles provided in the AERC Regulations, 2018. These components have been discussed plant wise in detail in the following sections of the petition.

4.2. Return on Equity (ROE)

- 4.2.1. The Hon'ble Commission in its regulation 33 of the AERC Regulations, 2018 has considered the pre-tax return on equity at 15.50% of equity capital.
- 4.2.2. The Petitioner has determined the Return on Equity (RoE) at a rate of 15.50% in accordance with the AERC Regulations, 2018. The Petitioner submits that there has been no addition in Equity in FY 2019-20 for NTPS, LTPS and KLHEP. However there has been equity addition in LRPP in FY2019-20. Further, it is submitted that the actual tax paid is being claimed separately.

4.2.3. Additional Capital Expenditure for LRPP

4.2.3.1. The Petitioner had incurred the following additional Capital Expenditure for LRPP in FY2019-20 post COD of the plant.

Table 22: Additional Capital Expenditure incurred in FY2019-20 Post COD for LRPP

Particulars	Approved Additional Capitalization as per Order of March 2019	Expenditure incurred in FY2018-19	Expenditure incurred in FY2019-20
Expenditure Post COD in Rs. Crore	22.34	12.21	10.73
Grant Portion of the Additional Capitalization in Rs. Crore	11.43	6.02	7.40

4.2.3.1. The above expenditure for FY2019-20 includes Foreign Exchange Risk Variation (in addition to FERV claimed in True Up for FY2018-19). As per regulation 28.1 (a) of MYT Regulation 2018, any loss or gain on account of Foreign exchange risk variation will form part of the capital cost for the plant. The loss on account of Foreign exchange risk variation is as shown below.

Table 23: FERV loss for LRPP in FY2019-20

Particulars	Euro to INR conversion considered during bidding	Euro payment done in FY2019-20	INR amount considered during bidding @68.66	Actual INR amount paid	FERV loss in FY2019-20
	1	2	3 = 2 x 68.66	4	5 = 4-3
FERV loss in Rs. Crore	1 Euro = 68.66 INR	Euro 10.01 Lakhs	INR 6.87 Crore	INR 7.85 crore	0.98 Crores

4.2.3.2. We submit that the expenditure undertaken post COD of LRPP is within the original scope of work and these were either works deferred for execution or undischarged liabilities recognized to be payable at a future date. Hence, APGCL prays to the Hon'ble Commission to approve the additional capitalization planned in FY 2019-20

4.2.3.3. APGCL has considered the balance fund source of Additional Capital Expenditure in the normative allowed debt-equity ratio of 70:30 for FY2019-20 as approved by the Commission in its order of March 2019

4.2.4. The Plant wise Return in Equity has been shown below:

Table 24: Computation of Plant wise Return in Equity for 2019-20

Rs. Cr

Station	Particulars	Approved as per order of March 2019	True up Petition for FY 2019-20
NTPS	Opening Equity	55.00	55.00
	Closing Equity	55.00	55.00
	Rate of Return	15.50%	15.50%
	Return on Equity	8.53	
	Return on Equity for Effective Capacity	3.10	8.53
LTPS	Opening Equity	143.08	143.08
	Closing Equity	143.08	143.08
	Rate of Return	15.50%	15.50%
	Return on Equity	22.18	
	Return on Equity for Effective Capacity	15.16	22.18
KLHEP	Opening Equity	68.65	68.65
	Closing Equity	68.65	68.65
	Rate of Return	15.50%	15.50%
	Return on Equity	10.64	
	Return on Equity for Effective Capacity	10.64	10.64
LRPP	Opening Equity	16.1	14.84
	Closing Equity	16.1	15.73
	Rate of Return	15.50%	15.50%
	Return on Equity	2.50	
	Return on Equity for Effective Capacity	2.50	2.37

4.2.5. APGCL prays to the Hon'ble Commission to approve the plant wise Return on Equity as shown above.

4.3. Interest on Loan Capital

- 4.3.1. As per Regulation 34 of the Tariff Regulations, 2018, the Hon'ble Commission will consider interest on Loan capital on normative basis with repayment equal to depreciation allowed for that year and rate of interest will be the weighted average rate of interest calculated on the basis of the actual loan portfolio at the beginning of each year.
- 4.3.2. In view of the above, the Petitioner has computed the Interest on long term Loan on normative basis for FY 2019-20. The Petitioner has considered normative loan portfolio and the repayment shown is considered equal to the depreciation for FY 2019-20. The interest rate has been considered as the weighted average rate of actual interest rate applicable to APGCL at the beginning of FY 2019-20.
- 4.3.3. The finance charges are shown separately plant wise for FY 2019-20. The table below summarizes the interest on loan and finance charges considered for True-up of FY 2019-20.

Table 25: Computation of Plant wise Interest and finance charges for 2019-20

		Rs. Cr	
Station	Particulars	Approved as per order of March 2019	True up Petition for FY 2019-20
NTPS	Net Normative Opening Loan	0.25	0.85
	Addition of normative loan during the year	4.75	1.40
	Normative Repayment during the year	1.74	1.46
	Net Normative Closing Loan	3.27	0.79
	Avg. Normative Loan	1.76	0.82
	Interest Rate	10.30%	10.04%
	Interest on Loan Capital	0.18	0.08
	Add: Bank Charges	-	0.02
	Net Interest on Loan Capital	0.18	
	Net Interest on Loan Capital for Effective Capacity	0.07	0.10
LTPS	Net Normative Opening Loan	0	0
	Addition of normative loan during the year	16.1	3.38
	Normative Repayment during the year	15.3	11.15
	Net Normative Closing Loan	0.80	0.00
	Avg. Normative Loan	0.40	0.00
	Interest Rate	10.30%	10.04%
	Interest on Loan Capital	0.04	-
	Add: Bank Charges	-	0.03
	Net Interest on Loan Capital	0.04	0.03

Station	Particulars	Approved as per order of March 2019	True up Petition for FY 2019-20
	Net Interest on Loan Capital for Effective Capacity	0.03	
KLHEP	Net Normative Opening Loan	219.7	216.24
	Addition of normative loan during the year	11.2	0.13
	Normative Repayment during the year	21.63	21.13
	Net Normative Closing Loan	209.28	195.24
	Avg. Normative Loan	214.49	205.74
	Interest Rate	10.30%	10.04%
	Interest on Loan Capital	22.09	20.65
	Add: Bank Charges	-	0.02
	Net Interest on Loan Capital	22.09	
	Net Interest on Loan Capital for Effective Capacity	22.09	20.68
LRPP	Net Normative Opening Loan	34.8	36.71
	Addition of normative loan during the year	0	2.10
	Normative Repayment during the year	2.75	2.60
	Net Normative Closing Loan	32.05	36.21
	Avg. Normative Loan	33.43	36.46
	Interest Rate	10.30%	10.04%
	Interest on Loan Capital	3.44	3.66
	Add: Bank Charges	-	-
	Net Interest on Loan Capital	3.44	
	Net Interest on Loan Capital for Effective Capacity	3.44	3.66
Total	25.76	24.46	
Total for Effective Capacity	25.63	24.46	

4.3.4. APGCL prays to the Hon'ble Commission to approve the Total interest and finance charges as shown above.

4.4. Depreciation

4.4.1. The Hon'ble Commission in its Tariff Regulations, 2018 has considered the principle as laid out in Regulation 32.

4.4.2. In view of the above, the Petitioner has computed the Depreciation considering Capital Cost of the asset admitted by the Commission with 10% salvage value. Also, depreciation on grants has been subtracted. The table below summarizes the plant wise Depreciation considered for True-up of FY 2019-20

Table 26: Depreciation for 2019-20 of NTPS

Rs. Cr



Particulars	FY 2019-20
Opening GFA	190.49
Addition during the year	1.40
Closing	191.89
Average GFA	191.19
Rate of Depreciation	0.82%
Total Depreciation	1.56
Grant	13.16
Additions during the year	0.00
Closing grant	13.16
Average grant	13.16
Rate of Depreciation	0.82%
Depreciation on grants	0.11
Net Depreciation	1.46

Table 27: Depreciation for 2019-20 of LTPS

Rs. Cr

Particulars	FY 2019-20
Opening GFA	482.53
Addition during the year	3.38
Closing	485.91
Average GFA	484.22
Rate of Depreciation	2.66%
Total Depreciation	12.89
Grant	65.50
Additions during the year	0.00
Closing grant	65.50
Average grant	65.50
Rate of Depreciation	2.66%
Depreciation on grants	1.74
Net Depreciation	11.15

Table 28: Depreciation for 2019-20 of KLHEP

Rs. Cr

Particulars	FY 2019-20
Opening GFA	514.57
Addition during the year	0.13
Closing	514.70



Average GFA	514.63
Rate of Depreciation	4.59%
Total Depreciation	23.65
Grant	54.66
Additions during the year	0.00
Closing grant	54.66
Average grant	54.66
Rate of Depreciation	4.59%
Depreciation on grants	2.51
Net Depreciation	21.13

Table 29: Depreciation for 2019-20 of LRPP

Rs. Cr

Particulars	FY 2019-20
Opening GFA	257.68
Addition during the year	10.73
Closing	268.41
Average GFA	263.04
Rate of Depreciation	5.12%
Total Depreciation	13.47
Grant	208.56
Additions during the year	7.40
Closing grant	215.96
Average grant	212.26
Rate of Depreciation	5.12%
Depreciation on grants	10.87
Net Depreciation	2.60

Table 30: Summary of Depreciation claimed for FY 2019-20

Rs. Cr

Station	Particulars	Approved as per order of March 2019	True up Petition for FY 2019-20
NTPS	Depreciation	1.9	1.56
	Less: Depreciation on assets funded by Grants	0.16	0.11
	Net Depreciation	1.74	1.46
	Net Depreciation for Effective Capacity	0.63	



Station	Particulars	Approved as per order of March 2019	True up Petition for FY 2019-20
LTPS	Depreciation	17.83	12.89
	Less: Depreciation on assets funded by Grants	2.53	1.74
	Net Depreciation	15.30	11.15
	Net Depreciation for Effective Capacity	10.46	
KLHEP	Depreciation	24.39	23.65
	Less: Depreciation on assets funded by Grants	2.76	2.51
	Net Depreciation	21.63	21.13
	Net Depreciation for Effective Capacity	21.63	
LRPP	Depreciation	13.6	13.47
	Less: Depreciation on assets funded by Grants	10.85	10.87
	Net Depreciation	2.75	2.60
	Net Depreciation for Effective Capacity	2.75	
	Total	41.42	36.34
	Total for Effective Capacity	35.47	

4.4.3. APGCL prays to the Hon'ble Commission to approve the plant wise Depreciation for FY 2019-20 as shown above.

4.5. Interest on Working Capital

4.5.1. As per Regulation 34 of the Tariff Regulations, 2018, the interest on working capital will be considered on normative basis.

4.5.2. As per the above regulations, the Petitioner has claimed normative interest on working capital. However, as APGCL does not have liquid fuel stock facility, it has not considered working capital on storage of liquid fuel. The rate of interest has been considered as interest rate equivalent to the normative interest rate of three hundred (300) basis points above the average State Bank of India MCLR (One Year Tenor) prevalent during the last available six months i.e. 7.00% + 3.00 % = 10.00%. The plant wise interest on working capital considered is shown in the table below:

Table 31: Summary of Interest on working capital claimed for FY 2019-20
Rs. Cr

Station	Particulars	Approved as per order of March 2019	True up Petition for FY 2019-20
NTPS	Fuel Cost for one month	4.23	6.74



Station	Particulars	Approved as per order of March 2019	True up Petition for FY 2019-20
	O&M Expenses for one month	1.57	3.05
	Maintenance Spares-30% of O&M	5.65	10.97
	Receivables for two months	12.21	19.83
	Total Working Capital Requirement	23.66	40.58
	Rate of interest	11.50%	10.00%
	Interest on Working capital	2.72	4.06
LTPS	Fuel Cost for one month	9.65	9.02
	O&M Expenses for one month	3.22	3.23
	Maintenance Spares-30% of O&M	11.58	11.61
	Receivables for two months	31.23	27.23
	Total Working Capital Requirement	55.68	51.09
	Rate of interest	11.50%	10.00%
	Interest on Working capital	6.40	5.11
KLHEP	O&M Expenses for one month	2.37	2.40
	Maintenance Spares-30% of O&M	4.27	8.64
	Receivables for two months	15.79	11.57
	Total Working Capital Requirement	22.43	22.61
	Rate of interest	11.50%	10.00%
	Interest on Working capital	2.58	2.26
LRPP	Fuel Cost for one month	7.91	7.93
	O&M Expenses for one month	1.67	1.71
	Maintenance Spares-30% of O&M	6.01	6.14
	Receivables for two months	21.32	21.46
	Total Working Capital Requirement	36.91	37.24
	Rate of interest	11.50%	10.00%
	Interest on Working capital	4.24	3.72
Total interest on Working capital		15.95	15.15

4.5.3. APGCL prays to the Hon'ble Commission to approve the plant wise Interest on Working capital for FY 2019-20 as shown above.

4.6. Operation and Maintenance Expenses (O&M Expenses)

- 4.6.1. As per Regulation of the Tariff Regulations, 2018 does not provide for separate approval of Employee expenses, A&G expenses and R&M expenses.
- 4.6.2. We submit that that the Hon'ble Commission has approved the Normative Operations & Maintenance for LTPS for FY 2019-20 at Rs. 56.49 Crore in the Order of March 2019 which was subsequently revised to Rs. 56.69 Crore in the Order of March 2020
- 4.6.3. However, the Hon'ble Commission while approving the O&M for LTPS in the Order of March 2020 as per effective capacity for FY 2019-20 (table 53 of the order) has approved Rs. 22.86 Crore whereas as per effective capacity it should be Rs. 38.75 (Effective Capacity of 97.2 MW against installed capacity of 142.2 MW) Crore. The Hon'ble Commission had reduced the O&M cost of LRPP from the approved O&M cost of LTPS.
- 4.6.4. APGCL humbly submits that it had awarded the R&M services of LRPP to M/s Wartsila and for which APGCL is bearing Rs. 1.29 Crores per quarter as R&M expenditure. Such cost is also borne by APGCL.
- 4.6.5. APGCL humbly submits that the following historical O&M Cost for LTPS as well as the current actual O&M cost incurred in FY19-20.

(in Rs. Crore)

	FY16-17	FY17-18	FY18-19	FY19-20	Average O&M Expenditure
LTPS Actual O&M Expenditure	54.96	46.00	38.53	41.53	45.26

- 4.6.6. As can be seen from the above table, the average actual O&M cost incurred for LTPS has been Rs. ~45.26 Crore in the last 4 years. The Hon'ble Commission's reduction of the O&M Cost of LRPP from the Normative O&M cost for LTPS as per Order of March 2020 would lead to difficulty on the operations & maintenance cost coverage of LTPS for APGCL.
- 4.6.7. APGCL humbly prays to the Commission to approve the Normative O&M cost as per Order of March 2020 at Rs. 56.69 Crore and reduce the cost for effective capacity considering the actual effective installed capacity of 97.2 MW only while keeping the actual O&M Cost for LRPP separate for allowance.
- 4.6.8. APGCL also humbly submits to the Hon'ble Commission that is it not claiming the same O&M expenses for LTPS as well as LRPP. APGCL is only claiming the actual expenditure incurred for each plant separately as shown below.
- 4.6.9. APGCL prays to the hon'ble commission to approve the O&M expenses for FY 2019-20 as shown in the table below.

Table 32: Operation and Maintenance claimed for FY 2019-20

Station	Approved in March 2019	Approved considering Effective Installed Capacity in order of March 2019	As per audited accounts for FY 2019-20	Amount considered for True up Petition for FY 2019-20 (excluding Special R&M and ROP)
NTPS	51.72	18.83	39.04	36.56
LTPS	56.49	38.62	41.53	38.71
KLHEP	28.44	28.44	29.99	28.80
LRPP	20.04	20.04	20.98	20.48
Total	156.69	105.93	131.53	124.54

4.6.10. As per Regulation 2.1(50) of the Tariff Regulations, 2018, Operation and maintenance expense include manpower, repairs, spares, consumables, insurance and overheads but excludes fuel expenses and water charges.

4.6.11. In view of the above, APGCL has also provided Station-wise details of head-wise O&M expenses claimed for FY 2019-20

Table 33: Station-wise details of head-wise O&M expenses claimed for FY 2019-20

Station	Employee Cost	R&M	A&G	Total
NTPS	32.58	4.63	1.83	39.04
LTPS	28.54	8.96	4.02	41.53
KLHEP	22.87	3.96	3.16	29.99
LRPP	13.30	6.64	1.04	20.98
Total	97.30	24.19	10.05	131.53

Rs. Cr

4.6.12. The Petitioner submits that increase in Revision of Pay and Special R&M are being claimed separately as per the Tariff Regulations 2018.

APGCL had to incur Rs. 6.99 Crores for Revision of Pay in FY2019-20 as per order of the Government of Assam. The Order for the Payment of Generation Allowance Arrear has been attached in Annexure 7

4.6.13. APGCL prays to the Hon'ble Commission to approve the plant wise O&M expenses for FY 2019-20 as shown above.



4.7. Actual Tax Claim

4.7.1. As per regulation 35 of the Tariff Regulations 2018, income tax as will be reimbursed per actual income tax paid, based on the documentary evidence submitted at the time of truing up.

4.7.2. APGCL has determined the annual tax claim to be payable to Income Tax Department at Rs. 1.16 Crores. However the final tax payment will be done based on the amount determined under the tax audit which is expected to be completed by December 2020. In view of the above, the Petitioner has claimed the tax on income as shown in the table below. The tax on income has been apportioned plant wise based on the plant wise revenue from sale of power received in FY 2019-20. APGCL humbly submits that it will submit the actual tax claim based on the final tax audit assessment to the Commission as soon as it is available.

Table 34: Plant wise Tax on income claimed for FY 2019-20

Rs. Cr

Station	Tax on income claimed for FY 2019-20
NTPS	0.21
LTPS	0.41
KLHEP	0.23
LRPP	0.32
Total	1.16

4.7.3. The Petitioner prays to the Hon'ble Commission to approve the plant wise tax on income for FY 2019-20 as shown in the table above.

4.8. Impact of ROP (Revision of Pay)

4.8.1. APGCL had to incur Rs. 6.99 Crores for Revision of Pay in FY2019-20 as per order of the Government of Assam.

Table 35: Revision of pay and payment of arrears for FY 2019-20

Rs. Cr

Station	Approved in Order for March 2019	Amount appeared in Annual Accounts for FY 2019-20	Amount claimed for True-Up
NTPS	0.00	2.49	2.49
LTPS	0.00	2.82	2.82
KLHEP	0.00	1.19	1.19
LRPP	0.00	0.50	0.50
Total	0.00	6.99	6.99



4.8.2. APGCL prays to the Hon'ble Commission to approve the plant wise ROP expenses for FY 2019-20 as shown above.

4.9. Special R&M

4.9.1. As per regulation 29.5 (iii) of the Tariff Regulations 2018, special R&M expenditure is allowed for efficient operation of the stations.

4.9.2. APGCL's expenditure under Special R&M was done for the following.

Rs. Cr

Work Name	Total Amount Approved	Appeared in Annual Accounts FY 2019-20	Claim in FY 2019-20	Remarks
Overhauling of Unit-6 of NTPS	4.00	0.00	0.00	The overhauling could not be undertaken in FY2019-20. The overhauling schedule will be revised post commissioning of NRPP.
Overhauling LTPS - Unit 5 in FY2020-21	10.00	0.00	0.00	LTPS, APGCL has been using HRSG with 20 MW BHEL, GE, Frame - V Gas Turbines to produce power in combined cycle since 2012. As the HRSG of the unit GT#5 is under shut down since 08/02/2018, for the purpose of maximizing generation, optimizing the utilization of limited available Natural Gas and to minimize heat rate and mainly to run the plant in combined Cycle Mode, Preference was given to Gas Turbines whose HRSG were in available condition. And so it was assumed that GT#7 will reach next MI running hours earlier than GT#5 though the MI of GT#7 was done around 8 months later on 03/12/2014 at running hours of 82889 hrs than GT#5. MI of GT#5 was completed on 24/02/2014 after at Running Hour of 80914.5 RH and so the MI of GT#5 was shifted to GT#7. In the above context the Major Overhauling work was interchanged from GT#5 to GT#7. GT#5 will get preference in producing power only after



Work Name	Total Amount Approved	Appeared in Annual Accounts FY 2019-20	Claim in FY 2019-20	Remarks
				completion of restoration work of its HRSG. Thus, APGCL is undertaking the Special R&M of Unit 7 in the first phase in FY21-22.
Capital Overhauling of 50MW Francis type Fuji make Generator Turbine Unit-II - KLHEP	15.00	0.00	0.00	The revised estimate for work to be undertaken in FY21-22 is INR 15.10 Cr.

4.9.3. Thus no Special R&M works could be undertaken in FY 2019-20.

4.9.4. In view of the above regulations, the approved and actual number for Special R&M for FY 2019-20 are shown in the table below.

Table 36: Plant wise Special R&M for FY 2019-20

Rs. Cr

Station	Approved as per order of March 2019	Amount claimed for True-Up
NTPS	4.00	0.00
LTPS	10.00	0.00
KLHEP	15.00	0.00
LRPP	0.00	0.00
Total	29.00	0.00

4.9.5. APGCL prays to the Hon'ble Commission to approve the plant wise Special R&M for FY 2019-20 as shown in the table above.

4.10. Capacity building

4.10.1. The Hon'ble Commission had approved expenses pertaining to Capacity Building of APGCL employees.

4.10.2. In FY2019-20 has incurred INR 33.78 Lakhs on Capacity Building. The list of capacity building activities undertaken in FY2019-20 is shown below:

Sl No.	Title of the training course	Name, designation & place of posting of the participants	Period	Duration (in days)	Organizer of the training course
1	Preventive Maintenance of Transformer by Teanformer Oil Analysis and DGA	Sri Ranjit Das, AGM, APGCL (HQ); Sri P.J. Baishya, AGM, APGCL (HQ); Sri Tutmoni Dekaraja, DM, LTPS, APGCL, Maibella; Th. Sandeep Singha, DM, NTPS, APGCL, Namrup; Sri Ganitabh Arongia, JM, LTPS, APGCL, Maibella	19-07-2019	1	Central Power Research Institute Regional Testing Laboratory, Guwahati
2	Challenges & Remedial measures for retaining Human Resources	Sri Anal Kishore Bordoloi, DM(HR), LTPS, APGCL, Maibella; Sri Amar Kujur, AM(HR), KLHEP, APGCL, Lengery; Smti Purnima Mahanta, AM (HR), APGCL (HQ)	21/08/2019 to 23/08/2019	3	National Power Training Institute (NPTI), Faridabad
3	Protection of Industrail Power Systems	Sri Anuj Kumar Das, AGM (PP), KLHEP, APGCL, Lengery; Sri Kalyan Boruah, DM, LTPS, APGCL, Maibella; Sri Amit Ranjan Lashkar, AM, LTPS, APGCL, Maibella; Sri Makhan Bora, JM, LTPS, APGCL, Maibella; Sri Biswaraj Dhar, JM, LTPS, APGCL, Maibella; Sri Jehova Lalthuoiilen Inbudn, JM, KLHEP, APGCL, Lengery; Sri Nilkamal Singha, JM, LTPS, APGCL, Maibella	21/10/2019 to 25/10/2019	5	NPTI, Power System Training Institute (PSTI), Bangalore
4	Sediment Management for ensuring the sustainability of Reservoir and Run-off River Projects	Sri Sarbajit Bhattacharyya, AM (C), LKCD, APGCL, Lanka; Sri Pranoy Sarma, AM (C), MSHEP, APGCL, Karbi Anglong	25/09/2019 to 26/09/2019	2	Central Board of Irrigation & Power (CBIP), New Delhi
5	International Workshop on Hydrokinetic Technology	Sri Ratnajit Biswanath, CGM (H&C), APGCL; Sri Chandra Kamal Bora, AGM (C) i/c, NTPS, APGCL, Namrup	10/10/2019 to 11/10/2019	2	Indian Institute of Technology (IIT), Roorkee
6	Concept of commissioning of Solar Power Plants	Sri Mridul Bora, DM, LTPS, APGCL, Maibella; Sri Abhijit Dutta, AM, NTPS, APGCL, Namrup	16/09/2019 to 20/09/2019	2	REC Institute of Power Management and Training (RECIPMT)
7	Vibrations, Balancing, Alignment and Condition Monitoring of Rotating Equipment	Sri Prasanna Gogoi, AGM, LTPS, APGCL, Maibella; Sri Khonsing Teron, AGM, KLHEP, APGCL, Lengery; Sri Sanjay Mallik, AM, LTPS, APGCL, Maibella	20/08/2019 to 23/08/2019	4	Engineering Staff College of India (ESCI), Hyderabad
8	e- Procurement	Smti Lipika Das, AGM (PP), APGCL (HQ); Smti Destimona Borah, AM (C), APGCL (HQ)	24/07/2019 to 26/07/2019	3	Administrative Staff College of India (ASCI), Hyderabad

Sl No.	Title of the training course	Name, designation & place of posting of the participants	Period	Duration (in days)	Organizer of the training course
9	Income Tax	Sri AKS Zaman, AGM (F&A), APGCL (HQ); Sri Ajoy Kr. Nath, AO, APGCL (HQ)	12/12/2019 to 14/12/2019	3	National Academy of Human Resource Development (NAHRD)
10	Recent changes under GST for PSU & private undertaking	Sri Luit Saurav Mahanta, AO, APGCL (HQ); Sri Simanta Bordoloi, AO, APGCL (HQ)	05/12/2019 to 06/12/2019	2	International Business Conference (IBC)
11	Improving effectiveness of Private Secretaries & Personal Assistants	Sri Amal Mitra, OSD to the MD, APGCL	26/11/2019 to 28/11/2019	3	National Productivity Council, Under the Ministry of Commerce & Industry, Govt. of India, Bhubaneswar
12	Switch gear and Transformer Maintenance	Sri Pankaj Bikash Sarma, AGM, LTPS, APGCL, Maibella; Sri Madhurjya Ritu Das, DM, MSHEP, APGCL, Karbi Anglong; Sri Tutumoni Dekaraja, DM, KLHEP, APGCL, Lengery; Sri Saurav Das, DM, NTPS, APGCL, Namrup; Sri Longchap Kiri Phangcho, DM, LTPS, APGCL, Maibella; Sri munna Pathori, AM, NTPS, APGCL, Namrup; Sri Subhra Jyoti Borah, AM, NTPS, APGCL, Namrup; Sri Rajkumar Pegu, JM, LTPS, APGCL, Maibella; Sri Pronoy Bora, JM, LTPS, APGCL, Maibella; Sri Rajib Konwar, JM, KLHEP, APGCL, Lengery	11/11/2019 to 15/11/2019	5	NPTI, PSTI, Bangalore
13	Renewable Energy	Sri Kumud Ram Bora, DGM, NTPS, APGCL, Namrup; Sri Hridaya Nanda Bora, DGM, APGCL (HQ); Sri Akshay Talukdar, DGM, APGCL (HQ); Smti Ashrulima Borah, AGM, LTPS, APGCL, Maibella; Sri Rajib Rongpi, DM, KLHEP, APGCL, Lengery; Sri Victor Paul Choudhury, DM (C), NTPS, APGCL, Namrup; Sri Nihar Saikia, AM, LTPS, APGCL, Maibella; Sri Jitumoni Deka, AM, LTPS, APGCL, Maibella; Sri Rohan Upadhyay, AM (C), LTPS, APGCL, Maibella; Sri Ramen Nath, AM, NTPS, APGCL, Namrup; Sri Apurba Jyoti Biswasi, AM (C), KLHEP, APGCL, Lengery; Sri Sarat Bora, AM, APGCL (HQ); Sri Rajkumar Pegu, JM, LTPS, APGCL, Maibella; Sri Poran	24/09/2019 to 26/09/2019	3	Indian Electrical & Electronics Manufacturers' Association (IEEMA)

Sl No.	Title of the training course	Name, designation & place of posting of the participants	Period	Duration (in days)	Organizer of the training course
		Jyoti Borkoch, JM, LTPS, APGCL, Maibella; Sri Rupam Saikia, JM (C), NTPS, APGCL, Namrup; Sri Satyapriya Das, JM, KLHEP, APGCL, Lengery; Smti Rita Boro, AM, APGCL (HQ); Sri Dipanjal Das, JM (C), NTPS, APGCL, Namrup; Ngi Cheng Weingken, JM (C), NTPS, APGCL, Namrup; Sri Prema Bhadra Hasnu, JM, KLHEP, APGCL, Lengery			
14	MDP on Transformational Leadership	Sri Kumud Ram Bora, DGM, NTPS, APGCL, Namrup; Smti Lipika Das, AGM (PP), APGCL (HQ)	06/06/2019 to 08/06/2019	3	Xavier Institute of Management and Information Technology (XIMIT), Bamunimaidam
15	Cyber Security Awareness Session	Sri Animesh Saikia, DM, APGCL (HQ)	24-06-2019	1	NHPC Limited

Sl No.	Title of the training course	Name, designation & place of posting of the participants	Period	Duration (in days)	Organizer of the training course
16	Micro/Mini/Normal/Macro Hydro Power Plant	Sri Manash Pratim Bharadwaj, DM(C), KLHEP, APGCL, Lengery; Sri Victor Paul Choudhury, DM(C), NTPS, APGCL, Namrup; Sri Sharat Borah, DM (E), KLHEP, APGCL, Lengery; Sri Reswel Teron, DM (E), KLHEP, APGCL, Lengery; Sri Sobin Das, AM(C),NTPS, APGCL, Namrup; Sri Manokh Das, AM (C),LTPS, APGCL, Maibella; Sri Pranoy Sarma, AM(C),KLHEP, APGCL, Lengery; Sri Sanjay Rabha, AM(C),KLHEP, APGCL, Lengery; Sri Victor Bordoloi, AM(E),LTPS, APGCL, Maibella; Sri Victor Bordoloi, AM (E),LTPS, APGCL, Maibella; Sri Tirtha Pratim Khound, AM (M), KLHEP, APGCL, Lengery; Sri Pankaj Shyam, JM (E), LTPS, APGCL, Maibella; Sri Dipanjal Das, JM (C),NTPS, APGCL, Namrup; Sri Ramu Hanse, JM(C),KLHEP, APGCL, Lengery; Sri Pranab Jyoti Dutta, JM(C), LTPS, APGCL, Maibella; Sri Riju Malakar, JM (C), CTPS, APGCL, Chandrapur; Smti Geetika Hazarika, JM(C),APGCL (HQ); Sri Naba Jyoti Boruah, JM(C),NTPS, APGCL, Namrup; Sri Biju Difoesa, JM(C),LKHEP, APGCL, Lanka; Sri Krishna Singh, JM(C),BKV Investigation Division, APGCL, Jagiroad; Sri Dhiraj Borthakur, JM(C),LKHEP, APGCL, Lanka	07/08/2019 to 08/08/2019	2	Indian Electrical & Electronics Manufacturers' Association (IEEMA)

Sl No.	Title of the training course	Name, designation & place of posting of the participants	Period	Duration (in days)	Organizer of the training course
17	Managing Workplace Stress	Sri Akshay Talukdar, DGM, APGCL (HQ); Sri Ajanta Kr. Mahanta, AGM, APGCL (HQ); Sri Saurav Saikia, DGM (C), APGCL (HQ); Sri Ridib Baruah, AGM, APGCL (HQ); Sri Bikash Bharali, AGM, APGCL (HQ); Sri Khonsing Teron, AGM, KLHEP, APGCL, Lengery; Sri Ranjit Das, AGM, APGCL (HQ); Sri Pranab Jyoti Baishya, AGM, APGCL (HQ); Sri Jonardan Rongpi, DGM (C), KLHEP, APGCL, Lengery; Sri Angshuman Sonowal, AGM, LTPS, APGCL, Maibella; Sri Bigstone Hanse, AGM, KLHEP, APGCL, Lengery; Sri Himanshu Das, AGM, APGCL, KLHEP, Lengery; Sri Chandra Kamal Bora, DM(C), NTPS, APGCL, Namrup; Smti Banashri Choudhury, DM (IT), APGCL (HQ); Sri Anurag Gogoi, DM, LTPS, APGCL, Maibella; Sri Anup Bharali, DM, LTPS, APGCL, Maibella; Sri Animesh Saikia, DM(C), APGCL (HQ); Sri Porah Jyoti Ligira, DM, LKHEP, APGCL, Lanka; Sri Longchap Kiri Phangcho, DM, LTPS, APGCL, Maibella; Sri Abhinandan Dutta, AM (C), LKHEP, APGCL, Lanka; Sri AKS Zaman, AGM (F&A), APGCL (HQ); Smti Pinky Deb, AM (F&A), APGCL (HQ); Sri Sandipan Borah, AM, NTPS, APGCL, Namrup; Sri Gunamoni Nath, AM, NTPS, APGCL, Namrup; Sri Abhijit Dutta, AM, NTPS, APGCL, Namrup	24-02-2019	1`	Optimista, Guwahati-28
18	Efficient operation and maintenance of Boilers	Sri Abhijit Saha, AGM, NTPS, APGCL, Namrup; Sri Biswajyoti Gohain, AGM, NTPS, APGCL, Namrup; Sri Krishanu Bikash Karmakar, DM, NTPS, APGCL, Namrup; Sri Hiron Phukan, DM, NTPS, APGCL, Namrup	28-06-2019	1	National Productivity Council, Guwahati

Sl No.	Title of the training course	Name, designation & place of posting of the participants	Period	Duration (in days)	Organizer of the training course
19	Safety Awareness Generation Program	Sri Biswajyoti Gohain, AGM, NTPS, APGCL, Namrup; Sri Rati Kanta Dey, AGM, NTPS, APGCL, Namrup; Sri Prasanna Gogoi, AGM, LTPS, APGCL, Maibella; Sri Vikash Sharma, DM, LTPS, APGCL, Maibella	10-09-2019	1	Regional Inspectorial Organization (RIO) NE, Central Electricity Authority (CEA) in association with IEEMA, BIS & ICAI
20	Sexual Harassment of Women at Workplace (Prevention and Redressal) Act, 2013 for Officials of Government Departments, Members of ICC and LCC	Smti Indrani Dewri, AGM, APGCL (HQ); Smti Aklantika Saikia, AGM, APGCL (HQ)	18/07/2019 to 19/07/2019	2	National Institute of Public Cooperation and Child Development (NIPCCD), Regional Centre, Guwahati
21	Regional workshop for DCs of PET Cycle to and PET Cycle 5	Sri Pankaj Bikash Sarma, AGM, LTPS, APGCL, Maibella ; Sri Longchap Kiri Phangcho, DM, LTPS, APGCL, Maibella; Sri Rupjyoti Kalita, AM, NTPS, APGCL, Namrup.	21-05-2019	1	Bureau of Energy Efficiency, New Delhi with support of SDA, Chandigarh

4.10.3. The approved and claimed expenses have been shown in the table below:

Table 37: Expenses under Capacity building

Rs. Cr

Station	Approved as per order of March 2019	Amount claimed for APR
NTPS	0.10	0.11
LTPS	0.10	0.11
KLHEP	0.10	0.11
LRPP	0.00	0.00
Total	0.30	0.34

4.10.4. APGCL prays to the Hon'ble Commission to approve the above mentioned capacity building expenses for FY2019-20.

4.11. Non-Tariff income

4.11.1. As per Regulation 45 of the Tariff Regulations, 2018, the non-tariff income shall be deducted from the Annual Fixed Cost in determining the Annual Fixed Cost of the Generation Company.

4.11.2. In view of the above regulations, the details of non-tariff income for FY 2019-20 are shown in the table below

Table 38: Station-wise details of Non tariff income for FY 2019-20

Rs. Cr			
Station	Approved as per order of March 2019	As per audited accounts for FY 2019-20	True up Petition for FY 2019-20
NTPS	7.13	15.44	15.44
LTPS	9.22	25.37	25.37
KLHEP	5.75	16.69	16.69
LRPP	0.00	0.00	0.00
Total	22.10	57.49	57.49

4.11.3. APGCL prays to the Hon'ble Commission to approve the plant wise Non tariff income for FY 2019-20 as shown above.

4.12. Total Fixed Cost

4.12.1. The recovery of Annual fixed charges is to be done as per regulation 51.1 of the Tariff Regulations, 2018.

4.12.2. Based on the above, the Annual fixed charges for FY 2019-20 has been computed. The Hon'ble Commission is requested to approve the fixed charges as discussed in the table below:

Table 39: Annual Fixed charges for 2019-20 of NTPS

Rs. Cr			
Particulars	Approved as per order of March 2019	Amount appeared in Annual Accounts 19-20	Amount claimed for True-Up
Operation & Maintenance Expenditure	18.83	39.04	36.56
Employee Expenses	0	32.58	30.09
R&M Expenses	0	4.63	4.63
A&G Expenses	0	1.83	1.83
Interest & Finance Charges	0.07	20.49	0.10
Interest on working Capital	2.72	0.00	4.06



Particulars	Approved as per order of March 2019	Amount appeared in Annual Accounts 19-20	Amount claimed for True-Up
Depreciation	0.63	1.56	1.46
Return on Equity	3.10	0	8.53
Income taxes	-	0.21	0.21
Impact of ROP	0.00	2.49	2.49
Special R&M	4.00	0	0
Capacity Building	0.10	0.11	0.11
<u>Less: Other Income</u>	7.13	15.44	15.44
Total Fixed Charges	22.32	48.47	38.08

Table 40: Annual Fixed charges for 2019-20 of LTPS

Particulars	Approved as per order of March 2019	Amount appeared in Annual Accounts 19-20	Amount claimed for True-Up
Operation & Maintenance Expenditure	38.62	41.53	38.71
Employee Expenses		28.54	25.73
R&M Expenses		8.96	8.96
A&G Expenses		4.02	4.02
Interest & Finance Charges	0.03	27.46	0.03
Interest on working Capital	6.40	0.00	5.11
Depreciation	10.46	12.89	11.15
Return on Equity	15.16	0.00	22.18
Income taxes	-	0.41	0.41
Impact of ROP	0	2.82	2.82
Special R&M	10	0	0
Capacity Building	0.10	0.11	0.11
<u>Less: Other Income</u>	9.22	25.37	25.37
Total Fixed Charges	71.55	59.85	55.15

Rs. Cr



Table 41: Annual Fixed charges for 2019-20 of KLHEP

Rs. Cr

Particulars	Approved as per order of March 2019	Amount appeared in Annual Accounts 19-20	Amount claimed for True-Up
Operation & Maintenance Expenditure	28.44	29.99	28.80
Employee Expenses		22.87	21.68
R&M Expenses		3.96	3.96
A&G Expenses		3.16	3.16
Interest & Finance Charges	22.09	12.37	20.68
Interest on working Capital	2.58	0.00	2.26
Depreciation	21.63	23.65	21.13
Return on Equity	10.64	0.00	10.64
Income taxes	-	0.23	0.23
Impact of ROP	-	1.19	1.19
Special R&M	15.00	-	-
Capacity Building	0.10	0.11	0.11
<u>Less: Other Income</u>	5.75	16.69	16.69
Total Fixed Charges	94.73	50.84	68.34

Table 42: Annual Fixed charges for 2019-20 of LRPP

Rs. Cr

Particulars	Approved as per order of March 2019	Amount appeared in Annual Accounts 19-20	Amount claimed for True-Up
Operation & Maintenance Expenditure	20.04	20.98	20.48
Employee Expenses		13.30	12.80
R&M Expenses		6.64	6.64
A&G Expenses		1.04	1.04
Interest & Finance Charges	3.44	2.61	3.66
Interest on working Capital	4.24	0.00	3.72
Depreciation	2.75	13.47	2.60
Return on Equity	2.50	0.00	2.37
Income taxes	-	0.32	0.32



Particulars	Approved as per order of March 2019	Amount appeared in Annual Accounts 19-20	Amount claimed for True-Up
Impact of ROP	0	0.50	0.50
Special R&M	0	0.00	0.00
Capacity Building			
<u>Less: Other Income</u>	0.00	0.00	0.00
Total Fixed Charges	32.97	37.88	33.65

4.12.3. The Petitioner prays to the Hon'ble Commission to approve the plant wise fixed costs for FY 2019-20 as discussed in the tables above.

5. Energy Charges

5.1. Fuel Price and Calorific Value

5.1.1. As per Regulation 10 of the Tariff Regulations 2018, 'Fuel Price' and 'Calorific Value of Fuel' are uncontrollable items. The actual values of 'Fuel Price' and 'Calorific Value of Fuel' are shown in the table below:

Table 43: Actual Plant wise GCV and Price for FY 2019-20

Station	Wt. Avg. Gross Calorific Value of Gas (kcal/SCM)	Wt. Avg. Price of Gas (Rs./1000 SCM)
NTPS	9,157.63	6,390.70
LTPS	9,388.83	8,263.04
LRPP	9,388.83	8,263.04

5.1.2. The Petitioner prays to the Hon'ble Commission to approve the actual Price of Gas and GCV for NTPS, LTPS and LRPP for FY 2019-20 as shown in the table above.

5.2. Fuel cost

5.2.1. The table below shows the plant wise approved fuel cost and the actual total fuel cost incurred for FY 2019-20

Table 44: Fuel cost for NTPS for FY 2019-20

Particulars	Unit	Approved as per order of March 2019	FY 2019-20 Actual
Gross Generation	MU	173.73	252.86
Heat Rate	kcal/kWh	3900	4583.58
GCV of gas	kcal/SCM	8893.61	9157.63
Overall Heat	G. cal.	677547	1159018.74
Gas consumption	M. SCM	76.18	126.56
Price of Gas	Rs./ 1000 SCM	6076.99	6390.70
Total cost of Gas	Rs. Crore	46.30	80.88

Table 45: Fuel cost for LTPS for FY 2019-20

Particulars	Unit	Approved as per order of March 2019	FY 2019-20 Actual
Gross Generation	MU	425.74	362.01
Heat Rate	kcal/kWh	3200	3396.60
GCV of gas	kcal/SCM	9126.42	9388.83
Overall Heat	G. cal.	1362368	1229586.29



Particulars	Unit	Approved as per order of March 2019	FY 2019-20 Actual
Gas consumption	M. SCM	149.28	130.96
Price of Gas	Rs./1000 SCM	7758.11	8263.04
Total cost of Gas	Rs. Crore	115.81	108.21

Table 46: Fuel cost for LRPP for FY 2019-20

Particulars	Unit	Approved as per order of March 2019	FY 2019-20 Actual
Gross Generation	MU	520.82	504.20
Heat Rate	kcal/kWh	2150	2143.87
GCV of gas	kcal/SCM	9126.42	9388.83
Overall Heat	G. cal.	1119763	1080936.57
Gas consumption	M. SCM	122.69	115.13
Price of Gas	Rs./1000 SCM	7758.11	8263.04
Total cost of Gas	Rs. Crore	95.19	95.13

5.2.2. The Petitioner prays to the Hon'ble Commission to approve the actual Fuel cost Price for NTPS, LTPS and LRPP for FY 2019-20 as shown in the table above.

5.3. Incentives

5.3.1. Secondary charge for KLHEP: As per regulation 53.6 of the Tariff Regulations 2018, for a hydro power station if the actual saleable energy in a year exceeds Design energy the Energy Charge for such energy is billed equal to the lowest variable charges of the central sector thermal power generating stations in the north east region.

5.3.2. The net generation of KLHEP in FY 2019-20 was higher than the design energy and hence Secondary Charge Incentive has been claimed for KLHEP as follows:

Table 47: Secondary Charge for KLHEP in FY2019-20

Sl. No.	Station	Capacity of KLHEP	Design Energy (net of Aux. Consumption)	Actual Energy Sent out	Excess over D.E.	Ex-bus energy eligible for incentive	Secondary charge (Rs. Cr)
	1	2	3	4	5	6	7= 0.818 x 6/10
1	KLHEP	100	388.05	396.85	8.80	8.80	0.72



5.3.3. APGCL submits that due to an error it has billed Rs. 56 Lakhs for Secondary Charge for KLHEP in FY2019-20 which is included in the Revenue. It will bill the remaining amount in FY20-21 to APDCL in the month of December 2020

5.3.4. As per regulation 53.2 of the Tariff Regulations 2018, incentive payable to hydro power plants for achieving higher availability than normative availability is inclusive of the Annual fixed cost.

5.3.5. As per the formula in the above regulation, incentive is payable to hydro power plants if actual availability is higher than normative availability. The same is being claimed as shown in the table below.

Table 48: Incentive claim for KLHEP for FY 2019-20

SI. No	Station	Actual AFC for FY 2019-20	Actual availability achieved for 365 days	Normative availability	Incentive for Availability claimed as per actual AFC for 365 days (Rs. Cr)
	1	2	3	4	5 = 1 x 0.5 x (3-4) /4
1	KLHEP	68.34	85.03%	85.00%	0.01

5.3.6. APGCL submits that the above incentive is being claimed for KLHEP in FY 2019-20 as shown above.

5.3.7. The Petitioner prays to the Hon'ble Commission to approve the Secondary charge and Incentives for KLHEP for FY 2019-20 as shown in the tables above.

6. Summary of submissions for True-up of FY 2019-20

6.1. Net Annual Revenue Requirement

6.1.1. The plant wise Net Annual Revenue Requirements for FY 2019-20 are as shown in the tables below.

Table 49: Net Annual Revenue Requirements for NTPS for FY 2019-20

True-up for FY 2019-20 For NTPS				
Sl. No	Particulars	Approved as per order of March 2019	Amount appeared in Annual Accounts 19-20	Amount claimed for True-Up
I	POWER GENERATION (MU)			
	Gross Generation	173.73	252.86	252.86
	Net Generation	165.91	237.85	237.85
	Auxiliary Consumption Loss %	4.50%	5.94%	5.94%
I	Fixed Charges			
	Operation & Maintenance Expenditure	18.83	39.04	36.56
	Employee Expenses	0	32.58	30.09
	R&M Expenses	0	4.63	4.63
	A&G Expenses	0	1.83	1.83
	Interest & Finance Charges	0.07	20.49	0.10
	Interest on working Capital	2.72	0.00	4.06
	Depreciation	0.63	1.56	1.46
	Return on Equity	3.10	0	8.53
	Income taxes	-	0.21	0.21
	Impact of ROP	0.00	2.49	2.49
	Special R&M	4.00	0	0
	Capacity Building	0.10	0.11	0.11
	Less: Other Income	7.13	15.44	15.44
II	Total Fixed Charges	22.32	48.47	38.08
III	Fuel Cost	46.30	80.88	80.88
IV	Total Revenue Requirement	68.62	129.35	118.96
V	Incentive for generation for FY 2019-20	0	0	0
VI	Total Cost	68.62	129.35	118.96
VII	Revenue from Sale of Power	68.80	90.01	90.01



True-up for FY 2019-20 For NTPS				
Sl. No	Particulars	Approved as per order of March 2019	Amount appeared in Annual Accounts 19-20	Amount claimed for True-Up
VIII	Revenue Gap (+) / Surplus(-)	-0.18	39.35	28.95

Table 50: Net Annual Revenue Requirements for LTPS for FY 2019-20

Rs. Cr

True-up for FY 2019-20 For LTPS				
Sl. No	Particulars	Approved as per order of March 2019	Amount appeared in Annual Accounts 19-20	Amount claimed for True-Up
I	POWER GENERATION (MU)			
	Gross Generation	425.74	362.01	362.01
	Net Generation	402.32	324.39	324.39
	Auxiliary Consumption Loss %	5.50%	10.39%	10.39%
I	Fixed Charges			
	Operation & Maintenance Expenditure	38.62	41.53	38.71
	Employee Expenses		28.54	25.73
	R&M Expenses		8.96	8.96
	A&G Expenses		4.02	4.02
	Interest & Finance Charges	0.03	27.46	0.03
	Interest on working Capital	6.40	0.00	5.11
	Depreciation	10.46	12.89	11.15
	Return on Equity	15.16	0.00	22.18
	Income taxes	0.00	0.41	0.41
	Impact of ROP	0	2.82	2.82
	Special R&M	10	0	0
	Capacity Building	0.10	0.11	0.11
	<u>Less:</u> Other Income	9.22	25.37	25.37
II	Total Fixed Charges	71.55	59.85	55.15
III	Fuel Cost	115.81	108.21	108.21
IV	Total Revenue Requirement	187.36	168.06	163.36
V	Incentive for generation for FY 2019-20	0.00	0.00	0.00
VI	Total Cost	187.36	168.06	163.36



True-up for FY 2019-20 For LTPS				
Sl. No	Particulars	Approved as per order of March 2019	Amount appeared in Annual Accounts 19-20	Amount claimed for True-Up
VII	Revenue from Sale of Power	187.36	174.52	174.52
VIII	Revenue Gap (+) / Surplus(-)	0.00	-6.45	-11.16

Table 51: Net Annual Revenue Requirements for KLHEP for FY 2019-20

Rs. Cr

True-up for FY 2019-20 for KLHEP				
Sl. No	Particulars	Approved as per order of March 2019	Amount appeared in Annual Accounts 19-20	Amount claimed for True-Up
I	POWER GENERATION (MU)			
	Gross Generation	390.00	398.53	398.53
	Net Generation	388.05	396.85	396.85
	Auxiliary Consumption Loss %	0.5%	0.4%	0.42%
I	Fixed Charges			
	Operation & Maintenance Expenditure	28.44	29.99	28.80
	Employee Expenses		22.87	21.68
	R&M Expenses		3.96	3.96
	A&G Expenses		3.16	3.16
	Interest & Finance Charges	22.09	12.37	20.68
	Interest on working Capital	2.58	0.00	2.26
	Depreciation	21.63	23.65	21.13
	Return on Equity	10.64	0.00	10.64
	Income taxes	0.00	0.23	0.23
	Impact of ROP	-	1.19	1.19
	Special R&M	15.00	-	-
	Capacity Building	0.10	0.11	0.11
	<u>Less:</u> Other Income	5.75	16.69	16.69
II	Total Fixed Charges	94.73	50.84	68.34
III	Fuel Cost	-	-	-
IV	Total Revenue Requirement	94.73	50.84	68.34
V	Incentive for generation for FY 2019-20	0.00	0.00	0.01
VI	Incentive for Secondary Energy generation	0.00	0.00	0.72
VII	Total Cost	94.73	50.84	69.08
VIII	Revenue from Sale of Power	94.73	96.49	96.49
IX	Revenue Gap (+) / Surplus(-)	0.00	-45.64	-27.41



Table 52: Net Annual Revenue Requirements for LRPP for FY 2019-20
Rs. Cr

True-up for FY 2019-20 For LRPP				
Sl. No	Particulars	Approved as per order of March 2019	Amount appeared in Annual Accounts 19-20	Amount claimed for True-Up
I	POWER GENERATION (MU)			
	Gross Generation	520.82	504.20	504.20
	Net Generation	502.59	489.48	489.48
	Auxiliary Consumption Loss %	3.50%	2.92%	2.92%
I	Fixed Charges			
	Operation & Maintenance Expenditure	20.04	20.98	20.48
	Employee Expenses		13.30	12.80
	R&M Expenses		6.64	6.64
	A&G Expenses		1.04	1.04
	Interest & Finance Charges	3.44	2.61	3.66
	Interest on working Capital	4.24	0.00	3.72
	Depreciation	2.75	13.47	2.60
	Return on Equity	2.50	0.00	2.37
	Income taxes	0.00	0.32	0.32
	Impact of ROP	0	0.50	0.50
	Special R&M	0	0.00	0.00
	Capacity Building			
	<u>Less: Other Income</u>	0.00	0.00	0.00
II	Total Fixed Charges	32.97	37.88	33.65
III	Fuel Cost	95.19	95.13	95.13
IV	Total Revenue Requirement	128.16	133.01	128.78
V	Incentive for generation for FY 2019-20	0.00	0.00	0.00
VI	Total Cost	128.16	133.01	128.78
VII	Revenue from Sale of Power	128.16	134.42	134.42
VIII	Revenue Gap (+) / Surplus(-)	0.00	-1.41	-5.64

6.2. Summary

6.2.1. The summary of the True-up for FY 2019-20 For APGCL is as shown below.

Table 53: True-up for FY 2019-20 for APGCL (in Crores)

True-up for FY 2019-20 for APGCL				
Sl. No	Particulars	Approved as per order of March 2019	Amount appeared in Annual Accounts 19-20	Amount claimed for True-Up
I	POWER GENERATION (MU)			
	Gross Generation	1510.29	1517.60	1517.60
	Net Generation	1458.88	1448.57	1448.57
	Auxiliary Consumption Loss %	3.40%	4.55%	4.55%
I	Fixed Charges			
	Operation & Maintenance Expenditure	105.93	131.53	124.54
	Employee Expenses		97.30	90.31
	R&M Expenses		24.19	24.19
	A&G Expenses		10.05	10.05
	Interest & Finance Charges	25.63	62.93	24.46
	Interest on working Capital	15.95	0.00	15.15
	Depreciation	35.47	51.58	36.34
	Return on Equity	31.40	0.00	43.72
	Income taxes	0.00	1.16	1.16
	Impact of ROP	0.00	6.99	6.99
	Special R&M	29.00	0.00	0.00
	Capacity Building	0.30	0.34	0.34
	Less: Other Income	22.10	57.49	57.49
II	Total Fixed Charges	221.58	197.04	195.21
III	Fuel Cost	257.30	284.23	284.23
IV	Total Revenue Requirement	478.88	481.27	479.44
V	Incentive for generation for FY 2019-20	0.00	0.00	0.01
VI	Add: Incentive for Secondary Energy generation	0.00	0.00	0.72
VII	Total Cost	478.88	481.27	480.18
VIII	Revenue from Sale of Power	479.05	495.44	495.44
X	Revenue Gap (+) / Surplus(-)	-0.17	-14.17	-15.26

6.2.2. The Petitioner prays to the Hon'ble Commission to approve the plant wise Net Annual Revenue Requirement for FY 2019-20 as discussed in the tables above.



6.3. Revenue from sale of power

6.3.1. The plant wise Revenue from Sale of Power for FY 2019-20 are as shown in the tables below.

Table 54: Plant wise Revenue from Sale of Power for FY 2019-20

Rs. Cr

Particulars	Fixed/Capacity charges	Variable charges	Total Revenue appeared in Accounts FY 2019-20	Approved as per order of March 2019	Total Revenue claimed in True up for FY 2019-20
NTPS	22.31	67.70	90.01	68.80	90.01
LTPS	71.56	102.96	174.52	187.36	174.52
LRPP	33.06	101.36	134.42	128.16	134.42
KLHEP	47.51	48.98	96.49	94.73	96.49
MSHEP	0.00	6.24	6.24	0.00	0.00
Total	174.44	327.24	501.67	479.05	495.44

6.3.2. The above claimed revenue does not include Rs. 2.31 Crore submitted as a Debit Note to AGCL for exceeding maintenance schedule as per agreement. As the matter is under review with AGCL, APGCL hasn't claimed Rs 2.31 Crore for determination of cumulative revenue gap towards True Up for FY2019-20.

6.3.3. The Petitioner prays to the Hon'ble Commission to approve the plant wise Sale of Power for FY 2019-20 as discussed in the table above.

6.4. Adjustment of Revenue Gap / Surplus

6.4.1. The plant wise Revenue Gap / Surplus and also for APGCL has a whole are shown in the table below.

Table 55: Revenue Gap / Surplus amount for APGCL for FY 2019-20

Rs. Cr

Particulars	NTPS	LTPS	KLHEP	LRPP	APGCL as a whole
Total Cost	118.96	163.36	69.08	128.78	480.18
Revenue from Sale of Power	90.01	174.52	96.49	134.42	495.44
Revenue Gap (+) / Surplus(-)	28.95	-11.16	-27.41	-5.64	-15.26



6.4.2. As the Hon'ble Commission has not provided for Carrying Cost on Revenue Gap or Surplus in the MYT Regulations, 2018, APGCL has not claimed any carrying cost for the above.

6.4.3. In view of the above, APGCL has not claimed the carrying cost for APGCL as a whole. The Total True-up Claim is shown in the table below

Table 56: Total True-up Claim for APGCL for FY 2019-20

Rs. Cr

True-up Claim	FY 2019-20
Revenue Gap for 2019-20	-15.26
Total True-up Claim	-15.26

6.4.4. We submit that the CAG Comments on Accounts for FY2019-20 has been attached in Annexure 2.

6.4.5. The Petitioner prays to the Hon'ble Commission to approve the Total True-up Claim including carrying cost for FY 2019-20 as discussed in the table above

REVISED CAPITAL INVESTMENT PLAN FOR FY 2020-21
TO
FY 2021-22 for NTPS, LTPS and KLHEP
To
ASSAM ELECTRICITY REGULATORY COMMISSION



Prepared by
ASSAM POWER GENERATION CORPORATION LTD
Bijulee Bhawan, Paltanbazar
Guwahati – 781 001

7. Revised Capital Investment Plan for FY 2020-21 to FY 2021-22 for NTPS, LTPS and KLHEP

7.1. Regulatory provisions

7.1.1. The Hon'ble Commission in its Tariff regulations 2018 has stated the following on Capital Investment Plan for generating companies for the control period from FY 2019-20 to FY 2021-22. The same is reproduced below for ready reference:

"6 Capital Investment Plan

6.1 The Generating Company, Transmission Licensee, SLDC Business and Distribution Licensee shall submit a Capital Investment Plan for the entire Control Period, as part of the MYT Petition as per the timeline specified in this Regulation and accompanied by the Fee required for processing of Investment plan, as specified in AERC (Payment of Fee) Regulations, 2015. .

6.2 The Capital Investment Plan for a generating company shall be based on planned generation capacity growth and shall contain among other things the following (i) generation forecasts; (ii) future performance targets; (iii) proposed efficiency improvement measures; (iv) saving in operating costs; (v) Plan for reduction in per unit/per MW cost of generation (vi) financial statements (which include balance sheet, profit and loss statement and cash flow statement) - current and projected (at least for the control period duration) along with basis of projections; (vii) any other new measure to be initiated by the Generating Company e.g. IT initiatives, third party energy audit, safety initiatives etc."

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6.12 In the normal course, the Commission shall not revisit the approved capital investment plan during the control period. However, during the annual performance review and true-up, the Commission shall monitor the year wise progress of the actual capital expenditure incurred by the generating company or the licensee vis-à-vis the approved capital expenditure and in case of significant difference between the actual expenditure viz-a-viz the approved expenditure, the Commission may true up the capital expenditure, subject to prudence check, as a part of annual true up exercise or without an application to this effect by the generation company/licensee. The generating company and the licensee shall submit the scheme-wise actual capital expenditure incurred along with the annual performance review and true-up filing.

6.13 In case during execution of the project, the Capital Expenditure is estimated to cross 110% of the approved limit, the Licensee or company will need to take prior approval of the Commission before moving ahead with that expenditure.

6.14 In case during the annual performance review, large variations are observed in the actual cumulative capital expenditure incurred up to the current year starting from first year of the control period as against the approved capital expenditure, the Commission may revisit the costs incidental to the actual capital expenditure in the current year and remaining years of the control period.

Provided that the actual capital expenditure incurred shall be only for the schemes as per the approved capital investment plan.



Provided that if the actual capital expenditure incurred is more than the approved capital expenditure (whether at the time of MYT Order or separate approval before investment), the Commission may take appropriate decision at the time true-up of the cost incidental to such variations.

7.1.2. In accordance with the regulatory requirements, APGCL is submitting a revised Capital Expenditure Plan for APGCL for the Control Period FY 2020-21 to FY 2021-22 for approval from the Hon'ble Commission.

8. Capital Expenditure – Existing Projects

8.1. Capital Expenditure Plan of Existing Projects

8.1.1. APGCL hereby petitions for a revised Capital Expenditure Plan for its Existing Plants to the Hon'ble Commission.



8.2. Revised Capital Expenditure Plan of Namrup Thermal Power Project

8.2.1. The following capital expenditure Plan is proposed for Namrup Thermal Power Station for the Period FY 2020-21 to 2021-22:

Table 57: R&M plan proposed for Namrup TPS for FY 2020-21 to FY 2021-22

Sl. No.	Approved Schemes	As per Order of March 2020	As per Order of March 2019	Revised Capital Expenditure Plan		Remarks
		in Rs. Lacs FY20-21	in Rs. Lacs FY21-22	in Rs. Lacs Revised FY20-21	in Rs. Lacs Revised FY21-22	
A	Electro-mechanical works of NTPS					
1	Re-wiring of the quarters.		9.0		9.0	
2	High mast (30 m height, 400 W)		24.0		24.0	
3	LED Street light		3.8		3.8	
4	C.W. Pump for colony water supply. (60 HP)		8.0		8.0	
5	Procurement of one CW Pump- motor set of Unit-6		63.0		63.0	
6	Procurement of one Air dryer for Unit-6		15.0		15.0	
7	407 Mini truck for electrical maintenance of colony & Dillighat.		10.0		10.0	
B.	CIVIL Works in NTPS					
1	Repairing of connecting road between Dihing and Disang Path, NTPS	10.0		4.8		Revised Estimate
2	Repairing of Dikhou Path at NTPS.	9.8		9.2		Revised Estimate
3	Repairing of residential quarter of Type-III, Type-C, Type-IV at NTPS (Phase-II), Type III 5 nos., Type-C 3 nos., Type-IV 4 nos.		18.0		18.0	
4	Construction of road from Qtr No. Type-IV 130 to 137 at NTPS.		7.6		7.6	
5	Repairing of quarter Type C (4 Nos.) and Type IV (21 Nos.) at NTPS			48.3		The proposed capex is for safety purpose as well as for smooth & efficient operations
6	Repairing of Dihing Path at NTPS			9.2		
7	Repairing of road (right side) from gate no. 01 at Main power house, NTPS			2.2		
8	Repairing of civil colony road along Qtr. No. Type IV-31 to Type IV-37, IV-41 to IV-43, IV-22 to IV-19, IV-14 to IV-18 at NTPS			10.0		

Sl. No.	Approved Schemes	Revised Capital Expenditure Plan				Remarks
		As per Order of March 2020	As per Order of March 2019	in Rs. Lacs		
		in Rs. Lacs FY20-21	in Rs. Lacs FY21-22	Revised FY20-21	Revised FY21-22	
9	Repairing of waste heat colony road along Qtr. No. Type IV-129 towards IV-137, Type IV-127 to IV-128 at NTPS			4.7		
10	Repairing of connecting road between Bhogdoi and Digaru Path at NTPS			5.9		
		19.7	158.4	94.3	158.4	

8.3. Revised Capital Expenditure Plan of Lakwa Thermal Power Project

8.3.1. The following Revised Capital Expenditure Plan is proposed for Lakwa Thermal Power Station for the Period FY 2020-21 to FY2021-22:

Table 58: R&M plan proposed for Lakwa TPS for FY 2019-20 to FY 2021-22

Sl. No.	Approved Schemes	As per Order of March 2020	As per Order of March 2019	Revised Capital Expenditure Plan		Remarks
		in Rs. Lacs	in Rs. Lacs	in Rs. Lacs		
		FY20-21	FY21-22	Revised FY20-21	Revised FY21-22	
A	Electro-mechanical works of LTPS					
1	Procurement of field instruments of Gas Turbine units of LTPS	60.00	60.00		60.00	
2	Procurement of field instruments of Gas Turbine units of LTPS of Gas Compressor units of LTPS	50.00	50.00		50.00	
3	Procurement of Inlet Air Filter for GT's	24.20	26.62		26.62	
4	Gas chromatography with mitering at LTPS	200.00		323.60		Combined works for Placement of Gas Chromatography and Overhauling of Gas Compressor GC #7
5	AVR for GT#6	60.00		90.00		Replacement of AVR for GT # 6 and Vacuum Circuit Breaker, LA, CT and PT for WHRP.
6	Overhauling of Gas Compressor #6 & #7	300.00			300.00	Only for GC #6
7	Overhauling of Diesel Engine of GT #5, #6 & #7	62.00		51.00		Revised Estimate
8	Field packs of Cooling Tower of WHRP	100.00		120.00		Revised Estimate
B.	CIVIL Works in LTPS					
1	Renovation of boundary wall of LTPS colony (Residential)	20.00	10.00		10.00	
2	Renovation of boundary wall of LTPS plant area.	20.00	20.00		20.00	
3	Repairing of residential quarter inside LTPS colony	20.00	20.00		20.00	



Sl. No.	Approved Schemes	As per Order of March 2020		As per Order of March 2019		Revised Capital Expenditure Plan		Remarks
		in Rs. Lacs		in Rs. Lacs		in Rs. Lacs		
		FY20-21	FY21-22	Revised FY20-21	Revised FY21-22			
4	Construction of one no. of Type III/IV residential milt storied building at LTPS residential area.	170.00	180.00		180.00			
5	Procurement of Gym equipment.	5.00	5.00		5.00			
6	Demolishing and reconstruction of main boundary wall along Dhodar Ali road at LTPS, Maibella				6.62			The proposed capex is for safety purpose as well as for smooth & efficient operations
7	Demolishing and reconstruction of power plant boundary wall at LTPS, Maibella				8.67			
8	Construction of LTPS main entrance gate				8.29			
9	Construction of cover slab for master drain at LTPS, Maibella				8.30			
10	Renovation of children's park and construction of brick drain along with cover slab near children's park at LTPS, Maibella				17.99			
11	Roof treatment at switchyard control building, Roof treatment at CNI phase 2 building and Roof treatment at Type-IV RCC building at LTPS, Maibella				4.29			
12	Construction of paver block road near of SBI Bank of LTPS, Maibella				5.57			
13	Repairing of Quarter No. Type III (2 Nos.), IV (5 Nos.) / V (9 Nos.) / VI (8 Nos.), Old Colony at LTPS				24.43			
14	Repairing of Quarter No. Type IV (4 Nos.) / VI (2 Nos.), New Colony at LTPS				4.87			
15	Repairing of link cable office building at LTPS, Maibella				2.66			
16	Construction of paver block road from T-III RCC to auditorium at LTPS, Maibella				4.82			
17	Construction of player's dressing room at LTPS, Maibella				4.10			
		1091.20	371.62	685.21	671.62			

8.4. Revised Capital Expenditure Plan of KLHEP

8.4.1. The following Revised Capital Expenditure Plan is proposed for Karbi Langpi Hydro Electric Power Station for the Period 2020-21 to 2021-22

Table 59: R&M plan proposed for KLHEP for FY 2020-21 to FY 2021-22

Sl. No.	Approved Schemes	Revised Capital Expenditure Plan				Remarks
		As per Order of March 2020 in Rs. Lacs	As per Order of March 2019 in Rs. Lacs	in Rs. Lacs		
		FY20-21	FY21-22	Revised FY20-21	Revised FY21-22	
A	Electro-mechanical works of KLHEP					
2	Replacement of LT Panels of KLHEP	170.30		170.40		
3	Procurement of 220 KV switchgear materials for replacement of existing old system. (CT, transformer, isolators etc.)	902.13		902.13		
5	Procurement of new crane with loading capacity of 20 Ton Capacity for the O&M works of KLHEP and MSHEP	148.64		148.64		
6	Procurement of new 3-phase, 750 KVA, 100/0.43KV transformer required for the running 50 MW unit auxiliaries of 2x50 MW KLHEP	16.00		16.00		
7	Procurement of spare for Crane Loading Capacity 15 Tones		30.00		30.00	
8	Procurement of UAT (Spare)		20.00		20.00	
9	Upgradation of Transformer capacity and substation at KLHEP Lengery colony		70.00		70.00	
11	Capital Overhauling of 1.50MW Francis type Gugler make Generator Turbine. (Unit I, II & III)			255.00		Required for smooth & efficient operations for the plant. Work is already underway and rotor has been sent to Kolkata for refurbishment.
B.	CIVIL Works in KLHEP					
6	Construction of Engineers Hostel (Assam Type) near Power House for O&M personnel, KLHEP		40.00		40.00	

Sl. No.	Approved Schemes	As per Order of		Revised Capital Expenditure Plan		Remarks
		March 2020 in Rs. Lacs	March 2019 in Rs. Lacs	in Rs. Lacs	in Rs. Lacs	
		FY20-21	FY21-22	Revised FY20-21	Revised FY21-22	
7	Renovation of Bachelor's Hostel at KLHEP		10.00		10.00	
8	Painting of radial gates, Stop-log gate, Intake gate, Gantry crane and Catwalk at Hatidubi dam of 2x50 MW KLHEP, APGCL			55.77		The proposed capex is for safety purpose as well as for smooth & efficient operations
9	Renovation & repairing and painting of GM office complex, KLHEP, Medical, Auditorium and MSHEP Complex, Lengery, West Karbi Anglong			43.90		
		1237.07	170.00	1591.85	170.00	

9. Asset valuation and ERP implementation

9.1. Asset valuation

9.1.1. The Hon'ble Commission had approved the Asset Valuation Expenses for APGCL in its order dated 7th March 2020.

9.1.2. The work for Asset Valuation is under way and is expected to be paid out in entirety in FY2020-21 in line with the contract signed with the valuation agency.

9.1.3. The approved and projected cost has been shown below in the table:

Table 60: Financial impact of Asset valuation

Rs. Cr									
	Approved by Commission (in Crores) in the Order of March 2020						Revised Estimated		
Asset valuation	FY 2019-2020			FY 2020-2021			FY 2020-2021		
	Equity	Loan	Grant	Equity	Loan	Grant	Equity	Loan	Grant
		0.13	1.16		0.30	2.70		0.10	0.86

9.2. ERP implementation and consultancy

- 9.2.1. The Commission had approved the ERP Implementation and Consultancy costs for FY2019-20 to FY2020-21 in its order dated 7th March 2020
- 9.2.2. As part of the ongoing ERP implementation, the works have been divided into 4 lots.
- 9.2.3. At present, Lot 1 implementation is carried out by M/s Accenture Solutions Pvt. Ltd. The contract was signed on 31st July 2019 for Lot 1 at contract price at INR 27.50 Crore and actual implementation work at APGCL site began on 14.10.2019.
- 9.2.4. The actual cost of the remaining lots will be known only after signing of the contracts for the same and they will be claimed during True Up for the respective years.
- 9.2.5. We had earlier considered the ERP consultancy to be completed within FY2018-19. However the ERP Consultancy contract is currently under review as the implementation is ongoing. The cost for ERP consultancy work would be shared in True Up of FY2020-21.
- 9.2.6. The revised total financial impact is shown in the table below:

Table 61: Financial impact of Asset valuation and ERP implementation

Rs. Cr

ERP implementation and consultancy	Approved by the Commission in the order of March 2020			Revised Estimate					
	FY 2020-2021			FY 2020-2021			FY 2021-22		
	Equity	Loan	Grant	Equity	Loan	Grant	Equity	Loan	Grant
		0.34	3.71		1.48	13.29		1.10	9.88

- 9.2.7. The financial impact of ERP implementation and Asset valuation are shown in the table below.

Table 62: Financial impact of ERP implementation and Asset Valuation plant wise

Rs. Cr

Asset valuation, ERP Implementation	FY 2020-21			FY 2021-22		
	Equity	Loan	Grant	Equity	Loan	Grant
NTPS	-	1.47	4.75	-	1.90	2.80
LTPS	-	7.37	4.64	-	7.10	3.49
KLHEP	-	16.45	4.77	-	2.10	3.59
Total	-	25.29	14.16	-	11.10	9.88

1.1.1 The financial impact of ERP implementation and Asset valuation services are capitalized station wise in the FY2020-21 and FY2021-22 as shown above.

10. SUMMARY OF THE REVISED CAPITAL EXPENDITURE PLAN

10.1. Proposed Capex

10.1.1. As per the proposals given in the above sections for existing projects, total proposed year wise revised capital expenditure during the period from 2020-21 to 2021-22 of APGCL is as given below:

Table 63: Summary of capital expenditure plan for FY 2020-21 to FY2021-22
Rs. Cr

Existing Projects	FY2020-21 (in Crores)			FY2021-22 (in Crores)		
	Equity	Loan	Grant	Equity	Loan	Grant
NTPS	0.00	0.94	0.00	0.00	1.58	0.00
LTPS	0.00	6.85	0.00	0.00	6.72	0.00
KLHEP	0.00	15.92	0.00	0.00	1.70	0.00
Other Projects						
Asset Valuation		0.10	0.86			
ERP Implementation and Infrastructure Development of APGCL		1.48	13.29		1.10	9.88
Total	0.00	25.29	14.16	0.00	11.10	9.88



APPEAL FOR ANNUAL PERFORMANCE REVIEW FOR
FY 2020-21

To

ASSAM ELECTRICITY REGULATORY COMMISSION



Prepared by
ASSAM POWER GENERATION CORPORATION LTD
Bijulee Bhawan, Paltanbazar
Guwahati – 781 001

AFFIDAVIT – ANNUAL PERFORMANCE REVIEW

BEFORE THE ASSAM STATE ELECTRICITY REGULATORY
COMMISSION, GUWAHATI.

Petition No. –

Case No.
(to be filed by the Office)

IN THE MATTER OF

Filing of Annual Performance Review of the FY 2020-21

AND

IN THE MATTER OF

Assam Power Generation Corporation Limited
Bijulee Bhawan, Paltanbazar,
Guwahati-781 001.

Petitioner

I, Sri Ashok Kalita, son of Late Sarbeswar Kalita, age 59 years, residing at Narengi, Guwahati-781026, do solemnly affirm and say as follows:

I am the Chief General Manager (Gen) of Assam Power Generation Corporation Limited, the petitioner in the above matter and am duly authorized by the said Petitioner to make this affidavit for and on behalf of the Assam Power Generation Corporation Limited.

The Statement made in the Petition based on information received from official records and I believe them to reflect truly and no material has been concealed from the statements so made or documents or supporting data etc. attached.

Solemnly affirm at Guwahati on 27th November 2020 that the contents of this affidavit are true to my knowledge, no part of it is false or no material has been concealed therefore and misleading material included therein.

Place: Guwahati

Date: 27th November 2020

Deponent



(Ashok Kalita)
Chief General Manager (Gen),
Assam Power Generation Corporation Ltd.



PRAYER – ANNUAL PERFORMANCE REVIEW

BEFORE THE HON'BLE ASSAM ELECTRICITY REGULATORY COMMISSION

FILINGNO

CASENO.....

IN THE MATTER OF:

Petition for Annual Performance Review of the FY 2020-21

• AND IN THE MATTER OF:

Assam Power Generation Corporation Limited incorporated under the provisions of the Companies Act, 1956 and having its registered office in the State of Assam

THE HUMBLE APPLICANT ABOVE NAMED MOST RESPECTFULLY SHEWETH:

- i. That the Assam Power Generation Corporation Limited, hereinafter named as APGCL, is a successor corporate entity, formed in pursuant to the notification of the Government of Assam, notified under sub-sections (1), (2), (5), (6) and (7) of Section 131 and Section 133 of the Electricity Act 2003(Central Act 36 of 2003), for the purpose of transfer and vesting of functions, properties, interests, rights, obligations and liabilities, along with the transfer of Personnel of the Board to the successor corporate entities.
- ii. That the APGCL is a company incorporated with the main object of generation of electricity in the state of Assam.
- iii. That the APGCL is a generating company under the provisions laid down in Section 14 Provision 5, read with Section 131 (2) of the Electricity Act 2003.
- iv. That the APGCL submitted petitions for APR for the FY 2019-20 to the AERC on 30/11/2019.
- v. That the AERC, after completion of the due process, issued Tariff Order for the FY 2020-21 on 07/03/2020 with effectuation date from 01/04/2020.
- vi. That APGCL is now submitting the Petition for APR for the FY 2020-21.

Place: Guwahati

Date: 27th November' 2020

Deponent



(Ashok Kalita)
Chief General Manager (Gen),
Assam Power Generation Corporation Ltd.



11. Present status of NTPS, LTPS, KLHEP and LRPP

Table 64: Present Status of NTPS Units

Unit No.	Installed Capacity (MW)	Maximum Operating Capacity (MW)	Present Status
2 (GT)	21	16	The maximum operating capacity of the units has been affected by vibration problems and generation has come down to 16 MW and 18 MW respectively. Further, there is cooling problem in the generator transformer of Unit-3, which is affecting its maximum operating capacity. Other than the technical problems, the units are facing erratic gas supply problem as well.
3 (GT)	21	18	
4 (GT)	11	Decommissioned	Unit 4 and Unit 5 have been decommissioned w.e.f. 20 th August 2020
5 (ST)	24		
6 (WHRU with GTs 2 & 3)	22.5	10	The unit can be run at average operating load of 10 MW depending on the load on the mother units. This unit cannot be run at full load due to technical problems. Unit # 6 is under shutdown from 10-11-2020 for Generator Earth Fault.

Table 65: Present Status of LTPS Units

Unit No.	Installed Capacity (MW)	Maximum Operating Capacity (MW)	Present Status	
Ph-II	5 (GT)	20	20	The Unit is in operating condition and generates power depending on the availability of gas.
	6 (GT)	20	20	Unit #6 was in operating condition till 12th of Nov. Under S/D by MMD-II for HGPI work by BGGTS Pvt. Ltd. For 20 (twenty) days.
	7 (GT)	20	20	The Unit is in operating condition and generates power depending on the availability of gas.
Ph-III	8 (WHRU with GTs 5, 6 & 7)	37.2	20	Unit #8 is in operating condition and generates power depending upon the generation of the mother units. All the three HRSGs are in operation.

Table 66: Present Status of KLHEP Units

Unit No.	Installed Capacity (MW)	Present Status
1	50	Unit#1 is under Major Overhauling. Dismantling and re-erection has been completed, only testing and commissioning has to be carried out as soon as the tunnel is impounded with water. Initially the overhauling was delayed due to Covid Pandemic situation.
2	50	Unit#2 is in standstill due to landslide.

Table 67: Present Status of LRPP Unit

Unit No.	Installed Capacity (MW)	Remarks
1	9.965	All the units except #6, are running as per availability of gas. 16K Maintenance of Six units completed. The 16K Maintenance of Unit#6 has been started on 6/11/2020.
2	9.965	
3	9.965	
4	9.965	
5	9.965	
6	9.965	
7	9.965	

12. Annual Performance Review of FY 2020-21

12.1. Regulatory provisions

12.1.1. The Hon'ble Commission in its regulation has stated the following on Annual Performance Review of various costs under the Assam Electricity Regulatory Commission (Terms and Conditions for determination of Multi Year Tariff) Regulations, 2018. The same is reproduced below for ready reference:

"9 Annual Performance Review and True Up

9.1 Where the aggregate revenue requirement and expected revenue from tariff and charges of a Generating Company or Transmission Licensee or Distribution Licensee or SLDC is covered under a Multi-Year Tariff framework, then such Generating Company or Transmission Licensee or Distribution Licensee or SLDC, as the case may be, shall be subject to an annual performance review and true up during the Control Period in accordance with this Regulation.

9.2 The Generating company, Transmission Licensee and the Distribution Licensee shall file an application for annual performance review of current year, true-up of previous year and tariff for the ensuing year not less than 120 days before the close of each year of the control period..

Provided that the Generating Company or Transmission Licensee or Distribution Licensee or SLDC, as the case may be, submit to the Commission information in such form as may be stipulated by the Commission, together with the Accounting Statements, extracts of books of account and such other details as the Commission may require to assess the reasons for and extent of any variation in financial performance from the approved forecast of Aggregate Revenue Requirement and actual revenue from tariff and charges.

Provided that the Petition for Truing Up shall be accompanied by Audited Annual Accounts, duly certified by the Statutory Auditor and CAG.

Provided that the information sought by the Commission shall be submitted in the formats as prescribed by the Commission.

9.3 The scope of the Annual Performance review and True up shall be a comparison of the actual performance of the Generating Company or Transmission Licensee or SLDC or Distribution Licensee with the approved forecast of Aggregate Revenue Requirement and expected revenue from tariff and charges and shall comprise the following:

a).....

b) Annual Performance Review: a comparison of the performance targets estimated to be achieved for the current financial year(based on 6 months actual data) with the approved forecast for that financial year including adjusting trajectories of uncontrollable if needed.

c) Categorisation of variations in performance with reference to approved forecast into factors within the control of the applicant (controllable items) and those caused by factors beyond the control of the applicant (un-controllable items)

Provided such categorization of the controllable and uncontrollable items shall be done in accordance with Regulation 10 of this regulation.

13. Norms of operations

13.1. Regulatory provisions

13.1.1. The Hon'ble Commission had set norms of operations under Regulation 46 of Tariff Regulations 2018.

13.1.2. The 6 months actual and 6 months estimated performance vis-a-vis norms of operations set is discussed below:

13.2. Installed and Effective Capacity in FY2020-21

13.2.1. APGCL submits the following Installed & Effective Capacity for FY2020-21

Table 68: Installed & Effective Capacity for FY2020-21

Station	Installed Capacity (MW)	No. of Units	Units Decommissioned	Units Available for Generation & Capacity in MW	Effective Capacity
NTPS	119.5	6	1 4,5 (w.e.f. 20 th August 2020)	2, 3(21MW), 6 (22.50 MW-WHRU)	99.5 MW (1 st April 2020 – 20 th August 2020)
					64.5 MW (21 st August 2020 – 31 st March 2021)
					Total Weighted Average Effective Installed Capacity = 78.12 MW
LTPS	142.2	8	1,2,3,4	5,6,7(20 MW Each),8 (37.20 MW-WHRU)	97.2 MW
KLHEP	100	2	0	1 (50), 2(50)	100 MW
LRPP	69.755	7	0	1-7 (9.965 each)	69.755 MW

13.3. Snapshot of plant wise performance for FY 2020-21

13.3.1. The Commissioning of NRPP has been delayed and is now expected to be commissioned by 1st April 2021.

13.3.2. The following table shows the operating performance parameters of Namrup thermal power station for FY 2020-21

Table 69: Operating Performance for FY 2020-21 of NTPS

NTPS	Approved as per Order of March 2020	April - Sep (actual)	Oct - March (estimated)	Estimated total
Gross Energy in MU	173.73	88.92	84.81	173.73
Aux. Power Cons. (%)	4.50%	6.53%	4.50%	5.54%
Net Energy in MU	165.91	83.11	80.99	164.10
Availability (%)	50.00%	26.29%	50.00%	38.14%
PLF (%) for incentive	50.00%	21.62%	50.00%	35.81%
Gross Station Heat Rate on GCV (kcal/ kWh)	3900	5317	3900	4608
Wt. Avg. Price of Gas (Rs./1000 SCM)	6257.52	4757.43	3535.02	4146.22

13.3.3. The following table shows the operating performance parameters of Lakwa thermal power station for FY 2020-21.

Table 70: Operating Performance for FY 2020-21 of LTPS

LTPS + WHRU	Approved as per Order of March 2020	April - Sep (actual)	Oct - March (estimated)	Estimated total
Gross Energy in MU	425.74	183.63	212.28	395.92
Aux. Power Cons. (%)	5.50%	9.22%	5.50%	7.23%
Net Energy in MU	402.32	166.70	200.61	367.31
Availability (%)	50.00%	46.62%	50.00%	48.31%
PLF (%) for incentive	66.00%	41.32%	50.00%	45.66%
Gross Station Heat Rate on GCV (kcal/ kWh)	3200	2762	3200	2981
Wt. Avg. Price of Gas (Rs./1000 SCM)	8553.56	6645.79	4921.91	5783.85

13.3.4. The following table shows the operating performance parameters of Karbi Langpi hydro electric power station for FY 2020-21.

Table 71: Operating Performance for FY 2020-21 of KLHEP

KLHEP	Approved as per Order of March 2020	April - Sep (actual)	Oct - March (estimated)	Estimated total
Gross Energy in MU	390.00	147.28	193.83	341.11



KLHEP	Approved as per Order of March 2020	April - Sep (actual)	Oct - March (estimated)	Estimated total
Aux. Power Cons. (%)	0.50%	0.19%	0.50%	0.37%
Net Energy in MU	388.05	147.00	192.86	339.85
Availability (%)	85.00%	40.91%	62.85%	51.88%
PLF (%) for incentive	44.50%	33.64%	38.99%	36.31%

13.3.5. The following table shows the operating performance parameters of LRPP power station for FY2020-21.

Table 72: Operating Performance for FY 2020-21 of LRPP

LRPP	Approved as per Order of March 2020	April - Sep (actual)	Oct - March (estimated)	Estimated total
Gross Energy in MU	519.40	228.06	291.34	519.40
Aux. Power Cons. (%)	3.50%	2.18%	3.50%	2.92%
Net Energy in MU	501.22	223.08	281.15	504.22
Availability (%)	85.00%	83.28%	85.00%	84.14%
PLF (%)	90.00%	75.46%	90.00%	82.73%
Gross Station Heat Rate on GCV (kcal/ kWh)	2150	2156	2150	2153
Wt. Avg. Price of Gas (Rs./1000 SCM)	8853.56	6642.19	4921.91	5784

13.4. Normative Annual Plant Availability Factor (NAPAF)

13.4.1. As per Regulation 47.1 of the MYT Regulations, 2018 the Normative Plant Availability factor for recovery of full fixed charges, is 50% for FY 2019-20 for NTPS. However due to the problem of low gas supply and frequent forced shutdown of the aged units/auxiliaries, normative Plant Availability factor may not be achieved. Further APGCL has decommissioned Unit 4 and Unit 5 on account of higher cost of generation from these plants effective from 20th August 2020 as per CEA intimation. The letter by CEA is attached in Annexure 8

13.4.2. In view of the above, APGCL prays to the Hon'ble Commission to approve the revised estimated availability for FY 2020-21 as shown in the table below

Table 73: Availability for 2020-21 of NTPS

NTPS	Approved as per Order of March 2020	April - Sep (actual)	Oct - March (estimated)	Estimated total
Plant Availability Factor (%)	50.00%	26.29%	50.00%	38.14%



13.4.3. As per Regulation 47.1 of the MYT Regulations, 2018 the Normative Plant Availability factor for recovery of full fixed charges, is 50% for FY 2020-21 for LTPS. It is expected that the normative numbers may not be achieved due to lower availability in the first 6 months of FY2020-21. The approved and estimated numbers are shown in the table below.

Table 74: Availability for 2020-21 of LTPS

LTPS	Approved as per Order of March 2020	April - Sep (actual)	Oct - March (estimated)	Estimated total
Plant Availability Factor (%)	50.00%	46.62%	50.00%	48.31%

13.4.4. Further, Regulation 49, of MYT Regulations, 2018 specifies normative PAF for KLHEP as 85% for FY 2020-21. Due to delay in planned maintenance of KLHEP Unit 1, the normative availability may not be achieved for the year. Due to the Covid 19 related restrictions, the planned maintenance of KLHEP Unit 1 was delayed and is expected to be completed by December 2020 with planned resumption of generation at full capacity from 15th January 2021. Further Unit 2 is also under shutdown due to landslide. The approved and estimated numbers are shown in the table below.

Table 75: Availability for 2020-21 of KLHEP

KLHEP	Approved as per Order of March 2020	April - Sep (actual)	Oct - March (estimated)	Estimated total
Plant Availability Factor (%)	85.00%	40.91%	62.85%	51.88%

13.4.5. The Hon'ble Commission had approved NAPAF of 85% for LRPP for FY 2020-21 in its order of March 2020. The approved and projected numbers are shown in the table below.

Table 76: Availability for 2020-21 of LRPP

LRPP	Approved as per Order of March 2020	April - Sep (actual)	Oct - March (estimated)	Estimated total
Plant Availability Factor (%)	85.00%	83.28%	85.00%	84.14%

APGCL prays to the Hon'ble Commission to approve the estimated NAPAF for the plants as shown above for recovery of fixed charges for FY2020-21.

13.5. Normative Annual Plant Load Factor (NAPLF)

13.5.1. As per Regulation 47.1 of the Tariff Regulations, 2018 the Normative Plant Load factor for NTPS is 50% for FY 2020-21. The Hon'ble Commission had also approved the same for NTPS in its order March 2020. However, due to the lower gas supply, grid constraint and issues of aging and frequent forced shut downs the plant has not been able to achieve normative PLF. The actual and projected numbers are shown in the table below.

Table 77: Plant Load Factor for 2020-21 of NTPS

NTPS	Approved as per Order of March 2020	April - Sep (actual)	Oct - March (estimated)	Estimated total
Plant Load Factor (%)	50.00%	21.62%	50.00%	35.81%

13.5.2. As per Regulation 47.1 of the Tariff Regulations, 2018 the Normative Plant Load factor for LTPS is 66% for FY 2020-21 The Hon'ble Commission had also approved the same for LTPS in its order of March 2020. However, as there is shortage of gas, PLF is considered same as that as normative Availability for October-March. The actual and projected numbers are shown in the table below.

Table 78: Plant Load Factor for 2020-21 of LTPS

LTPS	Approved as per Order of March 2020	April - Sep (actual)	Oct - March (estimated)	Estimated total
Plant Load Factor (%)	66.00%	41.32%	50.00%	45.66%

13.5.3. As per Regulation 49.1 of the Tariff Regulations, 2018, normative PLF for KLHEP as 44.5%. The Hon'ble Commission had also approved the same for FY2020-21 in its order of March 2020. However due to the planned maintenance of KLHEP Unit 1 and shutdown of Unit 2 due to landslide, the normative plant load factor may not be achieved during the year due to uncontrollable factors. The approved and estimated numbers are shown in the table below.

Table 79: Plant Load Factor for 2020-21 of KLHEP

KLHEP	Approved as per Order of March 2020	April - Sep (actual)	Oct - March (estimated)	Estimated total
Plant Load Factor (%)	44.50%	33.64%	38.99%	36.31%

13.5.4. The Hon'ble Commission had approved 90% as PLF for incentive for LRPP for FY2020-21 in its order of March 2020. It had considered generation projection at PLF of 85% for FY2020-21. APGCL has projected the PLF at normative availability but will try to achieve the approved Plant Load Factor during the year. The actual and estimated numbers are shown in the table below.

Table 80: Plant Load Factor for 2020-21 of LRPP

LRPP	Approved as per Order of March 2020	April - Sep (actual)	Oct - March (estimated)	Estimated total
Plant Load Factor (%)	90.00%	75.46%	90.00%	82.73%

13.6. Gross Station Heat Rate (SHR)

13.6.1. As per Regulation 47.4, of the Tariff Regulations, 2018 the Normative Station Heat Rate, is 3900 kCal/kWh for FY 2020-21 for NTPS in Partial combined cycle mode of operation.

13.6.2. We submit that the SHR of NTPS is estimated to be higher than the approved SHR in FY 2020-21 due to part loading of units, lower gas supply and evacuation constraints and old nature of the plant equipments and machinery. In view of the above, APGCL prays to the Hon'ble Commission to approve the estimated SHR as it is increased due to uncontrollable factors.

13.6.3. The approved and estimated numbers are shown in the table below.

Table 81: SHR for 2020-21 of NTPS

NTPS	Approved as per Order of March 2020	April - Sep (actual)	Oct - March (estimated)	Estimated total
Station Heat Rate (kCal/kWh)	3900	5317	3900	4608

13.6.4. As per Regulation 47.4, of the Tariff Regulations, 2018 the Normative Station Heat Rate, is 3200 kCal/kWh for FY 2020-21 for LTPS in Partial combined cycle mode of operation. . APGCL has considered the SHR at actuals for the first 6 months and normative for rest of the year. The approved and estimated numbers are shown in the table below.

Table 82: SHR for 2020-21 of LTPS

LTPS	Approved as per Order of March 2020	April - Sep (actual)	Oct - March (estimated)	Estimated total
Station Heat Rate (kCal/kWh)	3200	2762	3200	2981



13.6.5. The Hon'ble Commission had approved SHR of 2,150 kCal/kWh for LRPP for FY2020-21 in its order of March 2020. The approved and estimated numbers are shown below:

Table 83: SHR for 2020-21 of LRPP

LRPP	Approved as per Order of March 2020	April - Sep (actual)	Oct - March (estimated)	Estimated total
Station Heat Rate (kCal/kWh)	2150	2156	2150	2153

13.7. Auxiliary Energy Consumption

13.7.1. As per Regulation 47.3 of the Tariff Regulations, 2018 the Normative Auxiliary energy consumption is 4.50% for FY 2020-21 for NTPS. We submit that the auxiliary consumption of NTPS is estimated to be higher than the approved auxiliary consumption in FY 2020-21 due to part loading of units. In view of the above, APGCL prays to the Hon'ble Commission to approve the estimated auxiliary consumption as it is expected to increase due to uncontrollable factors.

13.7.2. The approved and estimated numbers are shown in the table below.

Table 84: Auxiliary energy consumption for 2020-21 of NTPS

NTPS	Approved as per Order of March 2020	April - Sep (actual)	Oct - March (estimated)	Estimated total
Auxiliary energy consumption (%)	4.50%	6.53%	4.50%	5.54%

13.7.3. As per Regulation 47.3 of the Tariff Regulations, 2018 the Normative Auxiliary energy consumption, is 5.50% for FY 2020-21 for LTPS. The same has been approved by the Hon'ble Commission in its order of March 2020. The actual and projected numbers are shown in the table below.

13.7.4. We submit that the Auxiliary consumption of LTPS is expected to be higher than the approved values due to low gas pressure in supply of gas, the usage of gas compressors increases resulting in high auxiliary consumption of LTPS. As gas pressure in supply of gas is an uncontrollable factor for APGCL, we pray to the Hon'ble Commission to approve the estimated auxiliary consumption for FY 2020-21

13.7.5. The approved and estimated numbers are shown in the table below.

Table 85: Auxiliary energy consumption for 2020-21 of LTPS

LTPS	Approved as per Order of March 2020	April - Sep (actual)	Oct - March (estimated)	Estimated total
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Auxiliary energy consumption (%)	5.50%	9.22%	5.50%	7.23%
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13.7.6. As per Regulation 49.1 of the Tariff Regulations, 2018 the Normative Auxiliary energy consumption, is 0.50% for KLHEP. The same has been approved by the Hon'ble Commission in its order of March 2020. The approved and actual numbers are shown in the table below.

Table 86: Auxiliary energy consumption for 2020-21 of KLHEP

KLHEP	Approved as per Order of March 2020	April - Sep (actual)	Oct - March (estimated)	Estimated total
Auxiliary energy consumption (%)	0.50%	0.19%	0.50%	0.37%

13.7.7. The Hon'ble Commission had approved Auxiliary Consumption of 3.5% for LRPP for FY2020-21 in its order of March 2020. The approved and actual numbers are shown in the table below:

Table 87: Auxiliary energy consumption for 2020-21 of LRPP

LRPP	Approved as per Order of March 2020	April - Sep (actual)	Oct - March (estimated)	Estimated total
Plant Availability Factor (%)	3.50%	2.18%	3.50%	2.92%

13.7.8. The performance parameter certificate showing plant wise availability, generation, auxiliary consumption etc. issued by SLDC is are attached as Annexure No. 6

14. Fixed Cost of the Plant

14.1. Annual fixed cost for FY 2020-21

14.1.1. The fixed cost of APGCL's power plants has been approved by AERC via order in Case No. 10 of 2019 dated 7th March 2020 for NTPS, LTPS, LRPP and KLHEP

14.1.2. As per regulation 42.1 of the AERC Tariff regulations, 2018 the following components have been considered for projecting of fixed cost for the power plants:

- (a) Return on Equity Capital
- (b) Interest on Loan capital
- (c) Depreciation
- (d) Operation and Maintenance Expenses
- (e) Interest on Working Capital
- (f) Less: Non-Tariff Income

14.1.3. For the computation of the fixed components, the Petitioner has considered the principles provided in the Tariff Regulations, 2018. These components have been discussed in detail in the following sections of the petition.

14.2. Return on Equity (ROE)

14.2.1. The Hon'ble Commission in its regulation 33 of Tariff Regulations 2018 has considered the pre-tax return on equity at 15.5% of equity capital.

14.2.2. The Petitioner has determined the Return on Equity (RoE) at a rate of 15.5% in accordance with the AERC Regulations, 2018. The Petitioner submits that there has been no addition in Equity in FY 2020-21 for NTPS, LTPS, KLHEP and LRPP.

14.2.3. The plant wise Return on Equity approved and claimed for FY2020-21 has been shown in the table below:

Table 88: Computation of Plant wise Return in Equity for 2020-21

Rs. Cr

Station	Particulars	Approved as per order of March 2020	APR Petition for FY 2020-21 on effective capacity
NTPS	Opening Equity	55.00	55.00
	Closing Equity	55.00	55.00
	Rate of Return	15.50%	15.50%
	Return on Equity	8.53	8.53



Station	Particulars	Approved as per order of March 2020	APR Petition for FY 2020-21 on effective capacity
	Return on Equity for Effective Capacity	3.1	5.57
LTPS	Opening Equity	143.08	143.08
	Closing Equity	143.08	143.08
	Rate of Return	15.50%	15.50%
	Return on Equity	22.18	22.18
	Return on Equity for Effective Capacity	15.16	15.16
KLHEP	Opening Equity	68.65	68.65
	Closing Equity	68.65	68.65
	Rate of Return	15.50%	15.50%
	Return on Equity	10.64	10.64
	Return on Equity for Effective Capacity	10.64	10.64
LRPP	Opening Equity	15.31	15.73
	Closing Equity	15.31	15.73
	Rate of Return	15.50%	15.50%
	Return on Equity	2.37	2.44
	Return on Equity for Effective Capacity	2.37	2.44

14.2.4. APGCL prays to the Hon'ble Commission to approve the plant wise Return on Equity as shown above.

14.3. Interest on Loan Capital

14.3.1. As per Regulation 34 of the Tariff Regulations, 2018, the Commission will consider interest on Loan capital on normative basis with repayment equal to depreciation allowed for that year and rate of interest will be the weighted average rate of interest calculated on the basis of the actual loan portfolio at the beginning of each year.

14.3.2. In view of the above, the Petitioner has computed the Interest on long term Loan on normative basis for FY 2020-21. The Petitioner has considered normative loan portfolio and the repayment shown is considered equal to the depreciation for FY 2020-21. The interest rate has been considered as the expected weighted average rate of interest for FY 2020-21.

14.3.3. The finance charges are shown separately plant wise for FY 2020-21. The table below summarizes the interest on loan and finance charges considered for Annual Performance Review of FY 2020-21.

Table 89: Computation of Plant wise Interest and finance charges for 2020-21

Rs. Cr

Station	Particulars	Approved as per order of March 2020	APR Petition for FY 2020-21
NTPS	Net Normative Opening Loan	4.04	0.79
	Addition of normative loan during the year	3.04	1.47
	Normative Repayment during the year	1.87	1.45
	Net Normative Closing Loan	5.21	0.81
	Avg. Normative Loan	4.625	0.80
	Interest Rate	10.34%	10.15%
	Interest on Loan Capital	0.48	0.08
	Add: Bank Charges	-	-
	Net Interest on Loan Capital	0.48	0.08
	Net Interest on Loan Capital for Effective Capacity	0.17	0.05
	LTPS	Net Normative Opening Loan	0
Addition of normative loan during the year		20.91	7.37
Normative Repayment during the year		15.97	11.26
Net Normative Closing Loan		4.94	0.00
Avg. Normative Loan		2.47	-
Interest Rate		10.34%	10.15%
Interest on Loan Capital		0.26	-
Add: Bank Charges		-	-
Net Interest on Loan Capital		0.26	-
Net Interest on Loan Capital for Effective Capacity		0.17	-
KLHEP	Net Normative Opening Loan	204.2	195.24
	Addition of normative loan during the year	20.9	16.45
	Normative Repayment during the year	22.19	20.55
	Net Normative Closing Loan	202.91	191.14
	Avg. Normative Loan	203.555	193.19
	Interest Rate	10.34%	10.15%
	Interest on Loan Capital	21.05	19.62



Station	Particulars	Approved as per order of March 2020	APR Petition for FY 2020-21
	Add: Bank Charges	-	-
	Net Interest on Loan Capital	21.05	19.62
	Net Interest on Loan Capital for Effective Capacity	21.05	19.62
LRPP	Net Normative Opening Loan	30.66	36.21
	Addition of normative loan during the year	0	0.00
	Normative Repayment during the year	2.34	2.63
	Net Normative Closing Loan	28.32	33.57
	Avg. Normative Loan	29.49	34.89
	Interest Rate	10.34%	10.15%
	Interest on Loan Capital	3.05	3.54
	Add: Bank Charges	-	-
	Net Interest on Loan Capital	3.05	3.54
	Net Interest on Loan Capital for Effective Capacity	3.05	3.54
	Total	24.83	23.24
	Total for Effective Capacity	24.44	23.21

14.3.4. APGCL prays to the Hon'ble Commission to approve the Total interest and finance charges as shown above.

14.4. Depreciation

14.4.1. The Hon'ble Commission in its Tariff Regulations, 2018 has provided the principles for determination of depreciation.

14.4.2. In view of the above, the Petitioner has computed the Depreciation considering Capital Cost of the asset admitted by the Commission with 10% salvage value. Also, depreciation on grants has been subtracted. The table below summarizes the plant wise Depreciation considered for Annual Performance Review of FY 2020-21

Table 90: Depreciation for 2020-21 of NTPS

Rs. Cr

Particulars	FY 2020-21
Opening GFA	189.75
Addition during the year	0.94
Closing	190.69
Average GFA	190.22
Rate of Depreciation	0.83%
Total Depreciation	1.58
Grant	13.16
Additions during the year	4.75
Closing grant	17.91
Average grant	15.53
Rate of Depreciation	0.83%
Depreciation on grants	0.13
Net Depreciation	1.45

Table 91: Depreciation for 2020-21 of LTPS

Rs. Cr

Particulars	FY 2020-21
Opening GFA	485.91
Addition during the year	6.85
Closing	492.76
Average GFA	489.33
Rate of Depreciation	2.67%
Total Depreciation	13.07
Grant	65.50
Additions during the year	4.64
Closing grant	70.14
Average grant	67.82
Rate of Depreciation	2.67%
Depreciation on grants	1.81
Net Depreciation	11.26



Table 92: Depreciation for 2020-21 of KLHEP

Rs. Cr

Particulars	FY 2020-21
Opening GFA	514.70
Addition during the year	15.92
Closing	530.62
Average GFA	522.66
Rate of Depreciation	4.41%
Total Depreciation	23.07
Grant	54.66
Additions during the year	4.77
Closing grant	59.43
Average grant	57.05
Rate of Depreciation	4.41%
Depreciation on grants	2.52
Net Depreciation	20.55

Table 93: Depreciation for 2020-21 of LRPP

Rs. Cr

Particulars	FY 2020-21
Opening GFA	268.41
Addition during the year	0.00
Closing	268.41
Average GFA	268.41
Rate of Depreciation	5.02%
Total Depreciation	13.47
Grant	215.96
Additions during the year	0.00
Closing grant	215.96
Average grant	215.96
Rate of Depreciation	5.02%
Depreciation on grants	10.84
Net Depreciation	2.63



Table 94: Summary of Depreciation claimed for FY 2020-21

Rs. Cr

Station	Particulars	Approved as per Order of March 2020	APR Petition for FY 2020-21
NTPS	Depreciation	2.08	1.58
	Less: Depreciation on assets funded by Grants	0.2	0.13
	Net Depreciation	1.87	1.45
	Net Depreciation for Effective Capacity	0.68	0.95
LTPS	Depreciation	18.46	13.07
	Less: Depreciation on assets funded by Grants	2.5	1.81
	Net Depreciation	15.97	11.26
	Net Depreciation for Effective Capacity	10.92	7.70
KLHEP	Depreciation	24.83	23.07
	Less: Depreciation on assets funded by Grants	2.64	2.52
	Net Depreciation	22.19	20.55
	Net Depreciation for Effective Capacity	22.19	20.55
LRPP	Depreciation	12.23	13.47
	Less: Depreciation on assets funded by Grants	9.89	10.84
	Net Depreciation	2.34	2.63
	Net Depreciation for Effective Capacity	2.34	2.63
Total Depreciation claimed		42.37	35.89
Total Depreciation on Effective Capacity Claimed		36.13	31.83

14.4.3. APGCL prays to the Hon'ble Commission to approve the plant wise Depreciation for FY FY2020-21 as shown above.

14.5. Interest on Working Capital

14.5.1. As per Regulation 36 of the Tariff Regulations, 2018, the interest on working capital will be considered on normative basis.

14.5.2. As per the above regulations, the Petitioner has projected normative interest on working capital. However, as APGCL does not have liquid fuel stock facility, it has not considered working capital on storage of liquid fuel. The rate of interest has been considered equal to the normative interest rate of three hundred (300) basis points above the average State Bank of India MCLR (One Year Tenor) prevalent during the last available six months , which 7.00% + 3.00 % = 10.00%.

Table 95: Summary of Interest on working capital claimed for FY 2020-21

Rs. Cr

Station	Particulars	Approved as per order of March 2020	APR Petition for FY 2020-21
NTPS	Fuel Cost for one month	4.24	3.11
	O&M Expenses for one month	1.67	3.01
	Maintenance Spares-30% of O&M	6.02	10.82
	Receivables for two months	11.76	12.67
	Total Working Capital Requirement	23.70	29.61
	Rate of interest	11.22%	10.00%
	Interest on Working capital	2.66	2.96
LTPS	Fuel Cost for one month	10.41	5.94
	O&M Expenses for one month	2.03	3.11
	Maintenance Spares-30% of O&M	7.29	11.18
	Receivables for two months	30.84	21.09
	Total Work ing Capital Requirement	50.56	41.31
	Rate of interest	11.22%	10.00%
	Interest on Working capital	5.67	4.13
KLHEP	O&M Expenses for one month	2.53	2.53
	Maintenance Spares-30% of O&M	4.55	9.10
	Receivables for two months	16.04	12.99
	Total Work ing Capital Requirement	23.12	24.62
	Rate of interest	11.22%	10.00%
	Interest on Working capital	2.59	2.46
LRPP	Fuel Cost for one month	8.53	5.62
	O&M Expenses for one month	1.78	1.78
	Maintenance Spares-30% of O&M	6.39	6.39
	Receivables for two months	22.64	16.75
	Total Work ing Capital Requirement	39.34	30.53

Station	Particulars	Approved as per order of March 2020	APR Petition for FY 2020-21
	Rate of interest	11.22%	10.00%
	Interest on Working capital	4.41	3.05
	Total interest on Working capital	15.34	12.61

14.5.3. APGCL prays to the Hon'ble Commission to approve the plant wise Interest on Working capital for FY 2020-21 as shown above.

14.6. Operation and Maintenance Expenses (O&M Expenses)

14.6.1. The Operation and maintenance expense are to be projected as per Regulation 50.1 of the Tariff Regulations, 2018.

14.6.2. We submit that that the Hon'ble Commission has approved the Normative Operations & Maintenance for LTPS for FY 2020-21 at Rs. 60.26 Crore in the Order of March 2020.

14.6.3. However, the Hon'ble Commission while approving the O&M for LTPS in the Order of March 2020 as per effective capacity for FY 2020-21 has approved Rs. 24.31 Crore whereas as per effective capacity it should be Rs. 41.20 (Effective Capacity of 97.2 MW against installed capacity of 142.2 MW) Crore. The Hon'ble Commission had reduced the O&M cost of LRPP from the approved O&M cost of LTPS.

14.6.4. APGCL humbly submits that it had awarded the R&M services of LRPP to M/s Wartsila and for which APGCL is bearing Rs. 1.29 Crores per quarter as R&M expenditure. Such cost is also borne by APGCL.

14.6.5. APGCL humbly submits that the following historical O&M Cost for LTPS as well as the current actual O&M cost incurred in FY19-20.

(in Rs. Crore)

	FY16-17	FY17-18	FY18-19	FY19-20	Average O&M Expenditure
LTPS Actual O&M Expenditure	54.96	46.00	38.53	41.53	45.26

14.6.6. As can be seen from the above table, the average actual O&M cost incurred for LTPS has been Rs. ~45.26 Crore in the last 4 years. The Hon'ble Commission's reduction of the O&M Cost of LRPP from the Normative O&M cost for LTPS as per Order of March 2020 would lead to difficulty on the operations & maintenance cost coverage of LTPS for APGCL.

14.6.7. APGCL humbly prays to the Commission to approve the Normative O&M cost as per Order of March 2020 at Rs. 60.26 Crore and reduce the cost for effective capacity considering the actual effective installed capacity of 97.2 MW only while keeping the actual O&M Cost for LRPP separate for allowance.

14.6.8. APGCL also humbly submits to the Hon'ble Commission that it is not claiming the same O&M expenses for LTPS as well as LRPP. APGCL is only claiming the actual expenditure incurred for each plant separately as shown below.

14.6.9. APGCL is praying to the Hon'ble Commission to approve the O&M expenses at normative level for FY2020-21 considering the effective capacity of the plants in FY2020-21 as below:

Table 96: O&M Expenses for FY2020-21

Station	Approved in order of March 2020	Approved considering Effective Installed Capacity in order of March 2020	Effective Capacity considered in APR	Amount considered for Annual Performance Review Petition for FY 2020-21 on effective capacity
1	2	3	4	5 = 2 / Installed Capacity * 4
NTPS	55.17	20.08	78.12	36.06
LTPS	60.26	24.31	97.20	37.26
KLHEP	30.34	30.34	100.00	30.34
LRPP	21.30	21.30	69.76	21.30
Total	167.07	96.03		124.96

14.6.10. APGCL prays to the Hon'ble Commission to approve the plant wise O&M expenses for FY 2020-21 as shown above.

14.7. Impact of AERC (Payment of Fees etc.) Regulations, 2020

14.7.1. The Hon'ble Commission has notified the new AERC (Payment of Fees etc.) Regulations, 2020 which has led to a substantial increase in the Filing Fees of APGCL payable to AERC.

14.7.2. The tentative impact of the increase in the filing fees has been shown below:

Station	2015 Regulation			2020 Regulation			Increase in Filing Fees		
	Tariff Determination Fees	APR Fees	Total Fees	Tariff Determination Fees	True Up Fees	Total Fees	Tariff Determination Fees	True Up / APR Fees	Total Fees
NTPS	0.20	0.10	0.30	0.25	0.15	0.40	0.05	0.05	0.10
LTPS	0.20	0.10	0.30	0.25	0.15	0.40	0.05	0.05	0.10
KLHEP	0.10	0.05	0.15	0.10	0.05	0.15	0.00	0.00	0.00
LRPP	0.20	0.10	0.30	0.25	0.15	0.40	0.05	0.05	0.10
Total	0.70	0.35	1.05	0.85	0.50	1.35	0.15	0.15	0.30

14.7.3. Considering the increase in the plant wise filing fees as shown above, APGCL humbly prays to the Commission to allow it to claim in the increase in the fees at actuals in FY2020-21

14.8. Incentives

14.8.1. Incentives for FY 2020-21 will be claimed during True-up of FY 2020-21

14.9. Special R&M

14.9.1. The Hon'ble Commission in its order dated 1st March 2019 and 7th March 2020, had approved Special R&M for NTPS, LTPS and KLHEP. The status of the approved and actual special R&M being conducted in FY2020-21 has been shown in the table below:

Work Name	Total Amount Approved	Appeared in Annual Accounts FY 2020-21	Claim in FY 2020-21	Remarks
Capital Overhauling of 50MW Francis type Fuji make Generator Turbine Unit-II - KLHEP	15.10	0.00	0.00	Due to the delay in the overhauling of KLHEP Unit 1, the Overhauling of Unit 2 will be undertaken in FY2021-22 with the revised schedule to be provided in the APR for FY2021-22. However the order for the Work is expected to be given in FY20-21.
Overhauling of LTPS Unit -7 in FY2021-22	13.00	0.00	0.00	The overhauling has been shifted to FY2021-22



Work Name	Total Amount Approved	Appeared in Annual Accounts FY 2020-21	Claim in FY 2020-21	Remarks
Major Overhauling of KLHEP - Unit 1	0.00	15.00	0.00	Overhauling of Unit 1 to be completed in FY20-21 by December 2020 with plant running at full capacity from January 15 2021. Although the amount is present in the Annual Accounts till October 2020, the amount has been received from GoA (Rs. 26.9 Crore) Due to the delay in the overhauling of KLHEP Unit 1, the Overhauling of Unit 2 will be undertaken in FY2021-22 with the revised schedule to be provided in the APR for FY2021-22. However the order for the Work is expected to be given in FY20-21.

Table 97: Plant wise Special R&M for FY 2020-21

Rs. Cr

Station	Approved as per order of March 2020	Amount claimed for APR
NTPS	0.00	0.00
LTPS	13.00	0.00
KLHEP	15.10	0.00
LRPP	0.00	0.00
Total	28.10	0.00

14.9.2. APGCL prays to the Hon'ble Commission to approve the above mentioned Special R&M activities for FY2020-21

14.10. Capacity building

14.10.1. The Hon'ble Commission had approved expenses pertaining to Capacity Building of APGCL employees.

14.10.2. APGCL is claiming the normative Capacity Building expenses for FY2020-21 and shall provide the detailed capacity building activities undertaken in FY2020-21 during true up for the year.

14.10.3. The approved and claimed expenses have been shown in the table below:

Table 98: Expenses under Capacity building

Rs. Cr

Station	Approved as per order of March 2020	Amount claimed for APR
NTPS	0.10	0.10
LTPS	0.10	0.10
KLHEP	0.10	0.10
LRPP	0.00	0.00
Total	0.30	0.30

14.10.4. APGCL prays to the Hon'ble Commission to approve the above mentioned capacity building expenses for FY2020-21.

14.11. Non Tariff Income

14.11.1. As per Regulation 45 of the Tariff Regulations, 2018, the non-tariff income shall be deducted from the Annual Fixed Cost in determining the Annual Fixed Cost of the Generation Company.

14.11.2. The Non-tariff income has been estimated at normatively approved numbers by Hon'ble Commission in its order of March 2020. The same will be claimed at actuals during true up for FY2020-21

14.11.3. The details of non-tariff income for FY 2020-21 are shown in the table below:

Table 99: Station-wise details of Non tariff income for FY 2020-21

Rs. Cr

Station	Approved as per order of March 2020	Annual Performance Review Petition for FY 2020-21
NTPS	7.13	7.13



LTPS	9.22	9.22
KLHEP	5.75	5.75
LRPP	0.00	0.00
Total	22.09	22.09

14.11.4. APGCL prays to the Hon'ble Commission to approve the plant wise Non tariff income for FY 2020-21 as shown above.

14.12. Total Fixed Cost

14.12.1. The recovery of Annual fixed charges is to be done as per regulation 51.1 of the Tariff Regulations, 2018.

14.12.2. Based on the above, the Annual fixed charges for FY 2020-21 has been computed. The Hon'ble Commission is requested to approve the fixed charges as discussed in the table below:

Table 100: Annual Fixed charges for 2020-21 of NTPS

Rs. Cr

Particulars	Approved as per order of March 2020	Amount claimed for APR
Operation & Maintenance Expenditure	20.08	36.06
Increase in AERC Tariff Filing Fees	0	0.10
Interest & Finance Charges	0.17	0.05
Interest on working Capital	2.66	2.96
Depreciation	0.68	0.95
Return on Equity	3.1	5.57
Special R&M	0.00	0.00
Capacity Building	0.10	0.10
<u>Less: Other Income</u>	7.13	7.13
Total Fixed Charges	19.67	38.67

Table 101: Annual Fixed charges for 2020-21 of LTPS

Rs. Cr

Particulars	Approved as per order of March 2020	Amount claimed for APR
Operation & Maintenance Expenditure	24.31	37.26
Increase in AERC Tariff Filing Fees	0	0.10
Interest & Finance Charges	0.17	0.00
Interest on working Capital	5.67	4.13



Particulars	Approved as per order of March 2020	Amount claimed for APR
Depreciation	10.92	7.70
Return on Equity	15.16	15.16
Special R&M	13.00	0.00
Capacity Building	0.10	0.10
Less: Other Income	9.22	9.22
Total Fixed Charges	60.12	55.23

Table 102: Annual Fixed charges for 2020-21 of KLHEP

Rs. Cr

Particulars	Approved as per order of March 2020	Amount claimed for APR
Operation & Maintenance Expenditure	30.34	30.34
Increase in AERC Tariff Filing Fees	0.00	0.00
Interest & Finance Charges	21.05	19.62
Interest on working Capital	2.59	2.46
Depreciation	22.19	20.55
Return on Equity	10.64	10.64
Special R&M	15.10	0.00
Capacity Building	0.10	0.10
Less: Other Income	5.75	5.75
Total Fixed Charges	96.27	77.96

Table 103: Annual Fixed charges for 2019-20 of LRPP

Rs. Cr

Particulars	Approved as per order of March 2020	Amount claimed for APR
Operation & Maintenance Expenditure	21.30	21.30
Increase in AERC Tariff Filing Fees	0.00	0.10
Interest & Finance Charges	3.05	3.54
Interest on working Capital	4.41	3.05
Depreciation	2.34	2.63
Return on Equity	2.37	2.44
Special R&M	0.00	0.00
Capacity Building	-	-



Particulars	Approved as per order of March 2020	Amount claimed for APR
<u>Less: Other Income</u>	0.00	0.00
Total Fixed Charges	33.47	33.07

14.12.3. The Petitioner prays to the Hon'ble Commission to approve the plant wise fixed costs for FY 2020-21 as discussed in the tables above.

15. Energy Charges

15.1. Fuel Price and Calorific Value

15.1.1. As per Regulation 11 of the Tariff Regulations 2018, 'Fuel Price' and 'Calorific Value of Fuel' are uncontrollable items. The actual values of 'Fuel Price' and 'Calorific Value of Fuel' are shown in the table below:

Table 104: Actual Plant wise GCV and Price for FY 2020-21

Station	Wt. Avg. Gross Calorific Value of Gas (kcal/SCM)	Wt. Avg. Price of Gas (Rs./1000 SCM)		
		April - Sept (actual)	Oct -March (estimated)	
NTPS	9,147	4,757	3,535	4,146
LTPS	9,419	6,646	4,922	5,784
LRPP	9,419	6,642	4,922	5,782

15.1.2. The estimated for October 2020 has been considered to project the price from Oct-March. The Petitioner prays to the Hon'ble Commission to approve the Price of Gas and GCV for NTPS, LTPS and LRPP for FY 2020-21 as shown in the table above.

15.2. Fuel cost

15.2.1. The Commission, in the Tariff Orders of March 2020 had approved the Fuel Cost for FY FY2020-21 for NTPS, LTPS and LRPP. The table below shows the plant wise approved fuel cost, the actual total fuel cost incurred and the fuel cost on normative parameters for FY 2020-21. The average price of fuel and GSHR for April to September has been considered for the month of October – March.

Table 105: Fuel cost for NTPS for FY 2020-21

Particulars	Unit	Approved as per order of March 2020			
		April - Sep (actual)	Oct -March (estimated)	FY 2020-21 estimated	
Gross Generation	MU	173.73	88.92	84.81	173.73
Heat Rate	kcal/kWh	3900.00	5316.84	3900.00	4608.42
GCV of gas	kcal/SCM	9132.69	9147.27	9147.27	9147.27
Overall Heat	G. cal.	677547.00	472773.11	330759.00	800620.51
Gas consumption	M. SCM	74.19	51.68	36.16	87.53
Price of Gas	Rs./1000 SCM	6257.52	4757.43	3535.02	4146.22



Particulars	Unit	Approved as per order of March 2020	April - Sep (actual)	Oct -March (estimated)	FY 2020-21 estimated
Total cost of Gas	Rs. Crore	46.42	24.59	12.78	37.37

Table 106: Fuel cost for LTPS for FY 2020-21

Particulars	Unit	Approved as per order of March 2020	April - Sep (actual)	Oct -March (estimated)	FY 2020-21 estimated
Gross Generation	MU	425.74	183.63	212.28	395.92
Heat Rate	kcal/kWh	3200.00	2762.30	3200.00	2981.15
GCV of gas	kcal/SCM	9328.96	9419.27	9419.27	9419.27
Overall Heat	G. cal.	1362368.00	507250.04	679311.36	1180291.01
Gas consumption	M. SCM	146.04	53.85	72.12	125.31
Price of Gas	Rs./1000 SCM	8553.56	6645.79	4921.91	5783.85
Total cost of Gas	Rs. Crore	124.91	35.79	35.50	71.29

Table 107: Fuel cost for LRPP for FY 2020-21

Particulars	Unit	Approved as per order of March 2020	April - Sep (actual)	Oct -March (estimated)	FY 2020-21 estimated
Gross Generation	MU	519.40	228.06	291.34	519.40
Heat Rate	kcal/kWh	2150.00	2155.99	2150.00	2153.00
GCV of gas	kcal/SCM	9328.96	9419.27	9419.27	9419.27
Overall Heat	G. cal.	1116710.00	491685.79	626390.89	1118266.32
Gas consumption	M. SCM	119.70	52.20	66.50	118.72
Price of Gas	Rs./1000 SCM	8853.56	6642.19	4921.91	5782.05
Total cost of Gas	Rs. Crore	102.39	34.67	32.73	67.40

15.2.2. The Petitioner prays to the Hon'ble Commission to approve the estimated Fuel cost Price for NTPS, LTPS and LRPP for FY 2020-21 as shown in the table above.



16. Summary of submissions for Annual Performance Review of FY 2020-21

16.1. Net Annual Revenue Requirement

16.1.1. The plant wise Net Annual Revenue Requirements for FY 2020-21 are as shown in the tables below.

Table 108: Net Annual Revenue Requirements for NTPS for FY 2020-21

Rs. Cr

APR for FY 2020-21 For NTPS on Effective Capacity			
Sl. No	Particulars	Approved as per order of March 2020	Amount claimed for APR
I	POWER GENERATION (MU)		
	Gross Generation	173.73	173.73
	Net Generation	165.91	164.10
	Auxiliary Consumption, Loss %	4.50%	5.54%
I	Fixed Charges		
	Operation & Maintenance Expenditure	20.08	36.06
	Increase in AERC Tariff Filing Fees	0	0.10
	Interest & Finance Charges	0.17	0.05
	Interest on working Capital	2.66	2.96
	Depreciation	0.68	0.95
	Return on Equity	3.1	5.57
	Special R&M	0.00	0.00
	Capacity Building	0.10	0.10
	<u>Less: Other Income</u>	7.13	7.13
II	Total Fixed Charges	19.67	38.67
III	Fuel Cost	46.42	37.37
IV	Total Revenue Requirement	66.09	76.04
VII	Total Cost	66.09	76.04
VIII	Revenue from Sale of Power	66.09	59.96
IX	Revenue Gap (+) / Surplus(-)	0.00	16.08



Table 109: Net Annual Revenue Requirements for LTPS for FY 2020-21

Rs. Cr

APR for FY 2020-21 For LTPS on Effective Capacity			
Sl. No	Particulars	Approved as per order of March 2020	Amount claimed for APR
I	POWER GENERATION (MU)		
	Gross Generation	425.74	395.92
	Net Generation	402.32	367.31
	Auxiliary Consumption, Loss %	5.50%	7.23%
I	Fixed Charges		
	Operation & Maintenance Expenditure	24.31	37.26
	Increase in AERC Tariff Filing Fees	0	0.10
	Interest & Finance Charges	0.17	0.00
	Interest on working Capital	5.67	4.13
	Depreciation	10.92	7.70
	Return on Equity	15.16	15.16
	Special R&M	13.00	0.00
	Capacity Building	0.10	0.10
	<u>Less: Other Income</u>	9.22	9.22
II	Total Fixed Charges	60.12	55.23
III	Fuel Cost	124.91	71.29
IV	Total Revenue Requirement	185.03	126.52
VII	Total Cost	185.03	126.52
VIII	Revenue from Sale of Power	185.03	162.64
IX	Revenue Gap (+) / Surplus(-)	0.00	-36.13

Table 110: Net Annual Revenue Requirements for KLHEP for FY 2020-21

Rs. Cr

APR for FY 2020-21 For KLHEP on Effective Capacity			
Sl. No	Particulars	Approved as per order of March 2020	Amount claimed for APR
I	POWER GENERATION (MU)		
	Gross Generation	390.00	341.11
	Net Generation	388.05	339.85
	Auxiliary Consumption, Loss %	0.5%	0.4%
I	Fixed Charges		
	Operation & Maintenance Expenditure	30.34	30.34
	Increase in AERC Tariff Filing Fees	0.00	0.00
	Interest & Finance Charges	21.05	19.62
	Interest on working Capital	2.59	2.46
	Depreciation	22.19	20.55
	Return on Equity	10.64	10.64
	Special R&M	15.10	0.00
	Capacity Building	0.10	0.10
	<u>Less: Other Income</u>	5.75	5.75
II	Total Fixed Charges	96.27	77.96
III	Fuel Cost	0.00	0.00
IV	Total Revenue Requirement	96.27	77.96
VII	Total Cost	96.27	77.96
VIII	Revenue from Sale of Power	96.27	71.59
IX	Revenue Gap (+) / Surplus(-)	0.00	6.37



Table 111: Net Annual Revenue Requirements for LRPP for FY 2020-21

Rs. Cr

APR for FY 2020-21 For LRPP on Effective Capacity			
Sl. No	Particulars	Approved as per order of March 2020	Amount claimed for APR
I	POWER GENERATION (MU)		
	Gross Generation	519.40	519.40
	Net Generation	501.22	504.22
	Auxiliary Consumption, Loss %	3.50%	2.92%
I	Fixed Charges		
	Operation & Maintenance Expenditure	21.30	21.30
	Increase in AERC Tariff Filing Fees	0.00	0.10
	Interest & Finance Charges	3.05	3.54
	Interest on working Capital	4.41	3.05
	Depreciation	2.34	2.63
	Return on Equity	2.37	2.44
	Special R&M	0.00	0.00
	Capacity Building	-	-
	<u>Less:</u> Other Income	0.00	0.00
II	Total Fixed Charges	33.47	33.07
III	Fuel Cost	102.39	67.40
IV	Total Revenue Requirement	135.86	100.47
VII	Total Cost	135.86	100.47
VIII	Revenue from Sale of Power	135.86	126.29
IX	Revenue Gap (+) / Surplus(-)	0.00	-25.82

16.2. Summary

16.2.1. The summary of the APR for FY 2020-21 For APGCL is as shown below.

Table 112: APR for FY 2020-21 for APGCL

Rs. Cr

APR for FY 2020-21 For APGCL on Effective Capacity			
Sl. No	Particulars	Approved as per order of March 2020	Amount claimed for APR
I	POWER GENERATION (MU)		
	Gross Generation	1508.87	1430.16
	Net Generation	1457.51	1375.49
	Auxiliary Consumption, Loss %	3.40%	3.82%
I	Fixed Charges		
	Operation & Maintenance Expenditure	96.03	124.96
	Increase in AERC Tariff Filing Fees	0.00	0.30
	Interest & Finance Charges	24.44	23.21
	Interest on working Capital	15.34	12.61
	Depreciation	36.13	31.83
	Return on Equity	31.27	33.81
	Special R&M	28.10	0.00
	Capacity Building	0.30	0.30
	Less: Other Income	22.10	22.09
II	Total Fixed Charges	209.51	204.93
III	Fuel Cost	273.73	176.06
IV	Total Revenue Requirement	483.25	380.99
VII	Total Cost	483.25	380.99
VIII	Revenue from Sale of Power	483.25	420.48
IX	Revenue Gap (+) / Surplus(-)	0.00	-39.49

Table 113: Net Annual Revenue Requirements for APGCL for FY 2020-21

Rs. Cr

Particulars	Approved as per order of March 2020	Amount estimated for Annual Performance Review
Total Fixed Charges	209.51	204.93
Fuel Cost	273.73	176.06



Total Revenue Requirement	483.25	380.99
----------------------------------	---------------	---------------

16.2.2. We submit that since the figures for the FY FY2020-21 are estimated and are subject to True-up, APGCL has not considered gap in the tariff for FY 2020-21. The same shall be considered at the time of True-up petition of FY 2020-21.

16.2.3. The Petitioner prays to the Hon'ble Commission to approve the plant wise Net Annual Revenue Requirement and for APGCL as a whole for FY 2020-21 as discussed in the tables above.



**APPEAL FOR REVISED AGGREGATE REVENUE
REQUIREMENT FOR FY 2021-22 NTPS
&
DETERMINATION OF TARIFF FOR FY 2021-22
To
ASSAM ELECTRICITY REGULATORY COMMISSION**



Prepared by
ASSAM POWER GENERATION CORPORATION LTD
Bijulee Bhawan, Paltanbazar
Guwahati – 781 001



AFFIDAVIT – NTPS

BEFORE THE ASSAM STATE ELECTRICITY REGULATORY
COMMISSION, GUWAHATI.

Petition No. –

Case No.
(to be filed by the Office)

IN THE MATTER OF

Filing of Petition for Revised Aggregate Revenue Requirement and Determination of Tariff
for the FY 2021-22

AND

IN THE MATTER OF

Namrup Thermal Power Station,
Assam Power Generation Corporation Limited,
Namrup-786622

Petitioner

I, Sri Ashok Kalita, son of Late Sarbeswar Kalita, age 59 years, residing at Narengi, Guwahati-
781026, do solemnly affirm and say as follows:

I am the Chief General Manager (Gen) of Assam Power Generation Corporation Limited, the
petitioner in the above matter and am duly authorized by the said Petitioner to make this
affidavit for and on behalf of the Assam Power Generation Corporation Limited.

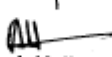
The Statement made in the Petition based on information received from official records and
I believe them to reflect truly and no material has been concealed from the statements so
made or documents or supporting data etc. attached.

Solemnly affirm at Guwahati on 27th November 2020 that the contents of this affidavit are
true to my knowledge, no part of it is false or no material has been concealed therefore and
misleading material included therein.

Place: Guwahati

Date: 27th November 2020

Deponent


(Ashok Kalita)
Chief General Manager (Gen),
Assam Power Generation Corporation Ltd.



PRAYER – NTPS

BEFORE THE HON'BLE ASSAM ELECTRICITY REGULATORY COMMISSION

FILINGNO

CASENO.....

IN THE MATTER OF:

Petition for Submission of Revised Aggregate Revenue Requirement and Determination of Tariff for the FY 2021-22

AND IN THE MATTER OF:

Namrup Thermal Power Station (hereinafter referred to as "NTPS") of Assam Power Generation Corporation Limited (hereinafter referred to as "APGCL") incorporated under the provisions of the Companies Act, 1956 and having its registered office in the State of Assam

THE HUMBLE APPLICANT ABOVE NAMED MOST RESPECTFULLY SHEWETH:

- 1 That the APGCL is a successor corporate entity of former ASEB, formed in pursuant to the notification of the Government of Assam, notified under sub-sections (1), (2), (5), (6) and (7) of Section 131 and Section 133 of the Electricity Act 2003(Central Act 36 of 2003), for the purpose of transfer and vesting of functions, properties, interests, rights, obligations and liabilities, along with the transfer of Personnel of the Board to the successor corporate entities.
- 2 That the APGCL is a company incorporated with the main object of generation of electricity in the state of Assam.
- 3 That the APGCL is a generating company under the provisions laid down in Section 14 Proviso 5, read with Section 131 (2) of the Electricity Act 2003.
- 4 That the NTPS is an operating gas based thermal Power Station under the APGCL in the district of Dibrugarh, Assam.
- 5 That the Hon'ble Commission notified the AERC (Terms and Conditions for determination of Multi Year Tariff) Regulations, 2018 on 28th June, 2018.
- 6 That the AERC, after completion of the due process, issued Order for the FY 2020-21 on 07/03/2020.
7. That APGCL is now submitting the Petition for the Revised Aggregate Revenue Requirement and Determination of Tariff for NTPS for the FY 2021-22 as per the relevant Regulations.

Place: Guwahati

Date: 27th November' 2020

Deponent



(Ashok Kalita)
Chief General Manager (Gen),
Assam Power Generation Corporation Ltd.



17. Revised ARR for FY 2021-22

17.1. Regulatory provisions for Revised ARR

17.1.1. The Hon'ble Commission in its Tariff regulations 2018 has stated the following on Revised ARR for the control period from FY 2019-20 to FY 2021-22. The same is reproduced below for ready reference:

“4 Multi-Year Tariff Framework

4.1 The Commission shall determine the tariff for matters covered under clauses (i), (ii), (iii), (iv) and (v) of Regulation 3.3 above under a Multi-Year Tariff framework with effect from 1st April 2019.

4.2 The Multi-Year Tariff framework shall be based on the following elements, for calculation of Aggregate Revenue Requirement and expected revenue from tariff and charges for Generating Companies, Transmission Licensee, SLDC, Distribution Wheeling Business and Retail Supply Business:

- (i) Before commencement of Control Period, a forecast of the Aggregate Revenue Requirement and expected revenue from existing tariff and charges shall be submitted by the applicant and approved by the Commission;*
- (ii) A detailed Capital Investment Plan for each year of the Control Period, shall be submitted by the applicant for the Commission's approval;*
- (iii) The applicant shall submit operating norms and trajectories of performance parameters for each year of the Control Period, for the Commission's approval*
- (iv) The applicant shall submit the forecast of Aggregate Revenue Requirement and expected revenue from existing tariff for each year of the Control Period, and the Commission shall approve the tariff for Generating Companies, SLDC, Transmission Licensee, Distribution Wheeling Business and Retail Supply Business, for each year of the Control Period;*
- (v) In its tariff petition, a generating company shall submit information to support the determination of tariff for each generating station*

5 Control Period and Baseline

5.1 The first Control Period under these Regulations shall be of three financial years from April 1, 2019 to March 31, 2022 and for every block of three years thereafter or such other period as may be decided by the Commission.

.....

5.2 The Commission shall determine baseline values for various financial and operational parameters of ARR for the Control Period taking into consideration the figures approved by the Commission in the past, actual average figures of last three years, audited accounts, estimate of the figures for the relevant year, Industry benchmarks/norms and other factors considered appropriate by the Commission;

Provided that in case of substantial difference between the estimates earlier provided / considered for determination of baseline values and the actual audited accounts, the Commission may re-determine the baseline values for the base year suo-moto or on an application filed by the Applicant”

18. Norms of operations

18.1. Regulatory provisions

18.1.1. The Hon'ble Commission had set norms of operations under Tariff Regulations 2018.

18.1.2. The projected performance vis-a-vis norms of operations set is discussed below:

18.2. Installed and Effective Capacity in FY2021-22

18.2.1. APGCL submits the following Installed & Effective Capacity for FY2021-22

Table 114: Installed & Effective Capacity for FY2020-21

Station	Installed Capacity (MW)	No. of Units	Units Decommissioned	Units Available for Generation & Capacity in MW	Effective Capacity
NTPS	119.5	6	1 4,5 (w.e.f. 20 th August 2020)	2, 3(21MW) – Only 1 Unit Operational at any time 6 (22.50 MW-WHRU)	43.5 MW

18.3. Snapshot of performance projection for FY 2021-22

18.3.1. The generation from Namrup thermal power station is expected to reduce due to proposed commissioning of the NRPP from 1st April 2021. It is expected that only two units totalling 43.5 MW of Namrup thermal power station will run post commissioning of NRPP.

18.3.2. The Commission in its order dated 1st March 2019 had approved the NAPAF of NTPS at 50% for FY2021-22. However due to the problem of low gas supply and frequent forced shutdown of the aged units/auxiliaries, normative Plant Availability factor may not be achieved

18.3.3. The following table shows the projection of performance parameters of gas based Namrup thermal power station for FY2021-22

Table 115: Projected Operating Performance for FY2021-22 of NTPS



NTPS	2021-22 Approved	2021-22 Projected
Gross Energy in MU	173.73	145.21
Aux. Power Cons. (%)	4.50%	4.50%
Net Energy in MU	165.9	138.68
Plant Availability Factor (%)	50.00%	38.11%
Plant Load Factor (%)	50.00%	38.11%
Gross Station Heat Rate on GCV (kcal / kWh)	3900	3900.00

18.4. Normative Annual Plant Availability Factor (NAPAF)

18.4.1. As per Regulation 47.1 of the Tariff Regulations, 2018 the Normative Plant Availability factor for recovery of full fixed charges, is 50% for FY2021-22 for NTPS. However, post commissioning of NRPP, availability of NTPS is expected to decrease due to low availability of gas. The approved and projected numbers are shown in the table below.

Table 116: Projected Availability for FY2021-22 of NTPS

NTPS	2021-22 Approved	2021-22 Projected
Plant Availability Factor (%)	50.00%	38.11%

18.5. Normative Annual Plant Load Factor (NAPLF)

18.5.1. As per Regulation 47.2 of the Tariff Regulations, 2018 the Normative Plant Load factor is 50% for FY 2019-20 to FY 2021-22 for NTPS. However, post commissioning of NRPP, generation of NTPS is expected to decrease due to low availability of gas. The PLF for NTPS has been projected at same level of availability. APGCL will try to achieve the approved PLF for NTPS during the year.. The approved and projected numbers are shown in the table below.

Table 117: Projected PLF for FY2021-22 of NTPS

NTPS	2021-22 Approved	2021-22 Projected
Plant Load Factor (%)	50.00%	38.11%



18.6. Gross Station Heat Rate (SHR)

18.6.1. As per Regulation 47.4, of the Tariff Regulations, 2018 the Normative Station Heat Rate, is 3900 kCal/kWh for FY 2021-22 for NTPS in Partial combined cycle mode of operation.

18.6.2. The approved and projected numbers are shown in the table below.

Table 118: Projected SHR for FY2021-22 of NTPS

NTPS	2021-22 Approved	2021-22 Projected
Gross Station Heat Rate on GCV (kcal / kWh)	3900.00	3900.00

18.7. Auxiliary Energy Consumption

18.7.1. As per Regulation 47.3 of the Tariff Regulations, 2018 the Normative Auxiliary energy consumption is 4.50% for FY 2021-22 for NTPS. The same has been considered for projection. The approved and projected numbers are shown in the table below.

Table 119: Auxiliary Energy Consumption for FY2021-22 of NTPS

NTPS	2021-22 Approved	2021-22 Projected
Auxiliary energy consumption (%)	4.50%	4.50%

18.7.2. APGCL prays to the Hon'ble Commission to approve the projection of performance parameters as shown above.

19. Fixed Cost of the Plant

19.1. Annual fixed cost for FY 2021-22

19.1.1. As per regulation 42.1 of the AERC Tariff regulations, 2018 the following components have been considered for projecting of fixed cost under the Multi Year Tariff framework for the power plants:

- (a) Return on Equity Capital
- (b) Interest on Loan capital
- (c) Depreciation
- (d) Operation and Maintenance Expenses
- (e) Interest on Working Capital
- (f) Less: Non-Tariff Income

19.1.2. For the computation of the fixed components, the Petitioner has considered the principles provided in the Tariff Regulations, 2018. These components have been discussed in detail in the following sections of the petition.

19.2. Return on Equity (ROE)

19.2.1. The Hon'ble Commission in its regulation has considered the pre-tax return on equity at 15.5% on equity capital as per Regulation 33 of the Tariff Regulations, 2018.

19.2.2. APGCL has projected the Return on Equity (RoE) at a rate of 15.5% in accordance with the Tariff Regulations, 2018. The Petitioner submits that there is no plan of addition in Equity in FY 2021-22 for the existing plant. Further, it is submitted that the actual tax paid would be claimed separately during True-up of respective years.

Table 120: Projected Return on Equity capital for FY2021-22 (Rs Cr.)

Station	Particulars	2021-22 Approved	2021-22 Projected
NTPS	Opening Equity	55.00	55.00
	Closing Equity	55.00	55.00
	Rate of Return	15.50%	15.50%
	Return on Equity	8.53	8.53
	Return on Equity for Effective Capacity	3.10	3.10

19.2.3. APGCL prays to the Hon'ble Commission to approve the projected Return on Equity as shown above.



19.3. Interest on Loan Capital

19.3.1. As per Regulation 34 of the Tariff Regulations, 2018, the Commission will consider interest on Loan capital on normative basis with repayment equal to depreciation allowed for that year and rate of interest will be the weighted average rate of interest calculated on the basis of the actual loan portfolio at the beginning of each year.

19.3.2. In view of the above, the Petitioner has projected the Interest on long term Loan on normative basis for FY2021-22. The Petitioner has considered normative loan portfolio and the repayment shown is considered equal to the depreciation for FY 2021-22. The interest rate has been considered as the expected weighted average rate of interest for FY 2021-22.

19.3.3. The finance charges are shown separately for FY 2021-22. The table below summarizes the interest on loan and finance charges considered for period of FY 2021-22.

Table 121: Projected Interest and Finance charges for FY2021-22 for NTPS

Rs. Cr

Station	Particulars	2021-22 Approved	2021-22 Projected
NTPS	Net Normative Opening Loan	4.17	0.81
	Addition of normative loan during the year	1.78	1.90
	Normative Repayment during the year	2.25	1.42
	Net Normative Closing Loan	3.70	1.29
	Avg. Normative Loan	3.94	1.05
	Interest Rate	10.10%	10.01%
	Interest on Loan Capital	0.40	0.10
	Add: Bank Charges	0.00	0.00
	Net Interest on Loan Capital	0.40	0.10
Net Interest on Loan Capital for Effective Capacity	0.14	0.04	

19.3.4. APGCL prays to the Hon'ble Commission to approve the projected Total interest and finance charges as shown above.

19.4. Depreciation

19.4.1. The Hon'ble Commission in its Tariff Regulations, 2018 has provided the principals for determination of depreciation.

19.4.2. In view of the above, the Petitioner has computed the Depreciation considering the Capital Cost of the asset admitted by the Commission and projected asset addition with 10% salvage value. Also, depreciation on grants has been subtracted. The table below summarizes the Depreciation projected for FY2021-22.

Table 122: Projected Depreciation for FY2021-22 of NTPS

Rs. Cr

Particulars	2021-22
Opening GFA	190.69
Addition during the year	1.58
Closing GFA	192.28
Average GFA	191.49
Rate of Depreciation	0.82%
Total Depreciation	1.58
Grant	17.91
Additions during the year	2.80
Closing grant	20.71
Average grant	19.31
Rate of Depreciation	0.82%
Depreciation on grants	0.16
Net Depreciation	1.42

Table 123: Summary of projected Depreciation for FY2021-22

Rs. Cr

Station	Particulars	2021-22 Approved	2021-22 Projected
NTPS	Depreciation	2.50	1.58
	Less: Depreciation on assets funded by Grants	0.25	0.16
	Net Depreciation	2.25	1.42
	Net Depreciation for Effective Capacity	0.82	0.52

19.4.3. APGCL prays to the Hon'ble Commission to approve the projected Depreciation for FY 2021-22 as shown above.

19.5. Interest on Working Capital

19.5.1. As per Regulation 36 of the Tariff Regulations, 2018, the interest on working capital will be considered on normative basis.

19.5.2. As per the above regulations, the Petitioner has projected normative interest on working capital. However, as APGCL does not have liquid fuel stock facility, it has not considered working capital on storage of liquid fuel. The rate of interest has been considered equal to the normative interest rate of three hundred (300) basis points above the average State Bank of India MCLR (One Year Tenor) prevalent during the last available six months, which $7.00\% + 3.00\% = 10.00\%$.

19.5.3. The interest on working capital considered is shown in the table below:

Table 124: Summary of Interest on working capital projected for FY2021-22

Rs. Cr

Station	Particulars	2021-22	2021-22
		Approved	Projected
NTPS	Fuel Cost for one month	4.23	1.82
	O&M Expenses for one month	1.77	1.78
	Maintenance Spares-30% of O&M	6.38	6.40
	Receivables for two months	13.43	6.95
	Total Working Capital Requirement	25.82	16.96
	Rate of interest	11.50%	10.00%
	Interest on Working capital	2.97	1.70

19.5.4. APGCL prays to the Hon'ble Commission to approve the Interest on Working capital for FY 2021-22 as shown above.

19.6. Operation and Maintenance Expenses (O&M Expenses)

19.6.1. The Operation and maintenance expense are to be projected as per Regulation 50.1 of the Tariff Regulations, 2018.

19.6.2. The Commission in its order dated 1st March 2019 had computed the normative O&M expenses for NTPS for FY2021-22.

19.6.3. APGCL has claimed the Normative O&M expenses for NTPS considering the escalation rate of 6.3% on the claimed Normative Expenses for NTPS for APR of FY2020-21

Table 125: Operation and Maintenance projected for FY2021-22

Rs. Cr



Station	Approved in order of March 2019	Approved considering Effective Installed Capacity in order of March 2019	Amount considered for APR of FY2020-21 on Effective Installed Capacity	Effective Capacity considered for APR for FY2020-21	Effective Capacity for Tariff Projection for FY2021-22	Amount considered for Tariff for FY 2021-22 on effective capacity
	1	2	3	4	5	6 = 3* (1+6.3%) *5/4
NTPS	58.44	21.27	36.06	78.12	43.50	21.35

19.6.4. APGCL prays to the Hon'ble Commission to approve the O&M expenses for FY 2021-22 as shown above.

19.7. Impact of AERC (Payment of Fees etc.) Regulations, 2020

19.7.1. The Hon'ble Commission has notified the new AERC (Payment of Fees etc.) Regulations, 2020 which has led to a substantial increase in the Filing Fees of APGCL payable to AERC.

19.7.2. The tentative impact of the increase in the filing fees has been shown below:

Station	2015 Regulation			2020 Regulation			Increase in Filing Fees		
	Tariff Determination Fees	APR Fees	Total Fees	Tariff Determination Fees	True Up Fees	Total Fees	Tariff Determination Fees	True Up / APR Fees	Total Fees
NTPS	0.20	0.10	0.30	0.25	0.15	0.40	0.05	0.05	0.10

19.7.3. Considering the increase in the NTPS filing fees as shown above, APGCL humbly prays to the Commission to allow it to claim in the increase in the fees at actuals in FY2020-21.

19.8. Incentives

19.8.1. APGCL submits that the Incentives for FY 2021-22 will be claimed in True-up as per Regulations.

19.9. Special R&M

19.9.1. APGCL does not plan to undertake any Special R&M for NTPS in FY2021-22. The revised schedule for Overhauling will be prepared post commissioning of NRPP.

Table 126: Expenses under Special R&M

Station	Rs. Cr	
	2021-22 Approved	2021-22 Projected
NTPS Unit 2	8.2	-

19.10. Capacity building

19.10.1. The Hon'ble Commission had approved the Capacity Building expenditure at INR 0.13 Crores for FY2020-21 for NTPS in its order dated 1st March 2019.

19.10.2. The below table shows the approved and projected expenditure for Capacity Building.

Table 127: Expenses under Capacity building

Station	Rs. Cr	
	2021-22 Approved	2021-22 Projected
NTPS	0.13	0.13

19.10.3. APGCL submits that the Other expenses like actual tax paid, prior period items etc. for FY2021-22 will be claimed in True-up of FY 2021-22 as per Regulations.

19.11. Non-Tariff income

19.11.1. As per Regulation 45 of the Tariff Regulations, 2018, the non-tariff income shall be deducted from the Annual Fixed Cost in determining the Annual Fixed Cost of the Generation Company.

19.11.2. The non-tariff income for FY2021-22 are projected same as approved by Hon'ble Commission. The same is as shown in the table below

Table 128: Station-wise Non tariff income projected for FY2021-22

Rs. Cr

Station	2021-22 Approved	2021-22 Projected
NTPS	7.13	7.13

19.11.3. APGCL prays to the Hon'ble Commission to approve the Non-tariff income for FY FY2020-21 as shown above.

19.12. Total Fixed Cost

19.12.1. The recovery of Annual fixed charges is to be done as per regulation 51.1 of the Tariff Regulations, 2018.

19.12.2. Based on the above, the Annual fixed charges for FY2021-22 has been computed. The Hon'ble Commission is requested to approve the fixed charges as discussed in the table below:

Table 129: Annual Fixed charges for FY2021-22 of NTPS

Particulars	2021-22 Approved	2021-22 Projected
Operation & Maintenance Expenditure	21.27	21.35
Increase in AERC Tariff Filing Fees	0	0.10
Interest & Finance Charges	0.14	0.04
Interest on working Capital	2.97	1.70
Depreciation	0.82	0.52
Return on Equity	3.10	3.10
Special R&M	8.20	0.00
Capacity Building	0.13	0.13
<u>Less: Other Income</u>	7.13	7.13
Total Fixed Charges	29.50	19.80

19.12.3. The Petitioner prays to the Hon'ble Commission to approve the fixed costs for FY 2021-22 as discussed in the tables above.



20. Energy Charges

20.1. Fuel Price and Calorific Value

20.1.1. As per Regulation 11 of the Tariff Regulations 2018, 'Fuel Price' and 'Calorific Value of Fuel' are uncontrollable items. The values of 'Calorific Value of Fuel' is considered same as considered in FY 2020-21. The value of 'Fuel Price' has been considered at the rate computed for the month of October 2020 and escalated at annual rate of 3% for Transmission charges as per agreement. The projected values of 'Fuel Price' and 'Calorific Value of Fuel' are shown in the table below:

Table 130: Projected GCV and Price for FY2021-22

Station	Wt. Avg. Gross Calorific Value of Gas (kcal/SCM)	Wt. Avg. Price of Gas (Rs./1000 SCM)
NTPS	9,147.27	4,146.22

20.1.2. The Petitioner prays to the Hon'ble Commission to approve the projected Price of Gas and GCV for NTPS for FY 2021-22 as shown in the table above.

20.2. Fuel cost

20.2.1. The Commission, in the Tariff Order dated 1st March 2019 had approved the Fuel Cost for FY 2021-22. The table below shows the projected fuel cost for FY2021-22

Table 131: Fuel cost for NTPS for FY2021-22

Particulars	Derivation	Unit	2021-22 Approved	2021-22 Projected
Gross Generation	A	MU	173.73	145.21
Heat Rate	B	kcal/kWh	3900.00	3900.00
GCV of gas	C	kcal/SCM	8893.61	9147.27
Overall Heat	D=AxB	G. cal.	677547.00	566330.35
Gas consumption	E=D/C	M. SCM	76.18	61.91
Price of Gas	F	Rs./1000 SCM	6076.99	3537.22
Total cost of Gas	G=ExF/10000	Rs. Crore	46.30	21.90

20.2.2. The Petitioner prays to the Hon'ble Commission to approve the projected Fuel cost Price for NTPS for FY 2021-22 as shown in the table above.

21. Summary of submissions for Revised ARR of FY 2020-21

21.1. Summary

21.1.1. The Summary of the revised ARR for FY2021-22 for NTPS is shown below.

Table 132: Revised ARR for FY2021-22 for NTPS

Rs. Cr

Sl. No	ARR For NTPS for Effective Capacity Particulars	2021-22	2021-22
		Approved	Projected
	POWER GENERATION (MU)		
	Gross Generation	173.73	145.21
	Net Generation	165.91	138.68
	Auxiliary Consumption Loss %	4.50%	4.50%
I	Fixed Charges		
	Operation & Maintenance Expenditure	21.27	21.35
	Increase in AERC Tariff Filing Fees	0	0.10
	Interest & Finance Charges	0.14	0.04
	Interest on working Capital	2.97	1.70
	Depreciation	0.82	0.52
	Return on Equity	3.10	3.10
	Special R&M	8.20	0.00
	Capacity Building	0.13	0.13
	<u>Less: Other Income</u>	7.13	7.13
II	Total Fixed Charges	29.50	19.80
III	Fuel Cost	46.30	21.90
IV	Total Revenue Requirement	75.80	41.70
	Fixed Charge (Rs. / kWh)	1.78	1.43
	Energy Charge (Rs. / kWh)	2.79	1.58
	Proposed Tariff (Rs. / kWh)	4.57	3.01

21.2. Net Annual Revenue Requirement

21.2.1. The Net Annual Revenue Requirements for FY 2021-22 is shown in the tables below.

Table 133: Net Annual Revenue Requirements for NTPS for FY2021-22

Rs. Cr

Particulars	2021-22 Projected
Fixed Charges including Other expenses	19.80
Fuel Cost	21.90
Total Revenue Requirement	41.70

21.3. Tariff for NTPS for FY 2021-22

21.3.1. The tariff proposed for NTPS for FY 2021-22 is as shown below

Table 134: tariff proposed for NTPS for FY 2021-22

Particulars	NTPS
Annual fixed charges (Rs crore)	19.80
Monthly fixed charges (Rs crore)	1.65
Energy charge rate (Rs./ kWh)	1.58

21.3.2. The Petitioner prays to the Hon'ble Commission to approve the Net Annual Revenue Requirement for FY 2021-22 as discussed in the tables above.

APPEAL FOR REVISED AGGREGATE REVENUE REQUIREMENT FOR FY
2021-22 FOR LTPS
&
DETERMINATION OF TARIFF FOR FY2021-22
To
ASSAM ELECTRICITY REGULATORY COMMISSION



Prepared by
ASSAM POWER GENERATION CORPORATION LTD
Bijulee Bhawan, Paltanbazar
Guwahati – 781 001

AFFIDAVIT – LTPS

BEFORE THE ASSAM STATE ELECTRICITY REGULATORY
COMMISSION, GUWAHATI.

Petition No. –

Case No.
(to be filed by the Office)

IN THE MATTER OF

Filing of Petition for Revised Aggregate Revenue Requirement and Determination of Tariff
for the FY 2021-22

AND

IN THE MATTER OF

Lakwa Thermal Power Station,
Assam Power Generation Corporation Limited,
Maibella, Charaideo,
Saffry-785689

Petitioner

I, Sri Ashok Kalita, son of Late Sarbeswar Kalita, age 59 years, residing at Narengi, Guwahati-781026, do solemnly affirm and say as follows:

I am the Chief General Manager (Gen) of Assam Power Generation Corporation Limited, the petitioner in the above matter and am duly authorized by the said Petitioner to make this affidavit for and on behalf of the Assam Power Generation Corporation Limited.

The Statement made in the Petition based on information received from official records and I believe them to reflect truly and no material has been concealed from the statements so made or documents or supporting data etc. attached.

Solemnly affirm at Guwahati on 27th November'2020 that the contents of this affidavit are true to my knowledge, no part of it is false or no material has been concealed therefore and misleading material included therein.

Place: Guwahati

Deponent

Date: 27th November' 2020


(Ashok Kalita)
Chief General Manager (Gen),
Assam Power Generation Corporation Ltd.



PRAYER FOR LTPS

BEFORE THE HON'BLE ASSAM ELECTRICITY REGULATORY COMMISSION

FILINGNO

CASENO.....

IN THE MATTER OF:

Petition for Submission of Revised Aggregate Revenue Requirement and Determination of Tariff for the FY 2021-22

AND IN THE MATTER OF:

Lakwa Thermal Power Station (hereinafter referred to as "LTPS") of Assam Power Generation Corporation Limited (hereinafter referred to as "APGCL") incorporated under the provisions of the Companies Act, 1956 and having its registered office in the State of Assam

THE HUMBLE APPLICANT ABOVE NAMED MOST RESPECTFULLY SHEWETH:

- 1 That the APGCL is a successor corporate entity of former ASEB, formed in pursuant to the notification of the Government of Assam, notified under sub-sections (1), (2), (5), (6) and (7) of Section 131 and Section 133 of the Electricity Act 2003(Central Act 36 of 2003), for the purpose of transfer and vesting of functions, properties, interests, rights, obligations and liabilities, along with the transfer of Personnel of the Board to the successor corporate entities.
- 2 That the APGCL is a company incorporated with the main object of generation of electricity in the state of Assam.
- 3 That the APGCL is a generating company under the provisions laid down in Section 14 Provision 5, read with Section 131 (2) of the Electricity Act 2003.
- 4 That the LTPS is an operating gas based thermal Power Station under the APGCL in the district of Charaideo, Assam.
- 5 That the Hon'ble Commission notified the AERC (Terms and Conditions for determination of Multi Year Tariff) Regulations, 2018 on 28th June, 2018.
- 6 That the AERC, after completion of the due process, issued Order for the MYT Control Period of FY 2019-20 to FY 2021-22 on 01/03/2019.
- 7 That APGCL is now submitting the Petition for the Revised Aggregate Revenue Requirement and Determination of Tariff for LTPS for the FY 2021-22 as per the relevant Regulations.

Place: Guwahati

Date: 27th November' 2020

Deponent



(Ashok Kalita)
Chief General Manager (Gen),
Assam Power Generation Corporation Ltd.



22. Revised ARR for FY 2021-22

22.1. Regulatory provisions for Revised ARR

22.1.1. The Hon'ble Commission in its Tariff regulations 2018 has stated the following on Revised ARR for the control period from FY 2019-20 to FY 2021-22. The same is reproduced below for ready reference:

“4 Multi-Year Tariff Framework

4.1 The Commission shall determine the tariff for matters covered under clauses (i), (ii), (iii), (iv) and (v) of Regulation 3.3 above under a Multi-Year Tariff framework with effect from 1st April 2019.

4.2 The Multi-Year Tariff framework shall be based on the following elements, for calculation of Aggregate Revenue Requirement and expected revenue from tariff and charges for Generating Companies, Transmission Licensee, SLDC, Distribution Wheeling Business and Retail Supply Business:

- (vi) Before commencement of Control Period, a forecast of the Aggregate Revenue Requirement and expected revenue from existing tariff and charges shall be submitted by the applicant and approved by the Commission;*
- (vii) A detailed Capital Investment Plan for each year of the Control Period, shall be submitted by the applicant for the Commission's approval;*
- (viii) The applicant shall submit operating norms and trajectories of performance parameters for each year of the Control Period, for the Commission's approval*
- (ix) The applicant shall submit the forecast of Aggregate Revenue Requirement and expected revenue from existing tariff for each year of the Control Period, and the Commission shall approve the tariff for Generating Companies, SLDC, Transmission Licensee, Distribution Wheeling Business and Retail Supply Business, for each year of the Control Period;*
- (x) In its tariff petition, a generating company shall submit information to support the determination of tariff for each generating station*

5 Control Period and Baseline

5.1 The first Control Period under these Regulations shall be of three financial years from April 1, 2019 to March 31, 2022 and for every block of three years thereafter or such other period as may be decided by the Commission.

.....

5.2 The Commission shall determine baseline values for various financial and operational parameters of ARR for the Control Period taking into consideration the figures approved by the Commission in the past, actual average figures of last three years, audited accounts, estimate of the figures for the relevant year, Industry benchmarks/norms and other factors considered appropriate by the Commission;

Provided that in case of substantial difference between the estimates earlier provided / considered for determination of baseline values and the actual audited accounts, the Commission may re-determine the baseline values for the base year suo-moto or on an application filed by the Applicant”

23. Norms of operations

23.1. Regulatory provisions

23.1.1. The Hon'ble Commission had set norms of operations under Tariff Regulations 2018.

23.1.2. The projected performance vis-a-vis norms of operations set is discussed below:

23.2. Installed and Effective Capacity in FY2021-22

23.2.1. APGCL submits the following Installed & Effective Capacity for FY2020-21

Table 135: Installed & Effective Capacity for FY2020-21

Station	Installed Capacity (MW)	No. of Units	Units Decommissioned	Units Available for Generation & Capacity in MW	Effective Capacity
LTPS	142.2	8	1,2,3,4	5,6,7(20 MW Each),8 (37.20 MW-WHRU)	97.2 MW

23.3. Snapshot of performance projection for FY 2021-22

23.3.1. The following table shows the projection of performance parameters of gas based Lakwa thermal power station for FY2021-22

Table 136: Projected Operating Performance for FY2021-22 of LTPS

LTPS	2021-22 Approved	2021-22 Projected
Gross Energy in MU	425.74	425.74
Aux. Power Cons. (%)	5.50%	5.50%
Net Energy in MU	402.3	402.3
Plant Availability Factor (%)	50.00%	50.00%
Plant Load Factor (%)	66.00%	50.00%
Gross Station Heat Rate on GCV (kcal / kWh)	3200	3200



23.4. Normative Annual Plant Availability Factor (NAPAF)

23.4.1. As per Regulation 47.1 of the Tariff Regulations, 2018 the Normative Plant Availability factor for recovery of full fixed charges, is 50% for FY2020-21 for LTPS. The approved and projected numbers are shown in the table below.

Table 137: Projected Availability for FY2021-22 of LTPS

LTPS	2021-22 Approved	2021-22 Projected
Plant Availability Factor (%)	50.00%	50.00%

23.5. Normative Annual Plant Load Factor (NAPLF)

23.5.1. As per Regulation 47.2 of the Tariff Regulations, 2018 the Normative Plant Load factor is 66% for FY 2021-22. The Hon'ble Commission had also approved the same for LTPS for FY2021-22.

23.5.2. As there is shortage of gas, PLF is projected as that as normative Availability. However APGCL will try to achieve the approved PLF during FY2021-22. The actual and projected numbers are shown in the table below.

Table 138: Projected PLF for FY2021-22 of LTPS

LTPS	2021-22 Approved	2021-22 Projected
Plant Load Factor (%)	66.00%	50.00%

23.6. Gross Station Heat Rate (SHR)

23.6.1. As per Regulation 47.4, of the Tariff Regulations, 2018 the Normative Station Heat Rate, is 3200 kCal/kWh for FY 2021-22 for LTPS in Partial combined cycle mode of operation. The same has been considered for projection. The approved and projected numbers are shown in the table below.

Table 139: Projected SHR for FY2021-22 of LTPS

LTPS	2021-22 Approved	2021-22 Projected
Gross Station Heat Rate on GCV (kcal / kWh)	3200.00	3200.00

23.7. Auxiliary Energy Consumption

23.7.1. As per Regulation 47.3 of the Tariff Regulations, 2018 the Normative Auxiliary energy consumption, is 5.50% for FY2021-22. The same has been considered for projection. The approved and projected numbers are shown in the table below.

Table 140: Auxiliary Energy Consumption for FY2021-22 of LTPS

LTPS	2021-22 Approved	2021-22 Projected
Auxiliary energy consumption (%)	5.50%	5.50%

23.7.2. APGCL prays to the Hon'ble Commission to approve the projection of performance parameters as shown above.

24. Fixed Cost of the Plant

24.1. Annual fixed cost for FY 2021-22

24.1.1. As per regulation 42.1 of the AERC Tariff regulations, 2018 the following components have been considered for projecting of fixed cost under the Multi Year Tariff framework for the power plants:

- (g) Return on Equity Capital
- (h) Interest on Loan capital
- (i) Depreciation
- (j) Operation and Maintenance Expenses
- (k) Interest on Working Capital
- (l) Less: Non-Tariff Income

24.1.2. For the computation of the fixed components, the Petitioner has considered the principles provided in the Tariff Regulations, 2018. These components have been discussed in detail in the following sections of the petition.

24.2. Return on Equity (ROE)

24.2.1. The Hon'ble Commission in its regulation has considered the pre-tax return on equity at 15.5% on equity capital.

24.2.2. APGCL has projected the Return on Equity (RoE) at a rate of 15.5% in accordance with the Tariff Regulations, 2018. The Petitioner submits that there is no plan of addition in Equity in FY 2021-22 for the existing plant. Further, it is submitted that the actual tax paid would be claimed separately during True-up of respective years.

Table 141: Projected Return on Equity capital for FY2021-22

Rs. Cr

Station	Particulars	2021-22 Approved	2021-22 Projected
LTPS	Opening Equity	143.08	143.08
	Closing Equity	143.08	143.08
	Rate of Return	15.50%	15.50%
	Return on Equity	22.18	22.18
	Return on Equity for Effective Capacity	15.16	15.16

24.2.3. APGCL prays to the Hon'ble Commission to approve the projected Return on Equity as shown above.



24.3. Interest on Loan Capital

24.3.1. As per Regulation 34 of the Tariff Regulations, 2018, the Commission will consider interest on Loan capital on normative basis with repayment equal to depreciation allowed for that year and rate of interest will be the weighted average rate of interest calculated on the basis of the actual loan portfolio at the beginning of each year.

24.3.2. In view of the above, the Petitioner has projected the Interest on long term Loan on normative basis for FY2021-22. The Petitioner has considered normative loan portfolio and the repayment shown is considered equal to the depreciation for FY 2021-22. The interest rate has been considered as the expected weighted average rate of interest for FY 2021-22.

24.3.3. The finance charges are shown separately for FY 2021-22. The table below summarizes the interest on loan and finance charges considered for period of FY 2020-21.

Table 142: Projected Interest and Finance charges for FY2021-22

Rs. Cr

Station	Particulars	2021-22 Approved	2021-22 Projected
LTPS	Net Normative Opening Loan	0.16	0.00
	Addition of normative loan during the year	15.55	7.10
	Normative Repayment during the year	16.58	11.32
	Net Normative Closing Loan	0.00	0.00
	Avg. Normative Loan	0.08	0.00
	Interest Rate	10.10%	10.01%
	Interest on Loan Capital	0.01	0.00
	Add: Bank Charges	0.00	0.00
	Net Interest on Loan Capital	0.01	0.00
Net Interest on Loan Capital for Effective Capacity	0.01	0.00	

24.3.4. APGCL prays to the Hon'ble Commission to approve the projected Total interest and finance charges as shown above.

24.4. Depreciation

24.4.1. The Hon'ble Commission in its Tariff Regulations, 2018 has provided the principals for determination of depreciation.

24.4.2. In view of the above, the Petitioner has computed the Depreciation considering the Capital Cost of the asset admitted by the Commission and projected asset addition with 10% salvage value. Also, depreciation on grants has been subtracted. The table below summarizes the Depreciation projected for FY2021-22.

Table 143: Projected Depreciation for FY2020-21 of LTPS

Rs. Cr

Particulars	2021-22
Opening GFA	492.76
Addition during the year	7.16
Closing GFA	499.91
Average GFA	496.34
Rate of Depreciation	2.67%
Total Depreciation	13.24
Grant	70.14
Additions during the year	3.49
Closing grant	73.63
Average grant	71.88
Rate of Depreciation	2.67%
Depreciation on grants	1.92
Net Depreciation	11.32

Table 144: Summary of projected Depreciation for FY2021-22

Rs. Cr

Station	Particulars	2021-22 Approved	2021-22 Projected
LTPS	Depreciation	19.33	13.24
	Less: Depreciation on assets funded by Grants	2.75	1.92
	Net Depreciation	16.58	11.32
	Net Depreciation for Effective Capacity	11.33	7.74

24.4.3. APGCL prays to the Hon'ble Commission to approve the projected Depreciation for FY 2021-22 as shown above.

24.5. Interest on Working Capital

24.5.1. As per Regulation 36 of the Tariff Regulations, 2018, the interest on working capital will be considered on normative basis.

24.5.2. As per the above regulations, the Petitioner has projected normative interest on working capital. However, as APGCL does not have liquid fuel stock facility, it has not considered working capital on storage of liquid fuel. The rate of interest has been considered equal to the normative interest rate of three hundred (300) basis points above the average State Bank of India MCLR (One Year Tenor) prevalent during the last available six months , which $7.00\% + 3.00\% = 10.00\%$.

24.5.3. The interest on working capital considered is shown in the table below:

Table 145: Summary of Interest on working capital projected for FY2021-22

Rs. Cr

Station	Particulars	2021-22 Approved	2021-22 Projected
LTPS	Fuel Cost for one month	9.65	5.93
	O&M Expenses for one month	3.64	3.30
	Maintenance Spares-30% of O&M	13.09	11.88
	Receivables for two months	33.12	24.55
	Total Working Capital Requirement	59.49	45.67
	Rate of interest	11.50%	10.00%
	Interest on Working capital	6.84	4.57

24.5.4. APGCL prays to the Hon'ble Commission to approve the Interest on Working capital for FY 2021-22 as shown above.

24.6. Operation and Maintenance Expenses (O&M Expenses)

- 24.6.1. The Operation and maintenance expense are to be projected as per Regulation 50.1 of the Tariff Regulations, 2018.
- 24.6.2. The Commission in its order of March 2019 had computed the normative O&M expenses for LTPS for FY2021-22.
- 24.6.3. The Operation and maintenance expense are to be projected as per Regulation 50.1 of the Tariff Regulations, 2018.
- 24.6.4. We submit that that the Hon'ble Commission has approved the Normative Operations & Maintenance for LTPS for FY 2021-22 at Rs. 63.83 Crore in the Order of March 2019.
- 24.6.5. However, the Hon'ble Commission while approving the O&M for LTPS in the Order of March 2019 as per effective capacity for FY 2021-22 has approved Rs. 43.63 Crore
- 24.6.6. APGCL humbly prays to the Commission to approve the Normative O&M cost as per Order of March 2019 at Rs. 63.83 Crore and reduce the cost for effective capacity considering the actual effective installed capacity of 97.2 MW only while keeping the actual O&M Cost for LRPP separate for allowance.
- 24.6.7. APGCL also humbly submits to the Hon'ble Commission that is only claiming the estimated O&M expenses for LTPS and LRPP separately and not the same expenditure twice.
- 24.6.8. APGCL has claimed the Normative O&M expenses for LTPS considering the escalation rate of 6.3% on the claimed Normative Expenses for LTPS for APR of FY2020-21

Table 146: Operation and Maintenance projected for FY2021-22

Rs. Cr

Station	Approved in order of March 2019	Approved considering Effective Installed Capacity in order of March 2019	Amount considered for APR of FY2020-21 on Effective Installed Capacity	Effective Capacity considered for APR for FY2020-21	Effective Capacity for Tariff Projection for FY2021-22	Amount considered for Tariff for FY 2021-22 on effective capacity
	1	2	3	4	5	6 = 3* (1+6.3%) *5/4
LTPS	63.83	43.63	37.26	97.20	97.20	39.61

- 24.6.9. APGCL prays to the Hon'ble Commission to approve the O&M expenses for FY 2021-22 as shown above.



24.7. Impact of AERC (Payment of Fees etc.) Regulations, 2020

24.7.1. The Hon'ble Commission has notified the new AERC (Payment of Fees etc.) Regulations, 2020 which has led to a substantial increase in the Filing Fees of APGCL payable to AERC.

24.7.2. The tentative impact of the increase in the filing fees has been shown below:

Station	2015 Regulation			2020 Regulation			Increase in Filing Fees		
	Tariff Determination Fees	APR Fees	Total Fees	Tariff Determination Fees	True Up Fees	Total Fees	Tariff Determination Fees	True Up / APR Fees	Total Fees
LTPS	0.20	0.10	0.30	0.25	0.15	0.40	0.05	0.05	0.10

24.7.3. Considering the increase in the LTPS filing fees as shown above, APGCL humbly prays to the Commission to allow it to claim in the increase in the fees at actuals in FY2021-22

24.8. Incentives

24.8.1. APGCL submits that the Incentives for FY 2021-22 will be claimed in True-up as per Regulations.

24.9. Special R&M

24.9.1. APGCL plans to undertake Special R&M for Unit 7 of LTPS in FY2021-22. The overhauling of Unit 7 was planned in FY2021-22 but had to be shifted to FY2021-22. Further APGCL's planned Overhauling of Unit 6 of LTPS will be shifted to FY2022-23. APGCL has planned to undertake overhauling of Gas Compressor of GC6 of LTPS which will improve its performance. APGCL prays to the Hon'ble Commission to approve the revised Special R&M plan as below

Sl. No.	Work Name	Approved	Claim for FY21-22	Remarks
1	Overhauling of LTPS Unit -7 in FY2020-21	0.00	15.00	The overhauling has been shifted to FY2021-22. Thus the amount for Special R&M Rs. 15 Cr approved for FY20-21 is being claimed in FY2021-22.
2	Overhauling of LTPS Unit -6 in FY2022-23	15.00	0.00	The overhauling plan for LTPS Unit 6 will be revised in FY2021-22

Sl. No.	Work Name	Approved	Claim for FY21-22	Remarks
3	Overhauling of Gas Compressor of GC #6 of LTPS		3.00	APGCL will be undertaking the overhauling of Gas Compressor on priority basis. The order for the Overhauling is expected to be completed in FY2020-21 with the works being undertaken in FY2021-22 The overhauling is expected to reduce the auxiliary consumption which will help the operational performance of the plant.

Table 147: Expenses under Special R&M

Rs. Cr

Station	2021-22 Approved	2021-22 Projected
LTPS	15.00	18.00

24.10. Capacity building

24.10.1. The Hon'ble Commission had approved the Capacity Building expenditure at INR 0.13 Crores for FY2021-22 for LTPS in its order dated 1st March 2019.

24.10.2. The below table shows the approved and projected expenditure for Capacity Building.

Table 148: Expenses under Capacity building

Rs. Cr

Station	2021-22 Approved	2021-22 Projected
LTPS	0.13	0.13

24.11. Non-Tariff income

24.11.1. As per Regulation 45 of the Tariff Regulations, 2018, the non-tariff income shall be deducted from the Annual Fixed Cost in determining the Annual Fixed Cost of the Generation Company.

24.11.2. The non-tariff income for FY2021-22 are projected same as approved by Hon'ble Commission. The same is as shown in the table below

Table 149: Station-wise Non tariff income projected for FY2021-22

Rs. Cr

Station	2021-22 Approved	2021-22 Projected
LTPS	9.22	9.22

24.11.3. APGCL prays to the Hon'ble Commission to approve the Non-tariff income for FY 2021-22 as shown above.

24.12. Total Fixed Cost

24.12.1. The recovery of Annual fixed charges is to be done as per regulation 51.1 of the Tariff Regulations, 2018.

24.12.2. Based on the above, the Annual fixed charges for FY 2021-22 has been computed. The Hon'ble Commission is requested to approve the fixed charges as discussed in the table below:

Table 150: Annual Fixed charges for FY2021-22 of LTPS

Rs. Cr

Particulars	2021-22 Approved	2021-22 Projected
Operation & Maintenance Expenditure	43.63	39.61
Increase in AERC Tariff Filing Fees	0	0.10
Interest & Finance Charges	0.01	0.00
Interest on working Capital	6.84	4.57
Depreciation	11.33	7.74
Return on Equity	15.16	15.16
Special R&M	15.00	18.00
Capacity Building	0.13	0.13



Particulars	2021-22 Approved	2021-22 Projected
<u>Less: Other Income</u>	9.22	9.22
Total Fixed Charges	82.88	76.09

24.12.3. The Petitioner prays to the Hon'ble Commission to approve the fixed costs for FY 2021-22 as discussed in the tables above.

25. Energy Charges

25.1. Fuel Price and Calorific Value

25.1.1. As per Regulation 11 of the Tariff Regulations 2018, 'Fuel Price' and 'Calorific Value of Fuel' are uncontrollable items. The values of 'Calorific Value of Fuel' is considered same as considered in FY 2020-21. The value of 'Fuel Price' has been considered at the rate computed for the month of October 2020 and escalated at annual rate of 3% for Transmission charges as per agreement. The projected values of 'Fuel Price' and 'Calorific Value of Fuel' are shown in the table below:

Table 151: Projected GCV and Price for FY2021-22

Station	Wt. Avg. Gross Calorific Value of Gas (kcal/SCM)	Wt. Avg. Price of Gas (Rs./1000 SCM)
LTPS	9,419.27	4923.31

25.1.2. The Petitioner prays to the Hon'ble Commission to approve the projected Price of Gas and GCV for LTPS for FY 2020-21 as shown in the table above.

25.2. Fuel cost

25.2.1. The Commission, in the Tariff Order dated 1st March 2019 had approved the Fuel Cost for FY 2021-22. The table below shows the projected fuel cost for FY2021-22

Table 152: Fuel cost for LTPS for FY2021-22

Particulars	Derivation	Unit	2021-22 Approved	2021-22 Projected
Gross Generation	A	MU	425.74	425.74
Heat Rate	B	kcal/kWh	3200.00	3200.00
GCV of gas	C	kcal/SCM	9126.42	9419.27
Overall Heat	D=AxB	G. cal.	1362368.00	1362368.00
Gas consumption	E=D/C	M. SCM	149.28	144.64
Price of Gas	F	Rs./1000 SCM	7758.11	4923.31
Total cost of Gas	G=ExF/10000	Rs. Crore	115.81	71.21

25.2.2. The Petitioner prays to the Hon'ble Commission to approve the projected Fuel cost Price for LTPS for FY 2021-22 as shown in the table above.



26. Summary of submissions for Revised ARR of FY2021-22

26.1. Summary

26.1.1. The summary of the Revised ARR for LTPS for FY2021-22 is as shown below.

Table 153: Revised ARR for FY2021-22 For LTPS

Rs. Cr

Sl. No	ARR For LTPS for Effective Capacity Particulars	2021-22	2021-22
		Approved	Projected
	POWER GENERATION (MU)		
	Gross Generation	425.74	425.74
	Net Generation	402.32	402.32
	Auxiliary Consumption Loss %	5.50%	5.50%
I	Fixed Charges		
	Operation & Maintenance Expenditure	43.63	39.61
	Increase in AERC Tariff Filing Fees	0	0.10
	Interest & Finance Charges	0.01	0.00
	Interest on working Capital	6.84	4.57
	Depreciation	11.33	7.74
	Return on Equity	15.16	15.16
	Special R&M	15.00	18.00
	Capacity Building	0.13	0.13
	<u>Less:</u> Other Income	9.22	9.22
II	Total Fixed Charges	82.88	76.09
III	Fuel Cost	115.81	71.21
IV	Total Revenue Requirement	198.70	147.30
	Fixed Charge (Rs. / kWh)	2.06	1.89
	Energy Charge (Rs. / kWh)	2.88	1.77
	Proposed Tariff (Rs. / kWh)	4.94	3.66

26.2. Net Annual Revenue Requirement

26.2.1. The Net Annual Revenue Requirements for FY 2021-22 are as shown in the tables below.



Table 154: Net Annual Revenue Requirements for LTPS for FY2021-22

Rs. Cr

Particulars	2021-22 Projected
Fixed Charges	76.09
Fuel Cost	71.21
Total Revenue Requirement	147.30

26.3. Tariff for LTPS for FY 2021-22

26.3.1. The tariff proposed for LTPS for FY 2021-22 is as shown below

Table 155: tariff proposed for LTPS for FY 2020-21

Particulars	LTPS
Annual fixed charges (Rs crore)	76.09
Monthly fixed charges (Rs crore)	6.34
Energy charge rate (Rs./ kWh)	1.77

26.3.2. The Petitioner prays to the Hon'ble Commission to approve the Net Annual Revenue Requirement for FY 2021-22 as discussed in the table above.

APPEAL FOR REVISED AGGREGATE REVENUE
REQUIREMENT FOR FY 2021-22 FOR KLHEP
&
DETERMINATION OF TARIFF FOR FY 2021-22
To
ASSAM ELECTRICITY REGULATORY COMMISSION



Prepared by
ASSAM POWER GENERATION CORPORATION LTD
Bijulee Bhawan, Paltanbazar
Guwahati – 781 001

AFFIDAVIT – KLHEP

BEFORE THE ASSAM STATE ELECTRICITY REGULATORY
COMMISSION, GUWAHATI.

Petition No. –

Case No.
(to be filed by the Office)

IN THE MATTER OF

Filing of Petition for Revised Aggregate Revenue Requirement and Determination of Tariff
for the FY 2021-22

AND

IN THE MATTER OF

Karbi Langpi Hydro Electric Project,
Assam Power Generation Corporation Limited,
Lengery, Dist. Karbi Anglong, Assam

Petitioner

I, Sri Ashok Kalita, son of Late Sarbeswar Kalita, age 59 years, residing at Narengi, Guwahati-781026, do solemnly affirm and say as follows:

I am the Chief General Manager (Gen) of Assam Power Generation Corporation Limited, the petitioner in the above matter and am duly authorized by the said Petitioner to make this affidavit for and on behalf of the Assam Power Generation Corporation Limited.

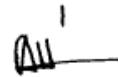
The Statement made in the Petition based on information received from official records and I believe them to reflect truly and no material has been concealed from the statements so made or documents or supporting data etc. attached.

Solemnly affirm at Guwahati on 27th November'2020 that the contents of this affidavit are true to my knowledge, no part of it is false or no material has been concealed therefore and misleading material included therein.

Place: Guwahati

Date: 27th November'2020

Deponent



(Ashok Kalita)
Chief General Manager (Gen),
Assam Power Generation Corporation Ltd.



PRAYER FOR KLHEP

BEFORE THE HON'BLE ASSAM ELECTRICITY REGULATORY COMMISSION

FILINGNO

CASENO.....

IN THE MATTER OF:

Petition for Submission of Revised Aggregate Revenue Requirement and Determination of Tariff for the FY 2021-22

AND IN THE MATTER OF:

Karbi Langpi Hydro Electric Project (hereinafter referred to as "KLHEP") of Assam Power Generation Corporation Limited (hereinafter referred to as "APGCL") incorporated under the provisions of the Companies Act, 1956 and having its registered office in the State of Assam

THE HUMBLE APPLICANT ABOVE NAMED MOST RESPECTFULLY SHEWETH:

- 1 That the APGCL is a successor corporate entity of former ASEB, formed in pursuant to the notification of the Government of Assam, notified under sub-sections (1), (2), (5), (6) and (7) of Section 131 and Section 133 of the Electricity Act 2003(Central Act 36 of 2003), for the purpose of transfer and vesting of functions, properties, interests, rights, obligations and liabilities, along with the transfer of Personnel of the Board to the successor corporate entities.
- 2 That the APGCL is a company incorporated with the main object of generation of electricity in the state of Assam.
- 3 That the APGCL is a generating company under the provisions laid down in Section 14 Proviso 5, read with Section 131 (2) of the Electricity Act 2003.
- 4 That the KLHEP, with commercial operation of both of its units declared on 06/04/2007, is an operating hydro Power Station under the APGCL in the district of Karbi Anglong, Assam.
- 5 That the Hon'ble Commission notified the AERC (Terms and Conditions for determination of Multi Year Tariff) Regulations, 2018 on 28th June, 2018.
- 6 That the AERC, after completion of the due process, issued Tariff Order for KLHEP for the FY 2020-21 on 07/03/2020.
- 7 That APGCL is now submitting the Petition for the Revised Aggregate Revenue Requirement and Determination of Tariff for KLHEP for the FY 2021-22 as per the relevant Regulations.

Place: Guwahati

Date: 27th November' 2020

Deponent



(Ashok Kalita)
Chief General Manager (Gen),
Assam Power Generation Corporation Ltd.



27. Revised ARR for FY 2021-22

27.1. Regulatory provisions for Revised ARR

27.1.1. The Hon'ble Commission in its Tariff regulations 2018 has stated the following on Revised ARR for the control period from FY 2019-20 to FY 2021-22. The same is reproduced below for ready reference:

4 Multi-Year Tariff Framework

4.1 The Commission shall determine the tariff for matters covered under clauses (i), (ii), (iii), (iv) and (v) of Regulation 3.3 above under a Multi-Year Tariff framework with effect from 1st April 2019.

4.2 The Multi-Year Tariff framework shall be based on the following elements, for calculation of Aggregate Revenue Requirement and expected revenue from tariff and charges for Generating Companies, Transmission Licensee, SLDC, Distribution Wheeling Business and Retail Supply Business:

- (xi) Before commencement of Control Period, a forecast of the Aggregate Revenue Requirement and expected revenue from existing tariff and charges shall be submitted by the applicant and approved by the Commission;*
- (xii) A detailed Capital Investment Plan for each year of the Control Period, shall be submitted by the applicant for the Commission's approval;*
- (xiii) The applicant shall submit operating norms and trajectories of performance parameters for each year of the Control Period, for the Commission's approval*
- (xiv) The applicant shall submit the forecast of Aggregate Revenue Requirement and expected revenue from existing tariff for each year of the Control Period, and the Commission shall approve the tariff for Generating Companies, SLDC, Transmission Licensee, Distribution Wheeling Business and Retail Supply Business, for each year of the Control Period;*
- (xv) In its tariff petition, a generating company shall submit information to support the determination of tariff for each generating station*

5 Control Period and Baseline

5.1 The first Control Period under these Regulations shall be of three financial years from April 1, 2019 to March 31, 2022 and for every block of three years thereafter or such other period as may be decided by the Commission.

.....

5.2 The Commission shall determine baseline values for various financial and operational parameters of ARR for the Control Period taking into consideration the figures approved by the Commission in the past, actual average figures of last three years, audited accounts, estimate of the figures for the relevant year, Industry benchmarks/norms and other factors considered appropriate by the Commission;

Provided that in case of substantial difference between the estimates earlier provided / considered for determination of baseline values and the actual audited accounts, the Commission may re-determine the baseline values for the base year suo-moto or on an application filed by the Applicant"

28. Norms of operations

28.1. Regulatory provisions

28.1.1. The Hon'ble Commission had set norms of operations under Tariff Regulations 2018.

28.1.2. The projected performance vis-a-vis norms of operations set is discussed below:

28.2. Installed and Effective Capacity in FY2021-22

28.2.1. APGCL submits the following Installed & Effective Capacity for FY2021-22

Table 156: Installed & Effective Capacity for FY2020-21

Station	Installed Capacity (MW)	No. of Units	Units Decommissioned	Units Available for Generation & Capacity in MW	Effective Capacity
KLHEP	100	2	0	1 (50), 2(50)	100 MW

28.3. Snapshot of performance projection for FY 2021-22

28.3.1. The following table shows the projection of performance parameters of Karbi Langpi hydro electric power station for FY 2020-21. The planned overhauling of the Unit II of KLHEP has been scheduled in FY2021-22. The dates for the overhauling will be finalized and shared during the APR filing of KLHEP for FY2021-22. APGCL has thus projected the performance parameters in line with the approved parameters by the Hon'ble Commission in its order dated 1st March 2019.

Table 157: Projected Operating Performance for FY2021-22 of KLHEP

KLHEP	2021-22 Approved	2021-22 Projected
Gross Energy in MU	390.00	390.00
Aux. Power Cons. (%)	0.5%	0.5%
Net Energy in MU	388.05	388.05
Plant Availability Factor (%)	85.00%	85.00%
Plant Load Factor (%)	44.50%	44.50%

28.4. Normative Annual Plant Availability Factor (NAPAF)

28.4.1. As per Regulation 49.1, of the Tariff Regulations, 2018, the normative Plant Availability factor for KLHEP as 85% for FY2021-22. The approved and projected numbers are shown in the table below.

Table 158: Projected Availability for FY2021-22 of KLHEP

KLHEP	2021-22 Approved	2021-22 Projected
Plant Availability Factor (%)	85.00%	85.00%

28.5. Normative Annual Plant Load Factor (NAPLF)

28.5.1. As per Regulation 49.1 of the Tariff Regulations, 2018, normative PLF for KLHEP as 44.5%. The Hon'ble Commission had also approved the same for KLHEP for FY2021-22. The approved and projected numbers are shown in the table below.

Table 159: Projected PLF for FY201-22 of KLHEP

KLHEP	2021-22 Approved	2021-22 Projected
Plant Load Factor (%)	44.50%	44.50%

28.6. Auxiliary Energy Consumption

28.6.1. As per Regulation 49.1 of the Tariff Regulations, 2018 the Normative Auxiliary energy consumption, is 0.50% for KLHEP. The same has been considered for projection. The approved and projected numbers are shown in the table below.

Table 160: Auxiliary Energy Consumption for FY2021-22 of KLHEP

KLHEP	2021-22 Approved	2021-22 Projected
Auxiliary energy consumption (%)	0.50%	0.50%

28.6.2. APGCL prays to the Hon'ble Commission to approve the projection of performance parameters as shown above.

29. Fixed Cost of the Plant

29.1. Annual fixed cost for FY 2020-21

29.1.1. As per regulation 42.1 of the AERC Tariff regulations, 2018 the following components have been considered for projecting of fixed cost under the Multi Year Tariff framework for the power plants:

- (a) Return on Equity Capital
- (b) Interest on Loan capital
- (c) Depreciation
- (d) Operation and Maintenance Expenses
- (e) Interest on Working Capital
- (f) Less: Non-Tariff Income

29.1.2. For the computation of the fixed components, the Petitioner has considered the principles provided in the Tariff Regulations, 2018. These components have been discussed in detail in the following sections of the petition.

29.2. Return on Equity (ROE)

29.2.1. The Hon'ble Commission in its regulation has considered the pre-tax return on equity at 15.5% on equity capital.

29.2.2. APGCL has projected the Return on Equity (RoE) at a rate of 15.5% in accordance with the Tariff Regulations, 2018. The Petitioner submits that there is no plan of addition in Equity in FY 2021-22 for the existing plant. Further, it is submitted that the actual tax paid would be claimed separately during True-up of respective years.

Table 161: Projected Return on Equity capital for FY2021-22

Rs.Cr

Station	Particulars	2021-22	2021-22
		Approved	Projected
KLHEP	Opening Equity	68.65	68.65
	Closing Equity	68.65	68.65
	Rate of Return	15.50%	15.50%
	Return on Equity	10.64	10.64
	Return on Equity for Effective Capacity	10.64	10.64

29.2.3. APGCL prays to the Hon'ble Commission to approve the projected Return on Equity as shown above.



29.3. Interest on Loan Capital

29.3.1. As per Regulation 34 of the Tariff Regulations, 2018, the Commission will consider interest on Loan capital on normative basis with repayment equal to depreciation allowed for that year and rate of interest will be the weighted average rate of interest calculated on the basis of the actual loan portfolio at the beginning of each year.

29.3.2. In view of the above, the Petitioner has projected the Interest on long term Loan on normative basis for FY2021-22. The Petitioner has considered normative loan portfolio and the repayment shown is considered equal to the depreciation for FY 2021-22. The interest rate has been considered as the expected weighted average rate of interest for FY 2021-22.

29.3.3. The finance charges are shown separately for FY 2021-22. The table below summarizes the interest on loan and finance charges considered for period of FY 2021-22.

Table 162: Projected Interest and Finance charges for FY2021-22

Rs.Cr

Station	Particulars	2021-22 Approved	2021-22 Projected
KLHEP	Net Normative Opening Loan	194.87	191.14
	Addition of normative loan during the year	2.17	2.10
	Normative Repayment during the year	22.52	20.44
	Net Normative Closing Loan	174.51	172.79
	Avg. Normative Loan	184.69	181.96
	Interest Rate	10.10%	10.01%
	Interest on Loan Capital	18.66	18.21
	Add: Bank Charges	0.00	0.00
	Net Interest on Loan Capital	18.66	18.21
Net Interest on Loan Capital for Effective Capacity	18.66	18.21	

29.3.4. APGCL prays to the Hon'ble Commission to approve the projected Total interest and finance charges as shown above.

29.4. Depreciation

29.4.1. The Hon'ble Commission in its Tariff Regulations, 2018 has provided the principals for determination of depreciation.

29.4.2. In view of the above, the Petitioner has computed the Depreciation considering the Capital Cost of the asset admitted by the Commission and projected asset addition with 10% salvage value. Also, depreciation on grants has been subtracted. The table below summarizes the Depreciation projected for FY2021-22.

Table 163: Projected Depreciation for FY2021-22 of KLHEP

Particulars	2021-22	
	Cr	Rs.
Opening GFA		530.62
Addition during the year		1.70
Closing GFA		532.32
Average GFA		531.47
Rate of Depreciation		4.35%
Total Depreciation		23.11
Grant		59.43
Additions during the year		3.59
Closing grant		63.02
Average grant		61.23
Rate of Depreciation		4.35%
Depreciation on grants		2.66
Net Depreciation		20.44

Table 164: Summary of projected Depreciation for FY2021-22

Station	Particulars	2021-22	
		Approved	Projected
KLHEP	Depreciation	25.62	23.11
	Less: Depreciation on assets funded by Grants	3.10	2.66
	Net Depreciation	22.52	20.44
	Net Depreciation for Effective Capacity	22.52	20.44

29.4.3. APGCL prays to the Hon'ble Commission to approve the projected Depreciation for FY 2021-22 as shown above.

29.5. Interest on Working Capital

29.5.1. As per Regulation 36 of the Tariff Regulations, 2018, the interest on working capital will be considered on normative basis.

29.5.2. As per the above regulations, the Petitioner has projected normative interest on working capital. However, as APGCL does not have liquid fuel stock facility, it has not considered working capital on storage of liquid fuel. The rate of interest has been considered equal to the normative interest rate of three hundred (300) basis points above the average State Bank of India MCLR (One Year Tenor) prevalent during the last available six months, which $7.00\% + 3.00\% = 10\%$.

29.5.3. The interest on working capital considered is shown in the table below:

Table 165: Summary of Interest on working capital projected for FY2020-21

Rs. Cr

Station	Particulars	2021-22 Approved	2021-22 Projected
KLHEP	O&M Expenses for one month	2.68	2.69
	Maintenance Spares-30% of O&M	4.82	9.68
	Receivables for two months	13.46	15.11
	Total Working Capital Requirement	20.96	27.48
	Rate of interest	11.50%	10.00%
	Interest on Working capital	2.41	2.75

29.5.4. APGCL prays to the Hon'ble Commission to approve the Interest on Working capital for FY 2020-21 as shown above. The

29.6. Operation and Maintenance Expenses (O&M Expenses)

29.6.1. The Operation and maintenance expense are to be projected as per Regulation 50.1 of the Tariff Regulations, 2018.

29.6.2. The Commission in its order dated 1st March 2019 had computed the normative O&M expenses for KLHEP for FY2021-22.

29.6.3. APGCL has claimed the Normative O&M expenses for KLHEP considering the escalation rate of 6.3% on the claimed Normative Expenses for KLHEP for APR of FY2020-21

Table 166: Operation and Maintenance projected for FY2021-22

Rs. Cr



Station	Approved in order of March 2019	Approved considering Effective Installed Capacity in order of March 2019	Amount considered for APR of FY2020-21 on Effective Installed Capacity	Effective Capacity considered for APR for FY2020-21	Effective Capacity for Tariff Projection for FY2021-22	Amount considered for Tariff for FY 2021-22 on effective capacity
	1	2	3	4	5	6 = 3* (1+6.3%) *5/4
KLHEP	32.14	32.14	30.34	100.00	100.00	32.25

29.6.4. APGCL prays to the Hon'ble Commission to approve the O&M expenses for FY 2021-22 as shown above.

29.7. Incentives

29.7.1. APGCL submits that the Incentives for FY 2021-22 will be claimed in True-up as per Regulations.

29.8. Special R&M

29.8.1. APGCL's plans to undertake Special R&M for KLHEP Unit 2 in FY2021-22. As mentioned in APR Petition for FY2020-21, the planned Special R&M for Unit 2 was shifted from FY2020-21 to FY2021-22, the same has been considered for FY2020-21.

Sl. No.	Work Name	Approved	Claim for FY20-21	Remarks
1	Capital Overhauling of 50MW Francis type Fuji make Generator Turbine Unit-II - KLHEP	0	12	"Due to the delay in the overhauling of KLHEP Unit 1, the Overhauling of Unit 2 will be undertaken in FY2021-22 with the revised schedule to be provided in the APR for FY2021-22. However the order for the Work is expected to be given in FY20-21. Out of the total Rs. 27.1 Crore approved by the Hon'ble Commission APGCL had already received Rs 15.10 Crores from the Government of Assam. Hence we are claiming the remaining approved amount for KLHEP Unit II overhauling for FY20-21



Table 167: Expenses under Special R&M

Rs.

Cr

Station	FY2021-22 Approved	FY2021-22 Projected
KLHEP	0	12.00

29.9. Capacity building

29.9.1. The Hon'ble Commission had approved the Capacity Building expenditure at INR 0.13 Crores for FY2021-22 for KLHEP in its order dated 1st March 2019.

29.9.2. APGCL prays to the commission to approve INR 0.13 Crores for capacity building of employees of KLHEP for FY2021-22

Table 168: Expenses under Capacity building

Rs.

Cr

Station	2021-22 Approved	2021-22 Projected
KLHEP	0.13	0.13

29.9.3. APGCL submits that the Other expenses like actual tax paid, prior period items etc. for FY 2021-22 will be claimed in True-up of FY 2021-22 as per Regulations.

29.10. Non-Tariff income

29.10.1. As per Regulation 45 of the Tariff Regulations, 2018, the non-tariff income shall be deducted from the Annual Fixed Cost in determining the Annual Fixed Cost of the Generation Company.

29.10.2. The non-tariff income for FY2021-22 are projected same as approved by Hon'ble Commission. The same is as shown in the table below

Table 169: Station-wise Non tariff income projected for FY2021-22

Rs.

Cr

Station	2021-22 Approved	2021-22 Projected
KLHEP	5.75	5.75



29.10.3. APGCL prays to the Hon'ble Commission to approve the Non-tariff income for FY 2021-22 as shown above.

29.11. Total Fixed Cost

29.11.1. The recovery of Annual fixed charges is to be done as per regulation 51.1 of the Tariff Regulations, 2018.

29.11.2. Based on the above, the Annual fixed charges for FY 2020-21 has been computed. The Hon'ble Commission is requested to approve the fixed charges as discussed in the table below:

Table 170: Annual Fixed charges for FY2020-21 of KLHEP

Rs.Cr

Particulars	2021-22 Approved	2021-22 Projected
Operation & Maintenance Expenditure	32.14	32.25
Interest & Finance Charges	18.66	18.21
Interest on working Capital	2.41	2.75
Depreciation	22.52	20.44
Return on Equity	10.64	10.64
Special R&M	0.00	12.00
Capacity Building	0.13	0.13
<u>Less: Other Income</u>	5.75	5.75
Total Fixed Charges	80.76	90.69

29.11.3. The Petitioner prays to the Hon'ble Commission to approve the fixed costs for FY 2021-22 as discussed in the tables above.

30. Summary of submissions for Revised ARR of FY2021-22

30.1. Summary

30.1.1. The summary of the Revised ARR For KLHEP for FY2021-22 is shown below

Table 171: Revised ARR for FY2021-22 For KLHEP

Rs. Cr

Sl. No	ARR For KLHEP for Effective Capacity Particulars	2021-22	2021-22
		Approved	Projected
	POWER GENERATION (MU)		
	Gross Generation	390.00	390.00
	Net Generation	388.05	388.05
	Auxiliary Consumption Loss %	0.50%	0.50%
I	Fixed Charges		
	Operation & Maintenance Expenditure	32.14	32.25
	Interest & Finance Charges	18.66	18.21
	Interest on working Capital	2.41	2.75
	Depreciation	22.52	20.44
	Return on Equity	10.64	10.64
	Special R&M	0.00	12.00
	Capacity Building	0.13	0.13
	<u>Less: Other Income</u>	5.75	5.75
II	Total Fixed Charges	80.76	90.69
III	Fuel Cost	0	0
IV	Total Revenue Requirement	80.76	90.69
V	Fixed Charge (Rs. / kWh)	2.08	2.34
VI	Energy Charge (Rs. / kWh)	0.00	0.00
VII	Proposed Tariff (Rs. / kWh)	2.08	2.34

30.2. Net Annual Revenue Requirement

30.2.1. The Net Annual Revenue Requirement for FY 2021-22 is as shown in the tables below.



Table 172: Net Annual Revenue Requirements for KLHEP for FY2020-21

Rs.

Cr

Particulars	2021-22 Projected
Fixed Charges	90.69
Fuel Cost	0
Total Revenue Requirement	90.69

30.3. Tariff for KLHEP for FY 2021-22

30.3.1. The tariff proposed for KLHEP for FY 2021-22 is as shown below

Table 173: Tariff proposed for KLHEP for FY 2020-21

Particulars	KLHEP
Total Fixed charges (Rs crore)	90.69
Total Capacity charges (Rs crore)	45.34
Energy charge rate (Rs./ kWh)	1.17

30.3.2. The Petitioner prays to the Hon'ble Commission to approve the Net Annual Revenue Requirement for FY 2021-22 as discussed in the tables above.

APPEAL FOR REVISED AGGREGATE REVENUE REQUIREMENT FOR FY
2021-22 FOR LRPP
&
DETERMINATION OF TARIFF FOR FY2021-22
To
ASSAM ELECTRICITY REGULATORY COMMISSION



Prepared by
ASSAM POWER GENERATION CORPORATION LTD
Bijulee Bhawan, Paltanbazar
Guwahati – 781 001

AFFIDAVIT – LRPP

BEFORE THE ASSAM STATE ELECTRICITY REGULATORY
COMMISSION, GUWAHATI.

Petition No. –

Case No.
(to be filed by the Office)

IN THE MATTER OF

Filing of Petition for Revised Aggregate Revenue Requirement and Determination of Tariff
for the FY 2021-22

AND

IN THE MATTER OF

Lakwa Replacement Power Plant,
Assam Power Generation Corporation Limited,
Maibella, Charaideo,
Saffry-785689

Petitioner

I, Sri Ashok Kalita, son of Late Sarbeswar Kalita, age 59 years, residing at Narengi, Guwahati-781026, do solemnly affirm and say as follows:

I am the Chief General Manager (Gen) of Assam Power Generation Corporation Limited, the petitioner in the above matter and am duly authorized by the said Petitioner to make this affidavit for and on behalf of the Assam Power Generation Corporation Limited.

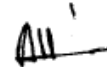
The Statement made in the Petition based on information received from official records and I believe them to reflect truly and no material has been concealed from the statements so made or documents or supporting data etc. attached.

Solemnly affirm at Guwahati on 27th November'2020 that the contents of this affidavit are true to my knowledge, no part of it is false or no material has been concealed therefore and misleading material included therein.

Place: Guwahati

Date: 27th November' 2020

Deponent



(Ashok Kalita)
Chief General Manager (Gen),
Assam Power Generation Corporation Ltd.



PRAYER FOR LRPP

BEFORE THE HON'BLE ASSAM ELECTRICITY REGULATORY COMMISSION

FILINGNO

CASENO.....

IN THE MATTER OF:

Petition for Submission of Revised Aggregate Revenue Requirement and Determination of Tariff for the FY 2021-22

AND IN THE MATTER OF:

Lakwa Replacement Power Plant (hereinafter referred to as "LRPP") of Assam Power Generation Corporation Limited (hereinafter referred to as "APGCL") incorporated under the provisions of the Companies Act, 1956 and having its registered office in the State of Assam

THE HUMBLE APPLICANT ABOVE NAMED MOST RESPECTFULLY SHEWETH:

- 1 That the APGCL is a successor corporate entity of former ASEB, formed in pursuant to the notification of the Government of Assam, notified under sub-sections (1), (2), (5), (6) and (7) of Section 131 and Section 133 of the Electricity Act 2003(Central Act 36 of 2003), for the purpose of transfer and vesting of functions, properties, interests, rights, obligations and liabilities, along with the transfer of Personnel of the Board to the successor corporate entities.
- 2 That the APGCL is a company incorporated with the main object of generation of electricity in the state of Assam.
- 3 That the APGCL is a generating company under the provisions laid down in Section 14 Proviso 5, read with Section 131 (2) of the Electricity Act 2003.
- 4 That the LRPP, commissioned on 26-04-2018, is an operating gas engine based thermal Power Station under the APGCL in the district of Charaideo, Assam.
- 5 That the Hon'ble Commission notified the AERC (Terms and Conditions for determination of Multi Year Tariff) Regulations, 2018 on 28th June, 2018.
- 6 That the AERC, after completion of the due process, issued Tariff Order for LRPP for the FY 2020-21 on 07/03/2020.
- 7 That APGCL is now submitting the Petition for the Revised Aggregate Revenue Requirement and Determination of Tariff for LRPP for the FY 2021-22 as per the relevant Regulations.

Place: Guwahati

Date: 27th November' 2020

Deponent



(Ashok Kalita)

**Chief General Manager (Gen),
Assam Power Generation Corporation Ltd.**



31. Revised ARR for FY 2021-22

31.1.1. The Hon'ble Commission in its Tariff regulations 2018 has stated the following on Revised ARR for the control period from FY 2019-20 to FY 2021-22. The same is reproduced below for ready reference:

"4 Multi-Year Tariff Framework

4.1 The Commission shall determine the tariff for matters covered under clauses (i), (ii), (iii), (iv) and (v) of Regulation 3.3 above under a Multi-Year Tariff framework with effect from 1st April 2019.

4.2 The Multi-Year Tariff framework shall be based on the following elements, for calculation of Aggregate Revenue Requirement and expected revenue from tariff and charges for Generating Companies, Transmission Licensee, SLDC, Distribution Wheeling Business and Retail Supply Business:

- (xvi) Before commencement of Control Period, a forecast of the Aggregate Revenue Requirement and expected revenue from existing tariff and charges shall be submitted by the applicant and approved by the Commission;*
- (xvii) A detailed Capital Investment Plan for each year of the Control Period, shall be submitted by the applicant for the Commission's approval;*
- (xviii) The applicant shall submit operating norms and trajectories of performance parameters for each year of the Control Period, for the Commission's approval*
- (xix) The applicant shall submit the forecast of Aggregate Revenue Requirement and expected revenue from existing tariff for each year of the Control Period, and the Commission shall approve the tariff for Generating Companies, SLDC, Transmission Licensee, Distribution Wheeling Business and Retail Supply Business, for each year of the Control Period;*
- (xx) In its tariff petition, a generating company shall submit information to support the determination of tariff for each generating station*

5 Control Period and Baseline

5.1 The first Control Period under these Regulations shall be of three financial years from April 1, 2019 to March 31, 2022 and for every block of three years thereafter or such other period as may be decided by the Commission.

.....

5.2 The Commission shall determine baseline values for various financial and operational parameters of ARR for the Control Period taking into consideration the figures approved by the Commission in the past, actual average figures of last three years, audited accounts, estimate of the figures for the relevant year, Industry benchmarks/norms and other factors considered appropriate by the Commission;

Provided that in case of substantial difference between the estimates earlier provided / considered for determination of baseline values and the actual audited accounts, the Commission may re-determine the baseline values for the base year suo-moto or on an application filed by the Applicant"

32. Norms of operations

32.1. Regulatory provisions

32.1.1. The Hon'ble Commission had set norms of operations under Tariff Regulations 2018.

32.1.2. The projected performance vis-a-vis norms of operations set is discussed below:

32.2. Installed and Effective Capacity in FY2021-22

32.2.1. APGCL submits the following Installed & Effective Capacity for FY2021-22

Table 174: Installed & Effective Capacity for FY2021-22

Station	Installed Capacity (MW)	No. of Units	Units Decommissioned	Units Available for Generation & Capacity in MW	Effective Capacity
LRPP	69.755	7	0	1-7 (9.965 each)	69.755 MW

32.3. Snapshot of performance projection for FY 2021-22

32.3.1. The following table shows the projection of performance parameters of gas based LRPP for FY 2021-22

Table 175: Projected Operating Performance for FY2021-22 of LRPP

LRPP	2021-22 Approved	2021-22 Projected
Gross Energy in MU	519.40	519.40
Aux. Power Cons. (%)	3.50%	3.50%
Net Energy in MU	501.22	501.22
Plant Availability Factor (%)	85.00%	85.00%
Plant Load Factor (%)	90.00%	90.00%
Gross Station Heat Rate on GCV (kcal / kWh)	2150.00	2150

32.4. Normative Annual Plant Availability Factor (NAPAF)

32.4.1. The Hon'ble Commission had approved 85% for NAPAF for LRPP for FY2021-22 in its order dated 1st March 2019. The approved and projected numbers are shown in the table below.

Table 176: Projected Availability for FY2021-22 of LRPP

LRPP	2021-22 Approved	2021-22 Projected
Plant Availability Factor (%)	85.00%	85.00%

32.5. Normative Annual Plant Load Factor (NAPLF)

32.5.1. The Hon'ble Commission had approved 90% for NAPLF for LRPP for FY2020-21 in its order dated 1st March 2019. APGCL has projected the PLF at same level of availability. However we will try to achieve the approved PLF for the plant during the year. The approved and projected numbers are shown in the table below.

Table 177: Projected PLF for FY2021-22 of LRPP

LRPP	2021-22 Approved	2021-22 Projected
Plant Load Factor (%)	90.00%	90.00%

32.6. Gross Station Heat Rate (SHR)

32.6.1. The Hon'ble Commission had approved GSHR of 2150 kCal/kWh for LRPP for FY2020-21 in its order dated 1st March 2019. The approved and projected numbers are shown in the table below.

Table 178: Projected SHR for FY2021-22 of LRPP

LRPP	2021-22 Approved	2021-22 Projected
Gross Station Heat Rate on GCV (kcal / kWh)	2150.00	2150.00

32.7. Auxiliary Energy Consumption

32.7.1. The Hon'ble Commission had approved 3.5% for auxiliary consumption for LRPP for FY2020-21 in its order dated 1st March 2019. The approved and projected numbers are shown in the table below.

Table 179: Auxiliary Energy Consumption for FY2020-21 of LRPP

LRPP	2021-22 Approved	2021-22 Projected
Auxiliary energy consumption (%)	3.50%	3.50%



33. Fixed Cost of the Plant

33.1. Annual fixed cost for FY 2020-21

33.1.1. As per regulation 42.1 of the AERC Tariff regulations, 2018 the following components have been considered for projecting of fixed cost under the Multi Year Tariff framework for the power plants:

- (a) Return on Equity Capital
- (b) Interest on Loan capital
- (c) Depreciation
- (d) Operation and Maintenance Expenses
- (e) Interest on Working Capital
- (f) Less: Non-Tariff Income

33.1.2. For the computation of the fixed components, the Petitioner has considered the principles provided in the Tariff Regulations, 2018. These components have been discussed in detail in the following sections of the petition.

33.2. Return on Equity (ROE)

33.2.1. The Hon'ble Commission in its regulation has considered the pre-tax return on equity at 15.5% on equity capital.

33.2.2. APGCL has projected the Return on Equity (RoE) at a rate of 15.5% in accordance with the Tariff Regulations, 2018. Further, it is submitted that the actual tax paid would be claimed separately during True-up of respective years.

Table 180: Projected Return on Equity capital for FY2021-22

Station	Particulars	2021-22	2021-22
		Approved	Projected
LRPP	Opening Equity	16.10	15.73
	Closing Equity	16.10	15.73
	Rate of Return	15.50%	15.50%
	Return on Equity	2.50	2.44
	Return on Equity for Effective Capacity	2.50	2.44

33.2.3. APGCL prays to the Hon'ble Commission to approve the projected Return on Equity as shown above.

33.3. Interest on Loan Capital

33.3.1. As per Regulation 34 of the Tariff Regulations, 2018, the Commission will consider interest on Loan capital on normative basis with repayment equal to depreciation allowed for that year and rate of interest will be the weighted average rate of interest calculated on the basis of the actual loan portfolio at the beginning of each year.

33.3.2. In view of the above, the Petitioner has projected the Interest on long term Loan on normative basis for FY2021-22. The Petitioner has considered normative loan portfolio and the repayment shown is considered equal to the depreciation for FY 2021-22. The interest rate has been considered as the expected weighted average rate of interest for FY 2021-22.

33.3.3. The finance charges are shown separately for FY 2021-22. The table below summarizes the interest on loan and finance charges considered for period of FY 2021-22.

Table 181: Projected Interest and Finance charges for FY2021-22

Station	Particulars	2021-22	2021-22
		Approved	Projected
LRPP	Net Normative Opening Loan	29.30	33.57
	Addition of normative loan during the year	0.00	0.00
	Normative Repayment during the year	2.75	2.63
	Net Normative Closing Loan	26.55	30.94
	Avg. Normative Loan	27.93	32.26
	Interest Rate	10.10%	10.01%
	Interest on Loan Capital	2.82	3.23
	Add: Bank Charges	0.00	0.00
	Net Interest on Loan Capital	2.82	3.23
	Net Interest on Loan Capital for Effective Capacity	2.82	3.23

33.3.4. APGCL prays to the Hon'ble Commission to approve the projected Total interest and finance charges as shown above.

33.4. Depreciation

33.4.1. The Hon'ble Commission in its Tariff Regulations, 2018 has provided the principals for determination of depreciation.

33.4.2. In view of the above, the Petitioner has computed the Depreciation considering the Capital Cost of the asset admitted by the Commission and projected asset addition with 10% salvage value. Also, depreciation on grants has been subtracted. The table below summarizes the Depreciation projected for FY2021-22.

Table 182: Projected Depreciation for FY2021-22 of LRPP

(Rs. Crore)

Particulars	2021-22
Opening GFA	268.41
Addition during the year	0.00
Closing GFA	268.41
Average GFA	268.41
Rate of Depreciation	5.02%
Total Depreciation	13.47
Grant	215.96
Additions during the year	0.00
Closing grant	215.96
Average grant	215.96
Rate of Depreciation	5.02%
Depreciation on grants	10.84
Net Depreciation	2.63

Table 183: Summary of projected Depreciation for FY2021-22

Station	Particulars	2021-22 Approved	2021-22 Projected
LRPP	Depreciation	13.60	13.47
	Less: Depreciation on assets funded by Grants	10.85	10.84
	Net Depreciation	2.75	2.63
	Net Depreciation for Effective Capacity	2.75	2.63

33.4.3. APGCL prays to the Hon'ble Commission to approve the projected Depreciation for FY 2021-22 as shown above.

33.5. Interest on Working Capital

33.5.1. As per Regulation 36 of the Tariff Regulations, 2018, the interest on working capital will be considered on normative basis.

33.5.2. As per the above regulations, the Petitioner has projected normative interest on working capital. However, as APGCL does not have liquid fuel stock facility, it has not considered working capital on storage of liquid fuel. The rate of interest has been considered equal to the normative interest rate of three hundred (300) basis points above the average State Bank of India MCLR (One Year Tenor) prevalent during the last available six months, which $7.00\% + 3.00\% = 10.00\%$.

33.5.3. The interest on working capital considered is shown in the table below:

Table 184: Summary of Interest on working capital projected for FY2021-22

(Rs. Crore)

Station	Particulars	2021-22 Approved	2021-22 Projected
LRPP	Fuel Cost for one month	7.91	4.86
	O&M Expenses for one month	1.89	1.89
	Maintenance Spares-30% of O&M	6.79	6.79
	Receivables for two months	21.67	15.38
	Total Working Capital Requirement	38.26	28.93
	Rate of interest	11.50%	10.00%
	Interest on Working capital	4.40	2.89

33.5.4. APGCL prays to the Hon'ble Commission to approve the Interest on Working capital for FY 2021-22 as shown above.

33.6. Operation and Maintenance Expenses (O&M Expenses)

33.6.1. The Operation and maintenance expense are to be projected as per Regulation 50.1 of the Tariff Regulations, 2018.

33.6.2. The Commission in its order dated 1st March 2019 had computed the normative O&M expenses for LRPP for FY2021-22 according to the regulation.

33.6.3. APGCL has claimed the Normative O&M expenses for LRPP considering the escalation rate of 6.3% on the claimed Normative Expenses for LRPP for APR of FY2020-21

Table 185: Operation and Maintenance projected for FY2021-22

Rs. Cr

Station	Approved in order of March 2019	Approved considering Effective Installed Capacity in order of March 2019	Amount considered for APR of FY2020-21 on Effective Installed Capacity	Effective Capacity considered for APR for FY2020-21	Effective Capacity for Tariff Projection for FY2021-22	Amount considered for Tariff for FY 2021-22 on effective capacity
	1	2	3	4	5	6 = 3* (1+6.3%) *5/4
LRPP	22.64	22.64	21.30	69.76	69.76	22.64

33.6.4. APGCL prays to the Hon'ble Commission to approve the O&M expenses for FY 2021-22 as shown above.

33.7. Impact of AERC (Payment of Fees etc.) Regulations, 2020

33.7.1. The Hon'ble Commission has notified the new AERC (Payment of Fees etc.) Regulations, 2020 which has led to a substantial increase in the Filing Fees of APGCL payable to AERC.

33.7.2. The tentative impact of the increase in the filing fees has been shown below:

Station	2015 Regulation			2020 Regulation			Increase in Filing Fees		
	Tariff Determination Fees	APR Fees	Total Fees	Tariff Determination Fees	True Up Fees	Total Fees	Tariff Determination Fees	True Up / APR Fees	Total Fees
LRPP	0.20	0.10	0.30	0.25	0.15	0.40	0.05	0.05	0.10

33.7.3. Considering the increase in the LRPP filing fees as shown above, APGCL humbly prays to the Commission to allow it to claim in the increase in the fees at actuals in FY2021-22

33.8. Incentives

33.8.1. APGCL submits that the Incentives for FY 2021-22 will be claimed in True-up as per Regulations.

33.9. Non-Tariff Income

33.9.1. As per Regulation 45 of the Tariff Regulations, 2018, the non-tariff income shall be deducted from the Annual Fixed Cost in determining the Annual Fixed Cost of the Generation Company.

33.9.2. The non-tariff income for FY2021-22 are projected same as approved by Hon'ble Commission. The same is as shown in the table below

Table 186: Station-wise Non tariff income projected for FY2021-22

(Rs. Crore)

Station	2021-22 Approved	2021-22 Projected
LRPP	0.00	0.00

33.9.3. APGCL submits that Non-Tariff Income for FY FY2021-22 will be claimed during True-up of the same.

33.9.4. APGCL prays to the Hon'ble Commission to approve the Non-tariff income for FY 2021-22 as shown above.

33.10. Total Fixed Cost

33.10.1. The recovery of Annual fixed charges is to be done as per regulation 51.1 of the Tariff Regulations, 2018.

33.10.2. Based on the above, the Annual fixed charges for FY 2021-22 has been computed. The Hon'ble Commission is requested to approve the fixed charges as discussed in the table below:

Table 187: Annual Fixed charges for FY2021-22 of LRPP

(Rs. Crore)

Particulars	2021-22 Approved	2021-22 Projected
Operation & Maintenance Expenditure	22.64	22.64
Increase in AERC Tariff Filing Fees	0.00	0.10
Interest & Finance Charges	2.82	3.23
Interest on working Capital	4.40	2.89
Depreciation	2.75	2.63
Return on Equity	2.50	2.44
<u>Less: Other Income</u>	0.00	0.00
Total Fixed Charges	35.11	33.94



33.10.3. The Petitioner prays to the Hon'ble Commission to approve the fixed costs for FY 2021-22 as discussed in the tables above.

33.10.4. APGCL submits that the Other expenses like actual tax paid, prior period items etc. for FY2021-22 will be claimed in True-up of FY 2021-22 as per Regulations.



34. Energy Charges

34.1. Fuel Price and Calorific Value

34.1.1. As per Regulation 11 of the Tariff Regulations 2018, 'Fuel Price' and 'Calorific Value of Fuel' are uncontrollable items. The values of 'Calorific Value of Fuel' is considered same as considered in FY 2020-21. The value of 'Fuel Price' has been considered at the rate computed for the month of October 2020 and escalated at annual rate of 3% for Transmission charges as per agreement. The projected values of 'Fuel Price' and 'Calorific Value of Fuel' are shown in the table below:

Table 188: Projected GCV and Price for FY2021-22

Station	Wt. Avg. Gross Calorific Value of Gas (kcal/SCM)	Wt. Avg. Price of Gas (Rs./1000 SCM)
LRPP	9,419.27	4923.31

34.1.2. The Petitioner prays to the Hon'ble Commission to approve the projected Price of Gas and GCV for LRPP for FY 2021-22 as shown in the table above.

34.2. Fuel cost

34.2.1. The Commission, in the Tariff Order dated 1st March 2019 had approved the Fuel Cost for FY 2021-22. The table below shows the projected fuel cost for FY2021-22

Table 189: Fuel cost for LRPP for FY2021-22

Particulars	Derivation	Unit	2021-22	2021-22
			Approved	Projected
Gross Generation	A	MU	519.40	519.40
Heat Rate	B	kcal/kWh	2150.00	2150.00
GCV of gas	C	kcal/SCM	9126.42	9419.27
Overall Heat	D=AxB	G. cal.	1116710.00	1116710.00
Gas consumption	E=D/C	M. SCM	122.36	118.56
Price of Gas	F	Rs./1000 SCM	7758.11	4923.31
Total cost of Gas	G=ExF/10000	Rs. Crore	94.93	58.37

35. Summary of submissions for Revised ARR of FY2021-22

35.1. Summary

35.1.1. The Summary of the Revised ARR for LRPP for FY2021-22 is shown below.

Table 190: Revised ARR for FY2021-22 For LRPP

(Rs. Crore)

Sl. No	ARR for LRPP for Effective Capacity Particulars	2021-22	2021-22
		Approved	Projected
	POWER GENERATION (MU)		
	Gross Generation	519.40	519.40
	Net Generation	501.22	501.22
	Auxiliary Consumption Loss %	3.50%	3.50%
I	Fixed Charges		
	Operation & Maintenance Expenditure	22.64	22.64
	Increase in AERC Tariff Filing Fees	0.00	0.10
	Interest & Finance Charges	2.82	3.23
	Interest on working Capital	4.40	2.89
	Depreciation	2.75	2.63
	Return on Equity	2.50	2.44
	<u>Less:</u> Other Income	0.00	0.00
II	Total Fixed Charges	35.11	33.94
III	Fuel Cost	94.93	58.37
IV	Total Revenue Requirement	130.04	92.30
V	Fixed Charge (Rs. / kWh)	0.70	0.68
VI	Energy Charge (Rs. / kWh)	1.89	1.16
VII	Proposed Tariff (Rs. / kWh)	2.59	1.84

35.2. Net Annual Revenue Requirement

35.2.1. The Net Annual Revenue Requirements for FY 2021-22 are as shown in the tables below.

Table 191: Net Annual Revenue Requirements for LRPP for FY2021-22

(Rs. Crore)

Particulars	2021-22 Projected
Fixed Charges	33.94



Particulars	2021-22 Projected
Fuel Cost	58.37
Total Revenue Requirement	92.30

35.3. Tariff for LRPP for FY 2021-22

35.3.1. The tariff proposed for LRPP for FY 2021-22 is as shown below

Table 192: Tariff proposed for LRPP for FY 2021-22

(Rs. Crore)

Particulars	LRPP
Annual fixed charges (Rs crore)	33.94
Monthly fixed charges (Rs crore)	2.83
Energy charge rate (Rs./ kWh)	1.16

35.3.2. The Petitioner prays to the Hon'ble Commission to approve the Net Annual Revenue Requirement for FY 2021-22 as discussed in the tables above.

36. Directives

36.1. Compliance of Directives issued in the Tariff Order for 2020-21

36.1.1. We submit that the update on the compliance directives issued in the Tariff order for FY 2020-21 for Quarter 1 has already been submitted to the Hon'ble Commission.

Compliance of Directives issued in the Tariff Order for 2020-21		
Sl. No:	AERC's Directive	Status as on 31st October, 2020
1	Directive1: Completion of new Power Projects within scheduled time and augmentation of own generating capacity	
	<p>The Commission directs APGCL to complete their ongoing projects on time.</p> <p>APGCL should set up new solar projects on its own, as solar projects require lesser time for commissioning. This would also help the Company build expertise in solar technology and add much required new capacity to their pool of generation projects.</p> <p>APGCL is, also, directed to explore the possibility of setting up solar power plants at remote areas of the State so that its generating stations are spread out throughout the State. This would help reduce losses and transmission cost.</p>	<p><u>13.5 MW Myntriang Small Hydro Electric Project (MSHEP):</u></p> <ul style="list-style-type: none"> Units no #1 & #2 of (3X3) MW MSHEP-I is under S/D due to vibration problem, Unit # 3 is under S/D for clearing debris from canal and forebay. Unit #2 of MSHEP-II is under S/D for major Overhauling, expected to come by 4th week of December'2020, Unit # 3 is running at rated capacity. Unit#1 is under trial run after overhauling. <p><u>Present Status of 100 MW NRPP:</u></p> <ul style="list-style-type: none"> NRPP is expected to be commissioned by April'2021. <p><u>Present Status of 70 MW Amguri Solar Power Project:</u></p> <ul style="list-style-type: none"> LOA has been issued to M/s JAKSON on 26/12/2019. All required drawings are approved from APGCL end. Soil testing and survey work is completed. Erection work, mainly Civil works has been started. <p><u>Present Status of 120 MW Lower KHEP:</u></p> <ul style="list-style-type: none"> First Stage Forest Clearance has been accorded for 523.046 Hectare of forest land by Ministry of Environment and Forest and Climate Change on 5th February, 2019. 2nd Stage Forest Clearance is in advance stage and will be received by Nov'2020. Final EC has been received from MoEF & CC, New Delhi. Resettlement and Rehabilitation (R&R)

		<p>plan for the project has been approved by the Ministry of Tribal Affairs, Govt. of India.</p> <ul style="list-style-type: none"> • Land premium and compensation amount for Karbi Anglong Dist amounting to Rs. 8.11 Cr transferred to KAAC on 27.06.19. Land Compensation payment in Karbi Anglong district is in progress. • Land allotment letters has been received from both Dima Hasao and Karbi Anglong Districts. • Package-2(Project Roads, Civil & Hydro-mechanical works) has been awarded to M/S Larsen & Toubro Ltd, Chennai. At present M/S L&T is carrying out survey works and geo-technical investigation works at project site. • Package-3(Electromechanical works) Technical Bid was opened on 09/11/2020. The evaluation of the bid is in progress. Loan signing with ADB is expected by Nov'2020. <p><u>Present status of 24 MW Borpani Middle-II SHEP:</u></p> <ul style="list-style-type: none"> • For land acquisition of the project, site visit has been made by representatives of Hamren, Donka and APGCL and land availability report has been submitted to the respective department under KAAC. Draft MoA has been approved in KAAC. • NOC from Water Resource Deptt. has been received. Report has been made to Dist Council for MOM. • KAAC has been requested for allotment of land • DEA has posed the project to ADB for financial assistance. <p><u>Present Status of 2X800 MW Margherita Super Thermal Power Project:</u></p> <ul style="list-style-type: none"> • The APGCL Board approved the Draft DPR (Rev-I) of Margherita Super Thermal Power Project (2x800 MW) prepared by M/s NTPC Ltd, Noida with total financial involvement of Rs. 16,850.14 Crore (Rupees sixteen Thousand Eight Hundred Fifty Crores and Fourteen Lakhs) only. • As per the directives of APGCL Board, comments from the MD, APDCL has been requested. <p><u>20 MW Namrup Solar Power Project:</u></p> <ul style="list-style-type: none"> • After completion of bid evaluation it was decided to issue LOI after the APGCL's Board approval. • In the period in-between APGCL's Board has approved for retendering of the project, as the L1 bidder refused to extend the bid security period.
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		<p><u>Setting up of a solar plant at Bilaspara and Lakhimpur and Dhemaji:</u></p> <ul style="list-style-type: none"> Correspondence has been made with the Deputy Commissioner of Dhubri District for allotment of 1500 Bighas of Govt land for setting up a Solar Project of 100 MW. Regarding setting up solar projects in far flung areas such as Lakhimpur, Dhemaji correspondence has already been made with the Deputy Commissioners for allotment of Govt vacant land (Approx 500 Bighas, in a single Plot) in the districts for setting up Solar Power Plant. Response it awaited.
2	Directive-2: Preventive Maintenance.	
	<p>The Commission directs APGCL to earnestly pursue preventive maintenance of its power stations using diagnostic tools and strategies, to avoid forced shutdown of its turbines and loss in revenue.</p> <p>Planned /scheduled shutdowns should also be opted for as and when necessary to maintain the power stations in operations and avoid accidents.</p>	Noted.
3	Directive 3: Employee’s Provident Fund	
	The Commission directs APGCL to deposit the contributions by the Employees including past liabilities for GPF in a separate bank account.	The matter is under progress
4.	Directive 4: Special R&M	
	It is observed that APGCL does not carry out Special R&M in the year for which	APGCL humbly submits that it is earnestly pursuing to achieve the projected Special R&M activities for its power plants. However the activities were

	<p>it is approved. This has also resulted in frequent breakdown of Units. Henceforth, APGCL should carry out Special R&M within the approved period failing which the same will not be allowed as an expenditure in the subsequent year.</p>	<p>hampered due to Covid-19 pandemic which has led to delay of the completion of the same</p> <p>APGCL humbly prays to the Hon'ble Commission to approve the proposed Special R&M activities for its power plants as presented in this petition.</p>
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ANNEXURES

S. No.	Annexure	Page No.
1	Annual accounts for FY 2019-20	2 - 37
2	CAG Comments on Accounts of FY2019-20	38 - 40
3	Statutory auditor report for FY 2019-20	41 - 63
4	SLDC certificate for FY 2019-20	64 - 65
5	NTPS – Loss due to Grid Constraints Certificate for FY2019-20	66
6	SLDC certificate for FY 2020-21	67 - 68
7	Order for the Payment of Generation Allowance Arrear	69
8	Letter from CEA confirming decommissioning of Unit 4 and Unit 5 of NTPS	70 - 71
9	Regulatory formats	72 - 189

IND AS FINANCIAL STATEMENT
2019-20



ASSAM POWER GENERATION
CORPORATION LIMITED

Assam Power Generation Corporation Limited
Ind AS Balance Sheet as at March 31, 2020

Particulars	Notes	As on 31 st March 2020 (Rs. In Lakh)	As on 31 st March 2019 (Rs. In Lakh) Restated
ASSETS			
Non-current assets			
Property, plant and equipment	2	80,333.53	84,392.99
Capital work-in-progress	3	1,24,380.81	1,04,946.86
Other non-current assets	4	145.07	142.47
		2,04,859.41	1,89,482.32
Current assets			
Inventories	5	7,404.51	7,056.97
Financial assets			
Trade receivables	6(I)	9,440.10	9,079.56
Cash and cash equivalents	6(II)	5,259.34	38,962.87
Bank balances other than 6(ii) above	6(III)	72,513.02	47,043.21
Loans	6(IV)	6,841.26	6,309.03
Other financial assets	6(V)	258.80	22.23
Income tax assets (net)		460.96	428.13
Other current assets	7	18,394.10	16,036.49
		1,20,572.09	1,24,938.47
Total assets		3,25,431.50	3,14,420.79
EQUITY AND LIABILITIES			
Equity			
Equity share capital	8	45,585.98	45,585.98
Other equity	9	92,309.83	89,920.64
		1,37,895.81	1,35,506.61
Liabilities			
Non-current liabilities			
Financial liabilities			
Borrowings	10(I)	64,107.65	68,389.00
Deferred tax liabilities (Provision for MAT)		136.09	673.47
Provisions	11	9,511.30	8,502.02
Other non current liabilities	12	6,092.98	6,586.94
		79,848.03	84,151.43
Current liabilities			
Financial liabilities			
Trade payables	13(I)	5,591.70	4,949.32
Other financial liabilities	13(II)	74,359.71	61,403.48
Other current liabilities	14	22,961.16	19,572.23
Provisions	15	4,775.10	8,837.70
		1,07,687.67	94,762.74
Total equity and liabilities		3,25,431.50	3,14,420.79
Summary of significant accounting policies	1		

The accompanying notes are an integral part of the Ind AS financial statements.

As per our separate report of even date

For K.P SARDA & Co.

Chartered Accountants

Firm Registration No. 319206E




(CA. K P SARDA)

Partner

Membership No.: 054555

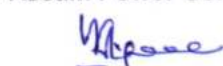
Place: GUWAHATI

Date: 07/08/20

UDIN: 20054555 AAAA FU3584

For and on behalf of

Assam Power Generation Corporation Limited



(Sri V. K. Pipersenia, IAS Retd)

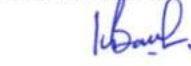
Chairman



(Smti. Bimala Brahma)
Chief Financial Officer

Place: Guwahati

Date: 28th July'2020



(Smti. Kalyani Baruah)

Managing Director



(Smti. Nayana Das)
Company Secretary

Assam Power Generation Corporation Limited
Statement of Profit and Loss for the year ended March 31, 2020

Particulars		Notes	For the year ended March 31, 2020 (Rs. In Lakh)	For the year ended March 31, 2019 (Rs. In Lakh) Restated
Income				
I	Revenue from operations	16	50,398.05	53,254.08
II	Other income	17	536.46	562.87
III	Finance income	18	5,213.20	4,867.81
IV	Total Income (I+II+III)		56,147.72	58,684.76
Expenses				
V	Cost of raw materials consumed - other than lubricants	19	28,733.61	29,156.34
	Cost of raw materials consumed - lubricants	19	365.54	1.54
	Employee benefits expenses	20	9,838.71	10,364.55
	Other expenses	21	3,057.80	2,865.80
	Depreciation and amortization expense	22	5,622.77	5,264.34
	Finance costs	23	7,984.71	7,876.56
	Total Expenses (V)		55,603.14	55,529.12
VI	Profit/(Loss) before exceptional items and tax (IV-V)		544.58	3,155.64
VII	Exceptional Item		-	-
VIII	Profit/(Loss) before tax (VI+VII)		544.58	3,155.64
IX	Tax expense			
	Current tax		116.22	673.47
	MAT credit entitlement		-	-
	Deferred Tax		-	-
	Prior year tax charge		-	53.54
	Building & other construction workers welfare cess		-	-
	Total tax expense		116.22	727.01
X	Profit/ (loss) for the year/period (VIII-IX)		428.36	2,428.63
XI	Other comprehensive income/(loss)			
	(i) Items that will not be reclassified to profit or loss		-	-
	- Re-measurement gains/(loss) on defined benefit plans		-	-
	(ii) Income tax relating to items that will not be reclassified to profit or loss		-	-
	Other comprehensive income/(loss) for the year, net of tax		-	-
XII	Total comprehensive income/(loss) for the year (X+XI)		428.36	2,428.63
XIII	Earning per share (EPS)			
	a) Basic earning/(loss) per share (in Rs.)	24	0.94	5.33
	b) Diluted earning/(loss) per share (in Rs.)			
	[Nominal value of share Rs.100 (Rs.100) each]			


The accompanying notes are an integral part of the Ind AS financial statements.

As per our separate report of even date

For K.P SARDA & Co.

Chartered Accountants

Firm Registration No. 319206E


(CA. K P SARDA)
Partner

Membership No.: 054555

Place: GUWAHATI

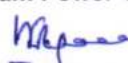
Date: 07/08/20


UDIN: 2005455JAAAFFU3584





For and on behalf of

Assam Power Generation Corporation Limited


(Sri V. K. Pipersenia, IAS Retd)
Chairman


(Smti. Kalyani Baruah)
Managing Director


(Smti. Bimala Brahma)
Chief Financial Officer
Place: Guwahati
Date: 28th July'2020


(Smti. Nayana Das)
Company Secretary

Assam Power Generation Corporation Limited

Statement of changes in equity for the year ended March 31, 2020

Equity share capital :

Equity shares of Rs. 100 each issued, subscribed	No. of Shares	(Rs. In Lakh)
As at April 1, 2018	4,55,85,975	45,585.98
Issue of share capital	-	-
As at March 31, 2019	4,55,85,975	45,585.98
Issue of share capital	-	-
As at March 31, 2020	4,55,85,975	45,585.98

Other equity :

(Rs. In Lakh)

Particulars	Other equity	
	Retained earnings	Total other equity
As at April 01, 2018	78,097.24	78,097.24
Profit/(loss) for the year	2,428.64	2,428.64
Other comprehensive income/(loss)	-	-
Total comprehensive income/(loss)	2,428.64	2,428.64
Created during the year	9,394.77	9,394.77
As at March 31, 2019	89,920.64	89,920.64
As at April 01, 2019	89,920.64	89,920.64
Profit/ (Loss) for the year	428.36	428.36
Other comprehensive income/(loss)	-	-
Total comprehensive income/(loss)	428.36	428.36
Created during the year	1,960.84	1,960.84
As at March 31, 2020	92,309.83	92,309.83

As per our separate report of even date

For K.P SARDA & Co.

Chartered Accountants

Firm Registration No. 319206E




(CA. K. P. SARDA)

Partner

Membership No.: 054355

Place : GUWAHATI

Date : 07/08/20

UDIN: 20054555 AAAAFU 3584

For and on behalf of

Assam Power Generation Corporation Limited



(Sri V. K. Pipersenia, IAS Retd)

Chairman



(Smti. Bimala Brahma)

Chief Financial Officer

Place : Guwahati

Date : 28th July'2020



(Smti. Kalyani Baruah)

Managing Director



(Smti. Nayana Das)

Company Secretary

ASSAM POWER GENERATION CORPORATION LTD.

CASH FLOW STATEMENT FOR THE YEAR ENDED 31st MARCH, 2020

<u>PARTICULARS</u>	<u>As on 31st March 2020</u> <u>(Rupees in Lakh)</u>	<u>As on 31st March 2019</u> <u>(Rupees in Lakh)</u>
A. CASH FLOW FROM OPERATING ACTIVITIES:		
Net Profit before Taxation	544.58	3,155.64
Adjusted for:	-	-
Profit/Loss on Sale of Assets	(22.86)	-
Depreciation	5,622.77	5,264.34
Income from Fixed Deposit	(5,159.29)	(4,849.76)
Interest /Other Income	-	-
Interest & Other Charges	7,984.71	7,876.56
	8,425.34	8,291.14
Operating profit before working capital changes	8,969.91	11,446.78
Change in Inventories	(347.55)	(794.12)
Change in Trade Receivable	(360.54)	5,094.58
Change in Short Term Loans & Advances	(532.23)	(335.64)
Change in Others Current Assets	(27,087.55)	9,783.75
Change in Trade Payables	642.38	945.12
Change in Other Current Liabilities	3,594.36	8,230.91
Change in Short Term Provisions	(4,062.60)	(363.16)
	(28,153.73)	22,561.45
Cash generated from operations	(19,183.81)	34,008.23
Tax expenses	(259.12)	(422.58)
Net Cash from Operating Activities	(19,442.94)	33,585.64
B. CASH FLOW FROM INVESTMENT ACTIVITIES :		
Purchases of Fixed Assets	(1,350.74)	(33,469.43)
Sale of Fixed Assets	-	-
Purchase of Investments	-	-
Sale of Investments	-	-
Capital Work in Progress	(19,433.94)	19,380.37
Income from Fixed Deposit	5,413.59	2,240.09
Interest/Other Income	22.86	-
	-	-
Net Cash Used in Investment Activities	(15,348.23)	(11,848.98)



C. CASH FLOW FROM FINANCING ACTIVITIES :		
Proceeds from Share capital		
Proceeds from Long Term Borrowings	3,450.21	2,872.56
Repayment made towards loan	(4,247.46)	(3,208.46)
Interest & Other Charges	(2,323.76)	(4,401.74)
Proceeds from Grant towards capital assets	4,208.65	9,394.77
Net Cash Used in Financing Activities	1,087.64	4,657.13
Net Increase/Decrease in Cash and Cash Equivalents(A+B+C)	(33,703.53)	26,393.79
Opening Balance of Cash and Cash Equivalents	38,962.87	12,569.08
Closing Balance of Cash and Cash Equivalents	5,259.34	38,962.87

As per our separate report of even date
For K.P SARDA & Co.
Chartered Accountants
Firm Registration No. **319206E**

[Handwritten Signature]



(CA. K P SARDA)
Partner

Membership No.: **054555**

Place : **GUWAHATI**

Date : **07/08/20**

UDIN : **20054555 AAAAFU 3584**

For and on behalf of
Assam Power Generation Corporation Limited

[Handwritten Signature]

(Sri V. K. Pipersenia, IAS Retd)
Chairman

[Handwritten Signature]

(Smti. Kalyani Baruah)
Managing Director

[Handwritten Signature]

(Smti. Bimala Brahma)
Chief Financial Officer

Place : Guwahati

Date : 28th July'2020

[Handwritten Signature]

(Smti. Nayana Das)
Company Secretary

Note 1 - Significant Accounting Policies

A. Corporate Information

Assam Power Generation Corporation Limited ("the Company") is a public Company domiciled in India and incorporated under the provisions of the Companies Act applicable in India. The registered office of the Company is located at Bijulee Bhawan, Paltan Bazar, Guwahati, Assam - 781001.

The Company is engaged in the generation and sell of power having its manufacturing facility in the State of Assam.

B. Basis of preparation

The Ind AS financial statements of the Company have been prepared in accordance with the Indian Accounting Standards (Ind AS) notified under the Companies (Indian Accounting Standards) Rules, 2015 as amended and the provisions of the Electricity Act, 2003, to the extent applicable.

The Ind AS financial statements have been prepared on an accrual basis and under the historical cost convention. The Ind AS financial statements are presented in Indian Rupees in Lakh, except number of shares, face value of share, earning / (loss) per share or wherever otherwise indicated.

C. Current versus non-current classification

The Company presents assets and liabilities in the balance sheet based on current/non-current classification. An asset is treated as current when it is:

- Expected to be realised or intended to be sold or consumed in normal operating cycle
- Held primarily for the purpose of trading
- Expected to be realised within twelve months after the reporting period, or
- Cash or cash equivalent unless restricted from being exchanged or used to settle a liability for at least twelve months after the reporting period

All other assets are classified as non-current.

A liability is current when:

- It is expected to be settled in normal operating cycle
- It is held primarily for the purpose of trading
- It is due to be settled within twelve months after the reporting period, or
- There is no unconditional right to defer the settlement of the liability for at least twelve months after the reporting period

The Company classifies all other liabilities as non-current.

Deferred tax assets and liabilities are classified as non-current assets and liabilities.

The operating cycle is the time between the acquisition of assets for processing and their realisation in cash and cash equivalents. The Company has identified twelve months as its operating cycle.

D. Fair value measurement

Fair value is the price that would be received to sell an asset or paid to transfer a liability in an orderly transaction between market participants at the measurement date. The fair value measurement is based on the presumption that the transaction to sell the asset or transfer the liability takes place either:

- In the principal market for the asset or liability, or
- In the absence of a principal market, in the most advantageous market for the asset or liability

The principal or the most advantageous market must be accessible by the Company.

The fair value of an asset or a liability is measured using the assumptions that market participants would use when pricing the asset or liability, assuming that market participants act in their economic best interest.

A fair value measurement of a non-financial asset takes into account a market participant's ability to generate economic benefits by using the asset in its highest and best use or by selling it to another market participant that would use the asset in its highest and best use.

All assets and liabilities for which fair value is measured or disclosed in the Ind AS financial statements are categorised within the fair value hierarchy, described as follows, based on the lowest level input that is significant to the fair value measurement as a whole:



- Level 1 — Quoted (unadjusted) market prices in active markets for identical assets or liabilities
- Level 2 — Valuation techniques for which the lowest level input that is significant to the fair value measurement is directly or indirectly observable
- Level 3 — Valuation techniques for which the lowest level input that is significant to the fair value measurement is unobservable

The company has engaged external agencies for valuation and verification of Assets & inventory and the work is under progress. On completion of the valuation and verification process, fair valuation shall be taken up by APGCL.

E. Revenue recognition and Other income

Revenue is recognized to the extent that it is probable that the economic benefits will flow to the Company and the revenue can be reliably measured, regardless of when the payment is being made.

The following recognition criteria described below must also be met before revenue is recognised:

Sale of goods

Revenue from sale of goods is recognized when all the significant risks and rewards of ownership of the goods have been passed to the buyer, usually on delivery of the goods. Revenue from sale of Power by Assam Power Generation Corporation Limited has been accounted for on the rate allowed in tariff ordered by Assam Electricity Regulatory Commission (AERC).

Revenue from services

Revenues from services are recognized as and when services are rendered.

Interest

Interest income of APGCL consists of interest earned on Fixed deposits made with various banks and the same is recorded using the balance confirmation provided by the respective banks. "Interest income" is included in "Finance income" in the statement of profit and loss.

Delay payment charges on customers

Delay payment charges are levied to APDCL in accordance to AERC Regulations and PPA and reflected in Other Income.

Dividends

Dividend income is recognized when the Company's right to receive dividend is established, which is generally when shareholders approve the dividend.

F. Government grants

Government grants are recognised where there is reasonable assurance that the grant will be received and all attached conditions will be complied with.

Revenue grants from GoA are recognized in the Profit & Loss Statement on a systematic and rational basis over the periods necessary to match them with the related costs.

Grants from ADB, though shown separately in the accounts are grants from the Govt. of Assam, which receives the fund from Central govt., the borrower in terms of the loan agreement with ADB.

Government grants towards cost of capital assets are contribution of the owner (i.e. State Govt.) towards capital of the Company and will be converted to equity in future as communicated to us vide letter no. ASEB/ACT/FIN/87/Pt-VI/35 dated 12/11/2008. These grants cannot be construed as meeting a portion of the cost and cannot be amortised in the books of accounts as they will be converted to equity in future. Hence, Govt. Grants are recognised in 'Other equity'.

G. Taxes

Current income tax

Current income-tax is measured at the amount expected to be paid to the tax authorities in accordance with the Income-tax Act, 1961 enacted in India and tax laws prevailing in the respective tax jurisdictions where the



Company operates. The tax rates and tax laws used to compute the amount are those that are enacted or substantively enacted, at the reporting date.

Current income tax relating to items recognised outside the statement of profit and loss is recognised outside the statement of profit and loss (either in other comprehensive income or in equity). Current tax items are recognised in correlation to the underlying transaction either in OCI or directly in equity. Management periodically evaluates positions taken in the tax returns with respect to situations in which applicable tax regulations are subject to interpretation and establishes provisions where appropriate.

Deferred tax

Deferred tax is provided using the liability method on temporary differences between the tax bases of assets and liabilities and their carrying amounts for financial reporting purposes at the reporting date.

Deferred tax liabilities are recognised for all taxable temporary differences, except:

- When the deferred tax liability arises from the initial recognition of goodwill or an asset or liability in a transaction that is not a business combination and, at the time of the transaction, affects neither the accounting profit nor taxable statement of profit and loss
- In respect of taxable temporary differences associated with investments in subsidiaries, associates and interests in joint ventures, when the timing of the reversal of the temporary differences can be controlled and it is probable that the temporary differences will not reverse in the foreseeable future

Deferred tax assets are recognised for all deductible temporary differences, the carry forward of unused tax credits and any unused tax losses. Deferred tax assets are recognised to the extent that it is probable that taxable profit will be available against which the deductible temporary differences, and the carry forward of unused tax credits and unused tax losses can be utilised, except:

- When the deferred tax asset relating to the deductible temporary difference arises from the initial recognition of an asset or liability in a transaction that is not a business combination and, at the time of the transaction, affects neither the accounting profit nor taxable statement of profit and loss
- In respect of deductible temporary differences associated with investments in subsidiaries, associates and interests in joint ventures, deferred tax assets are recognised only to the extent that it is probable that the temporary differences will reverse in the foreseeable future and taxable profit will be available against which the temporary differences can be utilised

The carrying amount of deferred tax assets is reviewed at each reporting date and reduced to the extent that it is no longer probable that sufficient taxable profit will be available to allow all or part of the deferred tax asset to be utilised. Unrecognised deferred tax assets are re-assessed at each reporting date and are recognised to the extent that it has become probable that future taxable profits will allow the deferred tax asset to be recovered.

Deferred tax assets and liabilities are measured at the tax rates that are expected to apply in the year when the asset is realised or the liability is settled, based on tax rates (and tax laws) that have been enacted or substantively enacted at the reporting date.

Deferred tax relating to items recognised outside the statement of profit and loss is recognised outside the statement of profit and loss (either in other comprehensive income or in other equity). Deferred tax items are recognised in correlation to the underlying transaction either in OCI or directly in other equity.

Deferred tax assets and deferred tax liabilities are offset if a legally enforceable right exists to set off current tax assets against current tax liabilities and the deferred taxes relate to the same taxable entity and the same taxation authority.

Deferred tax assets include Minimum Alternative Tax (MAT) paid in accordance with the tax laws in India, which is likely to give future economic benefits in the form of availability of set off against future income tax liability. Accordingly, MAT is recognised as deferred tax asset in the statement of financial position when the asset can be measured reliably and it is probable that the future economic benefit associated with the asset will be realised.

H. Property, plant and equipment ('PPE')

The Company has elected to continue with the carrying value for all of its property plant and equipment as recognized in the financial statements as at the date of transition to Ind AS.



Property, plant and equipment are stated at cost, net of accumulated depreciation and accumulated impairment losses, if any. Capital work in progress are stated at cost net of impairment loss if any. Such cost includes the cost of replacing part of the property plant and equipment and borrowing costs, if the recognition criteria are met.

Depreciation for the period in respect of assets has been provided on straight line method as per clause 33.4 of the Assam Electricity Regulatory Commission (Terms and Conditions for determination of Multi Year Tariff) Regulations, 2018 in terms of the provision of Schedule-II, Part "B" of Companies Act, 2013. Depreciation on addition of assets has been calculated on pro-rata basis.

<u>Assets Class</u>	<u>Rates of Depreciation</u>
Building	3.34%
Hydraulic	5.28%
Other civil works	3.34%
Plant & machinery	5.28%
Lines & cable network	5.28%
Vehicles – others	9.50%
Furniture & fixtures	6.33%
Office equipment	6.33%
Computers & Accessories	15.00%
Capital spare	5.28%

Residual value of Property, plant & equipment is taken as 10% of original cost.

The company has engaged external agencies for valuation and verification of Assets & inventory and the work is under progress. On completion of the valuation and verification process, fair valuation shall be taken up by APGCL

As per the accounting policy followed by the Company, grants from Govt. of Assam towards cost of capital assets have not been reduced from the cost of assets but have been treated as 'Other Equity'. The depreciation pertaining to fixed assets constructed out of such grants towards cost of capital assets is charged. However depreciation pertaining to fixed assets constructed out of consumer's contribution, subsidies is not charged. Presently the company is not in receipt of any consumer's contribution, subsidies till date.

I. Borrowing costs

Borrowing costs directly attributable to the acquisition, construction or production of an asset that necessarily takes a substantial period of time to get ready for its intended use or sale are capitalized as part of the cost of the asset. All other borrowing costs are expensed in the period in which they occur. Borrowing costs consist of interest and other costs that an entity incurs in connection with the borrowing of funds. Borrowing cost also includes exchange differences to the extent regarded as an adjustment to the borrowing costs.

J. Leases

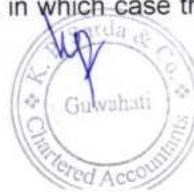
The determination of whether an arrangement is (or contains) a lease is based on the substance of the arrangement at the inception of the lease. The arrangement is, or contains, a lease if fulfilment of the arrangement is dependent on the use of a specific asset or assets and the arrangement conveys a right to use the asset or assets, even if that right is not explicitly specified in an arrangement.

For arrangements entered into prior to April 1, 2015, the Company has determined there are no arrangement contain lease on the basis of facts and circumstances existing on the date of transition.

Where the Company is lessee

A lease is classified at the inception date as a finance lease or an operating lease. A lease that transfers substantially all the risks and rewards incidental to ownership to the Company is classified as a finance lease.

Finance leases are capitalised at the commencement of the lease at the inception date fair value of the leased property or, if lower, at the present value of the minimum lease payments. Lease payments are apportioned between finance charges and reduction of the lease liability so as to achieve a constant rate of interest on the remaining balance of the liability. Finance charges are recognised in finance costs in the statement of profit and loss, unless they are directly attributable to qualifying assets, in which case they are capitalized in accordance



with the Company's general policy on the borrowing costs. Contingent rentals are recognised as expenses in the periods in which they are incurred.

A leased asset is depreciated over the useful life of the asset. However, if there is no reasonable certainty that the Company will obtain ownership by the end of the lease term, the asset is depreciated over the shorter of the estimated useful life of the asset and the lease term.

Operating lease payments are recognised as a expense in the statement of profit and loss on a straight line basis over the period of the lease term, unless the payment to lessor and structured to increase in line with expected general inflation and compensate for the lessor's expected inflation cost increase.

Where the Company is the lessor

Leases in which the Company does not transfer substantially all the risks and rewards of ownership of an asset are classified as operating leases. Rental income from operating lease is recognised on a straight-line basis over the term of the relevant lease. Initial direct costs incurred in negotiating and arranging an operating lease are added to the carrying amount of the leased asset and recognised over the lease term on the same basis as rental income. Contingent rents are recognised as revenue in the period in which they are earned.

Leases are classified as finance leases when substantially all of the risks and rewards of ownership transfer from the Company to the lessee. Amounts due from lessees under finance leases are recorded as receivables at the Company's net investment in the leases. Finance lease income is allocated to accounting periods so as to reflect a constant periodic rate of return on the net investment outstanding in respect of the lease.

K. Inventories

Inventories are valued at lower of cost or net realizable value. Net realizable value is the estimated selling price in the ordinary course of business, less estimated costs of completion and estimated costs necessary to make the sale.

Presently, Inventories Accounts of the Company maintained for construction project has been treated as "Capital Stores" and that of O& M purpose treated as "Operational Stores". The Capital stores are classified as inventory as per APGCL's recognition criteria based on specific circumstances and are outside the purview of Ind AS 16 Property Plant and Equipment and hence are dealt in accordance with Ind AS 2 Inventories.

APGCL was allocated a provision against stock for Rs. 3203.05 Lakhs and other material account amounting to Rs. 1312.04 Lakhs as per the transfer scheme of APGCL. Now, the company has engaged external agencies for valuation and verification of Assets & inventory and the work is under progress. Once the Valuation and verification process is complete fair valuation shall be taken up by APGCL for all of its inventories and the yearlong provision of Rs. 3203.05 Lakhs and Rs. 1312.04 Lakhs (allocated to APGCL as per transfer scheme) can be adjusted.

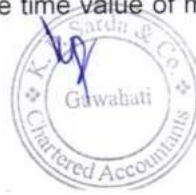
Materials are issued to works at standard price. Issue of Standard Items is at Standard rates on FIFO basis. For Non-Standard Items receipt accounting is based on Basic Price + GST. Issue of Non-Standard Items is based on weighted average rate of previous month's closing balance. If there is no closing stock in the previous month, valuation of issue is based on the first receipt rate of the current month.

Shortages found on physical verification of stocks are booked under "Material Shortages pending investigation (Account code 2710000)". These shortages are recovered from persons responsible or written off, as the case may be, on completion of investigation.

L. Impairment of non-financial assets

The Company assesses, at each reporting date, whether there is an indication that an asset may be impaired. If any indication exists, or when annual impairment testing for an asset is required, the Company estimates the asset's recoverable amount. An asset's recoverable amount is the higher of an asset's or cash-generating unit's (CGU) fair value less costs of disposal and its value in use. The recoverable amount is determined for an individual asset, unless the asset does not generate cash inflows that are largely independent of those from other assets or groups of assets. Where the carrying amount of an asset or CGU exceeds its recoverable amount, the asset is considered impaired and is written down to its recoverable amount.

In assessing value in use, the estimated future cash flows are discounted to their present value using a pre-tax discount rate that reflects current market assessments of the time value of money and the risks specific to the



asset. In determining fair value less costs of disposal, recent market transactions are taken into account. If no such transactions can be identified, an appropriate valuation model is used. These calculations are corroborated by valuation multiples, quoted share prices for publicly traded companies or other available fair value indicators.

The Company bases its impairment calculation on detailed budgets and forecast calculations, which are prepared separately for each of the Company's cash-generating units to which the individual assets are allocated. These budgets and forecast calculations generally cover a period of five years. For longer periods, a long-term growth rate is calculated and applied to project future cash flows after the fifth year. To estimate cash flow projections beyond periods covered by the most recent budgets/forecasts, the Company extrapolates cash flow projections in the budget using a steady or declining growth rate for subsequent years, unless an increasing rate can be justified. In any case, this growth rate does not exceed the long-term average growth rate for the products, industries, or country or countries in which the entity operates, or for the market in which the asset is used.

Impairment losses, including impairment on inventories, are recognized in the statement of profit and loss.

For assets, an assessment is made at each reporting date to determine whether there is an indication that previously recognised impairment losses no longer exist or have decreased. If such indication exists, the Company estimates the asset's or CGU's recoverable amount. A previously recognised impairment loss is reversed only if there has been a change in the assumptions used to determine the asset's recoverable amount since the last impairment loss was recognised. The reversal is limited so that the carrying amount of the asset does not exceed its recoverable amount, nor exceed the carrying amount that would have been determined, net of depreciation, had no impairment loss been recognised for the asset in prior years. Such reversal is recognised in the statement of statement of profit and loss.

M. Provisions

General

Provisions are recognized when the Company has a present obligation (legal or constructive) as a result of a past event, it is probable that an outflow of resources embodying economic benefits will be required to settle the obligation and a reliable estimate can be made of the amount of the obligation. When the Company expects some or all of a provision to be reimbursed, for example, under an insurance contract, the reimbursement is recognised as a separate asset, but only when the reimbursement is virtually certain. The expense relating to a provision is presented in the statement of profit and loss net of any reimbursement.

If the effect of the time value of money is material, provisions are discounted using a current pre-tax rate that reflects, when appropriate, the risks specific to the liability. When discounting is used, the increase in the provision due to the passage of time is recognised as a finance cost.

N. Retirement and other employee benefits

Pursuant to the Transfer Scheme, the GoA vide Notification No.PEL.190/2004/69 dated 4th February, 2005 notified the plan for meeting the terminal benefit obligations of personnel transferred from ASEB to successor entities. As per Clause 1.5 of the said notification "Terminal Benefit" means the ASEB's employee related liabilities including payments of pension, gratuity, leave encashment and General Provident Fund and any other retirement benefits and applicable benefits including right to appropriate revisions in the above benefits consistent with the practice that were prevalent in ASEB:

Funding for past unfunded terminal liabilities

Funding for past unfunded terminal liabilities is on the basis of actuarial valuation done as at 30th September, 2012. The cash outflows towards past unfunded liabilities of existing employees, existing pensioners and existing family pensioners funded pattern will be guided by the aforesaid Govt. notification.

Funding for future services - Terminal Benefits

The company has made a provision for terminal liability for future service of its existing employees @33.50% of Basic plus DA as per AERC guidelines and in the line with the GoA's Notification mentioned above.



Leave encashment benefit (LEB) of employees

Leave encashment benefit of the old employees are accounted on cash basis. LEB admissible to the employees are being paid by the Company and claim for recovery of the appropriate share of such fund (i.e. share of past liability) relating to period prior to 09.12.2004 is forwarded to the Pension Trust Authority as per GoA Notification mentioned here-in-above. At present employee related records including leave balance are maintained manually at Head quarter as well as various field levels and as such ascertainment of balance leave on the balance sheet date of every employee is tedious and hence not provided for. However, the Company is going to implement ERP and as soon as it starts, we will be able to make provision for leave encashment benefit for NPS employees.

GPF deductions/payments of employees

Payments on account of GPF (Final Withdrawal and Non-refundable advance) to the existing employees are being made from the GPF Account of the Company. Claim for recovery of appropriate share of such fund (i.e. share of past unfunded liability) is forwarded to the Pension Trust authority as per GoA Notification mentioned above.

Provision for interest on GPF is on the basis of the following rates:

- i) 8.0% w.e.f 01.04.2019 to 30.06.2019
- ii) 7.9% w.e.f 01.07.2019 to 30.09.2019
- iii) 7.9% w.e.f 01.10.2019 to 31.12.2019
- iv) 7.9% w.e.f 01.01.2020 to 31.03.2020 applied on the average subscription of the employee.

Terminal benefit for new (appointed on or after 1.1.2004) employees

New Pension Scheme is being implemented for the new employees of the Company as per Government of India Notification No.5/7/2003-ECB & PR dated. 22.12.2003. The Company contributed the equal amount deducted from its employees, fall under New Pension Scheme.

O. Earnings per Share

Basic earnings per share is calculated by dividing the profit/(loss) attributable to owners of the Company by the weighted average number of equity shares outstanding during the financial year, adjusted for bonus elements in equity shares issued during the year and excluding treasury shares.

Diluted earnings per share adjusts the figures used in the determination of basic earnings per share to take into account the after income tax effect of interest and other financing costs associated with dilutive potential equity shares and the weighted average number of additional equity shares that would have been outstanding assuming the conversion of all dilutive potential equity shares.

P. Financial Instruments

A financial instrument is any contract that gives rise to a financial asset of one entity and a financial liability or equity instrument of another entity.

Financial assets

Initial recognition and measurement

All financial assets are recognised initially at fair value plus, in the case of financial assets not recorded at fair value through statement of profit and loss, transaction costs that are attributable to the acquisition of the financial asset. Purchases or sales of financial assets that require delivery of assets within a time frame established by regulation or convention in the market place (regular way trades) are recognised on the trade date, i.e., the date that the Company commits to purchase or sell the asset.

Subsequent measurement

For purposes of subsequent measurement, financial assets are classified as debt instruments at amortised cost

Debt instruments at amortised cost

A 'debt instrument' is measured at the amortised cost if both the following conditions are met:

- a) The asset is held within a business model whose objective is to hold assets for collecting contractual cash flows, and
- b) Contractual terms of the asset give rise on specified dates to cash flows that are solely payments of principal and interest (SPPI) on the principal amount outstanding.



After initial measurement, such financial assets are subsequently measured at amortised cost using the effective interest rate (EIR) method. Amortised cost is calculated by taking into account any discount or premium on acquisition and fees or costs that are an integral part of the EIR. The EIR amortisation is included in finance income in the statement of profit and loss. The losses arising from impairment are recognised in the statement of profit and loss. This category generally applies to trade and other receivables.

Derecognition

A financial asset is primarily derecognised when:

- The rights to receive cash flows from the asset have expired, or
- The Company has transferred its rights to receive cash flows from the asset or has assumed an obligation to pay the received cash flows in full without material delay to a third party under a 'pass-through' arrangement; and either (a) the Company has transferred substantially all the risks and rewards of the asset, or (b) the Company has neither transferred nor retained substantially all the risks and rewards of the asset, but has transferred control of the asset.

When the Company has transferred its rights to receive cash flows from an asset or has entered into a pass-through arrangement, it evaluates if and to what extent it has retained the risks and rewards of ownership. When it has neither transferred nor retained substantially all of the risks and rewards of the asset, nor transferred control of the asset, the Company continues to recognise the transferred asset to the extent of the Company's continuing involvement. In that case, the Company also recognises an associated liability. The transferred asset and the associated liability are measured on a basis that reflects the rights and obligations that the Company has retained.

Continuing involvement that takes the form of a guarantee over the transferred asset is measured at the lower of the original carrying amount of the asset and the maximum amount of consideration that the Company could be required to repay.

Impairment of financial assets

The Company recognizes loss allowances using the expected credit loss (ECL) model for the financial assets which are not fair valued through profit or loss. Loss allowance for trade receivables with no significant financing component is measured at an amount equal to lifetime ECL. The amount of expected credit losses (or reversal) that is required to adjust the loss allowance at the reporting date to the amount that is required to be recognized as an impairment gain or loss in statement of profit or loss

Financial liabilities

Initial recognition and measurement

Financial liabilities are classified, at initial recognition, as financial liabilities at fair value through statement of profit and loss.

The Company's financial liabilities include trade and other payables, loans and borrowings.

Subsequent measurement

Financial liabilities are subsequently carried at amortized cost using the effective interest method, except for contingent consideration recognized in a business combination which is subsequently measured at fair value through profit or loss. For trade and other payables maturing within one year from the balance sheet date, the carrying amounts approximate the fair value due to the short maturity of these instruments

Financial guarantee contracts

Financial guarantee contracts issued by the company are those contracts that require a payment to be made by holding company to reimburse banks for a loss they incurs because the Company fails to make a payment when due in accordance with the terms of a debt instrument. Financial guarantee contracts are recognised initially as contribution from shareholders under other equity at fair value, adjusted for transaction costs that are directly attributable to the issuance of the guarantee. This amount is adjusted from borrowings obtained by the Company. Borrowings are subsequently measured at amortised cost using the EIR method.

De-recognition

A financial liability is derecognised when the obligation under the liability is discharged or cancelled or expires. When an existing financial liability is replaced by another from the same lender on substantially different terms, or the terms of an existing liability are substantially modified, such an exchange or modification is treated as the de-recognition of the original liability and the recognition of a new liability. The difference in the respective carrying amounts is recognised in the statement of statement of profit and loss.



Reclassification of financial instruments

The Company determines classification of financial assets and liabilities on initial recognition. After initial recognition, no reclassification is made for financial assets which are equity instruments and financial liabilities. For financial assets which are debt instruments, a reclassification is made only if there is a change in the business model for managing those assets. Changes to the business model are expected to be infrequent. The Company's senior management determines change in the business model as a result of external or internal changes which are significant to the Company's operations. Such changes are evident to external parties. A change in the business model occurs when the Company either begins or ceases to perform an activity that is significant to its operations. If the Company reclassifies financial assets, it applies the reclassification prospectively from the reclassification date which is the first day of the immediately next reporting period following the change in business model. The Company does not restate any previously recognised gains, losses (including impairment gains or losses) or interest.

Offsetting of financial instruments

Financial assets and financial liabilities are offset and the net amount is reported in the balance sheet if there is a currently enforceable legal right to offset the recognised amounts and there is an intention to settle on a net basis, to realise the assets and settle the liabilities simultaneously.

APGCL at first-time adoption did not, under its previous GAAP, recognise and measure a government loan at a below-market rate of interest on a basis consistent with Ind AS requirements, hence has used its previous GAAP carrying amount of the loan at the date of transition to Ind ASs as the carrying amount of the loan in the opening Ind AS Balance Sheet and thereon.

Q. Cash and cash equivalents

Cash and cash equivalent in the balance sheet comprise cash at banks and on hand and short-term deposits with an original maturity of three months or less, which are subject to an insignificant risk of changes in value. For the purpose of the statement of cash flows, cash and cash equivalents consist of cash and short-term deposits, as defined above, net of outstanding bank overdrafts as they are considered an integral part of the Company's cash management.



Assam Power Generation Corporation Limited

Notes to the Ind AS financial statements as at and for the year ended March 31, 2020

2. Property, plant and equipment

Description	Land owned under full title	Leasehold loan	Building	Hydraulic	Other civil works	Plant & machinery	Lines & cable network	Vehicles	Furniture & fixtures	Office equipment	Roads on land belonging to others	Capital spares at generating stations	Total
GROSS BLOCK													
As on 1st April 2018	2,072.78	6.40	6,400.24	17,820.15	17,476.60	56,177.58	4,450.71	108.07	171.14	165.68	28.24	17,514.73	1,22,392.34
Adjustment / Reclassification	-	-	-	-	-	-	-	-	-	-	-	-	-
Additions during the year	-	-	3.37	4.07	7,561.21	25,526.69	-	-	4.44	6.64	-	364.46	33,470.90
Deductions during the year	-	-	-	-	-	-	-	-	-	(1.47)	-	-	(1.47)
As on 31st March 2019	2,072.78	6.40	6,403.62	17,824.23	25,037.82	81,704.27	4,450.71	108.07	175.58	170.85	28.24	17,879.20	1,55,861.77
Adjustment / Reclassification	-	-	-	-	-	-	-	-	-	-	-	-	-
Additions during the year	-	-	-	3.85	117.63	1,391.10	-	-	26.68	24.89	-	-	1,564.15
Deductions during the year	-	-	-	-	(202.78)	-	-	(10.63)	-	-	-	-	(213.41)
As on 31st March 2020	2,072.78	6.40	6,403.62	17,828.08	24,952.67	83,095.38	4,450.71	97.44	202.27	195.73	28.24	17,879.20	1,57,212.51
DEPRECIATION													
As on 1st April 2018	-	-	3,048.68	8,106.98	6,987.33	30,633.41	3,122.31	92.91	110.23	96.63	6.36	14,001.48	66,206.33
Adjustment / Reclassification	-	-	-	-	-	-	-	-	-	-	-	-	-
Depreciation for the year	-	-	134.19	940.95	619.17	3,144.34	121.61	1.71	5.51	10.38	2.68	283.79	5,264.34
Deduction/ Adjustment during the year	-	-	-	-	-	-	-	-	-	(1.89)	-	-	(1.89)
As on 31st March 2019	-	-	3,182.87	9,047.93	7,606.50	33,777.75	3,243.92	94.62	115.74	105.12	9.05	14,285.28	71,468.78
Adjustment / Reclassification	-	-	-	-	-	-	-	-	-	-	-	-	-
Depreciation for the year	-	-	127.06	941.20	763.17	3,374.56	112.73	0.67	6.60	10.95	2.68	283.16	5,622.77
Deduction/Adjustment during the year	-	-	-	-	(203.12)	-	-	(9.45)	-	-	-	-	(212.57)
As on 31st March 2020	-	-	3,309.93	9,989.13	8,166.55	37,152.31	3,356.65	85.83	122.34	116.07	11.73	14,568.44	76,878.98
NET BOOK VALUE													
As on 31st March 2020	2,072.78	6.40	3,093.69	7,838.95	16,786.12	45,943.07	1,094.06	11.61	79.92	79.67	16.51	3,310.76	80,333.53
As on 31st March 2019	2,072.78	6.40	3,220.75	8,776.30	17,431.32	47,926.52	1,206.80	13.45	59.84	65.73	19.19	3,593.92	84,392.99
As on 1st April 2018	2,072.78	6.40	3,351.56	9,713.18	10,489.27	25,544.17	1,328.41	15.16	60.91	69.05	21.88	3,513.25	56,186.01

Note:- (i) In the absence of shift log book for Plant & machinery, depreciation on Plant & machinery has been charged on continued process plant basis.

(ii) On fixed assets acquired during the year depreciation is charged on 'Put to use' basis.



3. CAPITAL WORK IN PROGRESS

Particulars	As on 31.3.2018	As on 31.3.2019	As on 31.3.2020
Capital work in progress	1,24,327.23	1,04,946.86	1,24,380.81

Details of capital work in progress	As on 1st April 2018 (In Rs.)	Addition / (capitalised) during the year	As on 31st March 2019 (In Rs.)	Addition / (capitalised) during the year	As on 31st March 2020 (In Rs.)
ERP Software	-	-	-	532.65	532.65
Land owned under full title	173.20	4,234.47	4,407.67	12,598.25	17,005.91
Leasehold loan	-	-	-	-	-
Building	99.48	214.56	314.04	-	314.04
Hydraulic	-	-	-	-	-
Other civil works	74,671.61	(27,373.83)	47,297.79	2,497.46	49,795.25
Plant & machinery	49,106.06	3,533.70	52,639.76	3,805.59	56,445.35
Lines & cable network	108.51	-	108.51	-	108.51
Vehicles	0.32	-	0.32	-	0.32
Furniture & fixtures	6.12	-	6.12	-	6.12
Office Equipment	161.93	10.72	172.66	-	172.66
Total	1,24,327.23	(19,380.37)	1,04,946.86	19,433.94	1,24,380.81



Assam Power Generation Corporation Limited

Notes to the Ind AS financial statements as at and for the year ended March 31, 2020

4. OTHER NON-CURRENT ASSETS (UNSECURED AND CONSIDERED GOOD UNLESS OTHERWISE STATED)*

Particulars	As on 31-03-2020 (Rs. In Lakh)	As on 31-03-2019 (Rs. In Lakh) Restated
Advance to suppliers (Capital)		
Interest free	69.39	69.39
Advance to contractors (Capital)		
Advance to Capital Contractors - Interest Free	75.68	73.07
Contractors materials control Account (capital)	-	-
Total	145.07	142.47

5. INVENTORIES (AT LOWER OF COST OR NET REALIZABLE VALUE)

Particulars	As on 31-03-2020 (Rs. In Lakh)	As on 31-03-2019 (Rs. In Lakh) Restated
1. Capital Stores and Spares		
Fuel Stock	5.01	(0.39)
Capital Materials Stock A/c	7,283.22	7,639.43
Material Issues O&M	-	-
2. O&M Materials Stock A/c	2,007.29	1,308.93
3. Materials Stock Adjustments (Capital)		
Materials Stock Adjustment (O&M)	-	-
Other Material Account	1,312.04	1,312.04
Material stock-Excess/Shortage pending investigation - Capital	-	-
Less: Provision against stock	(3,203.05)	(3,203.05)
Net Total	7,404.51	7,056.97

6. CURRENT FINANCIAL ASSETS (CONSIDERED GOOD AND UNSECURED UNLESS OTHERWISE STATED)

(I). TRADE RECEIVABLES

Particulars	As on 31-03-2020 (Rs. In Lakh)	As on 31-03-2019 (Rs. In Lakh) Restated
Receivables against sale of power - APDCL	9,440.10	9,079.56
Total	9,440.10	9,079.56
Break-up for security details :		
Trade receivables		
Secured, considered good	-	-
Unsecured, considered good	9,440.10	9,079.56
Doubtful	-	-
Total	9,440.10	9,079.56

(II). CASH & CASH EQUIVALENTS

Particulars	As on 31-03-2020 (Rs. In Lakh)	As on 31-03-2019 (Rs. In Lakh) Restated
Balances with banks:		
- On current accounts	1,394.48	8,884.74
- On cash credit facilities	-	-
- On deposit accounts with original maturity of less than three months*	3,800.00	30,007.17
Cash in hand	64.87	70.96
Total	5,259.34	38,962.87

- (i) Balances with bank includes closing bank balance of HQ as well as of all field units along with the fund in transit.
(ii) Fixed Deposits with Banks includes closing balance of fixed deposit at various banks.



(III). BANK BALANCES OTHER THAN (II) ABOVE

Particulars	As on 31-03-2020 (Rs. In Lakh)	As on 31-03-2019 (Rs. In Lakh) Restated
- On deposit accounts with remaining maturity of more than three months but less than 12 months *	72,513.02	47,043.21
Total	72,513.02	47,043.21

*Short-term deposits are made for varying periods of between one day and twelve months, depending on the immediate cash requirements of the Company and on interest at the respective short-term deposit rates ranging from 6.50% - 8.75%.

For the purpose of the statement of cash flows, cash and cash equivalents comprise the following:

Particulars	As on 31-03-2020 (Rs. In Lakh)	As on 31-03-2019 (Rs. In Lakh) Restated
Balances with banks:		
- On current accounts	1,394	8,885
- On cash credit facilities	-	-
- Deposits with remaining maturity of less than three months	3,800	30,007
Cash on hand	65	71
	5,259.34	38,962.87

(IV). LOANS (CONSIDERED GOOD AND UNSECURED UNLESS OTHERWISE STATED)

Particulars	As on 31-03-2020 (Rs. In Lakh)	As on 31-03-2019 (Rs. In Lakh) Restated
Advances for O&M supplies/works	6,756.89	6,225.86
Loans and advances to staff	31.78	30.58
Others	52.59	52.59
Total	6,841.26	6,309.03

(V). OTHER FINANCIAL ASSETS (CARRIED AT AMORTIZED COST)

Particulars	As on 31-03-2020 (Rs. In Lakh)	As on 31-03-2019 (Rs. In Lakh) Restated
Amount recoverable from AGCL	230.69	-
Advance (to)/from APDCL	28.12	22.23
Total	258.80	22.23

7. OTHER CURRENT ASSETS (CONSIDERED GOOD AND UNSECURED UNLESS OTHERWISE STATED)

Particulars	As on 31-03-2020 (Rs. In Lakh)	As on 31-03-2019 (Rs. In Lakh) Restated
Fuel related receivables & claims (Railway claims for coal)	747.91	747.91
Fuel related receivables & claims (OIL)	1,394.47	
Other receivables	12,907.26	11,255.55
Prepaid expenses	114.01	68.38
Income accrued but not due	3,230.09	3,945.35
Deposits	0.35	0.35
Inter Unit A/c - Fuel	-	(0.00)
Inter Unit A/c - Capital Expenditure & Fixed Assets	-	0.00
Inter Unit A/c - Remittance to HQ	-	16.59
Inter-Unit Accounts-Funds Transfer From Head Office	-	(0.50)
Inter Unit A/c - Opening Balance	-	2.84
Total	18,394.10	16,036.49

7.1 Other receivable includes proportion of unfunded liabilities to be received from the Pension Trust on account of GPF & LEB payment.

8. EQUITY SHARE CAPITAL

Particulars	As at March 31, 2020		As at March 31, 2019	
	No. of shares	Rs. In Lakh	No. of shares	Rs. In Lakh
Authorised				
At the beginning of the year	100000000	1,00,000.00	100000000	1,00,000.00
Increase / decrease during the year	-	-	-	-
At the end of the year	100000000	1,00,000	100000000	1,00,000

Particulars	As on 31-03-2020 (Rs. In Lakh)	As on 31-03-2019 (Rs. In Lakh)
Issued, Subscribed and Fully Paid Up :		
45,585,975 equity share of Rs 100/- each	45,585.98	45,585.98
Total	45,585.98	45,585.98

a. Reconciliation of equity shares outstanding at the beginning and at the end of the period

Particulars	As at March 31, 2020		As at March 31, 2019	
	No. of	Rs.	No. of shares	Rs.
At the beginning of the year	45585975	45,585.98	45585975	45,585.98
Increase / decrease during the year	0	-	0	-
At the end of the year	45585975	45,585.98	45585975	45,585.98

b. Terms/ rights attached to Equity shares

The Company has only one class of equity shares having par value of Rs.100 per share. Each holder of equity shares is entitled to one vote per share. The Company declares and pays dividends in Indian rupees. The dividend proposed by the Board of Directors is subject to the approval of the shareholders at the ensuing Annual General Meeting (AGM).

In the event of liquidation of the Company, the holders of equity shares will be entitled to receive remaining assets of the Company, after distribution of all preferential amounts, in proportion to the number of equity shares held by them.

c. Details of shareholders holding more than 5% shares in the company

Particulars	As at March 31, 2020		As at March 31, 2019	
	No. of shares	% holding	No. of shares	% holding
Governor of Assam	45585967	99.99998	45585967	99.99998

As per records of the Company, including its register of shareholders/members and other declaration received from shareholders regarding beneficial interest, the above shareholding represent both legal and beneficial ownership of shares, unless stated otherwise.

d. Shares issued for consideration other than cash

Particulars	As at March 31, 2020
Aggregate number of shares issued for consideration other than cash during the period of five years immediately preceding the reporting date:	45585975



9. OTHER EQUITY

Particulars	As on 31-03-2020 (Rs. In Lakh)	As on 31-03-2019 (Rs. In Lakh) Restated
Capital Reserve*		
Capital Reserve	1,03,068.91	1,01,074.43
Total (A)	1,03,068.91	1,01,074.43
Surplus/(deficit) in the Statement of Profit and Loss		
Profit (Loss) as per last Balance Sheet	(11,153.79)	(13,582.42)
Other Adjustments	(33.65)	
Profit (Loss) for the year	428.36	2,428.64
Net surplus/(deficit) in the Statement of Profit and	(10,759.08)	(11,153.79)
	-	
Total (A+B)	92,309.83	89,920.64

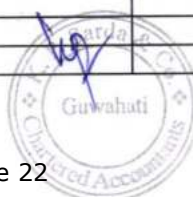
*Movement of Capital Reserve

Particulars	As on 31-03-2020 (Rs. In Lakh)	As on 31-03-2019 (Rs. In Lakh) Restated
Grant from GoA -1		
At the beginning of the year	73,624.47	66,316.93
Accrual during the year	278.46	7,307.54
Released to the statement of profit and loss	-	-
At the end of the year	73,902.93	73,624.47
Grant from GoA -2		
At the beginning of the year	22,081.06	19,993.83
Accrual during the year	1,716.03	2,087.23
Released to the statement of profit and loss	-	-
At the end of the year	23,797.08	22,081.06
Grant from GoA-3(NABARD)		
At the beginning of the year	4,284.42	4,284.42
Accrual during the year	-	-
Released to the statement of profit and loss	-	-
At the end of the year	4,284.42	4,284.42
Donated Capital Assets		
At the beginning of the year	1,084.48	1,084.48
Accrual during the year	-	-
Released to the statement of profit and loss	-	-
At the end of the year	1,084.48	1,084.48

10. FINANCIAL LIABILITIES

(I). BORROWINGS

Particulars	Rate of Interest (%)	As on 31-03-2020 (in Rs.)	As on 31-03-2019 (Rs. In Lakh) Restated
SECURED			
Other parties - PFCL	9.76%-12.54%	32,096.28	34,455.10
Total (A)		32,096.28	34,455.10
UNSECURED			
From other parties - State Govt. (ADB)	10%	2,629.50	2,438.83
From other parties - State Govt. (GoA)	10%	29,381.87	31,495.07
Total (B)		32,011.37	33,933.90
Total (A+B)		64,107.65	68,389.00



Particulars	Terms of repayment and security
PFC Loan No. 62102002 (Rs. 125 Crs.)	Repayable in 180 structured monthly installments starting from January 15, 2007 to December 15, 2021. PFC Loan No. 62102002 is taken against hypothecation of future assets of KLHEP created out of the loan.
PFC Loan No. 62404001 (Rs. 18.28 Crs.)	Repayable in 60 structured quarterly installments starting from April 15, 2009 to January 15, 2024. PFC Loan No.62404001 is taken against hypothecation of future assets of R&M-II LTPS created out of the loan.
PFC Loan No. 62401001 (Rs. 165.45 Crs.)	Repayable in 60 structured quarterly installments starting from July 15, 2008 to April 15, 2023. PFC Loan No. 62401001 is taken against hypothecation of future assets of LWHRP created out of the loan.
PFC Loan No. 62401003 (Rs. 485 Crs.)	Repayable in 60 structured quarterly installments starting from October 15, 2018 to July 15, 2033. PFC Loan No. 62401003 is taken against hypothecation of future assets of NRPP created out of the loan.
GoA Loan	Repayable in 10 structured monthly installments. However no repayment is done yet except for one installment of KLHEP. All the governing terms & conditions regarding loans from GoA are being governed by GoA OM No.BW.22/89/175 dtd.27-03-06 or as specified in different sanction orders for different loans. In case of default in repayment of instalment of Principal & Interest, Penal Interest @2.75% will be charged above the normal rate of interest.
ADB Loan	Repayment terms and other conditions yet to be informed by GoA. Accordingly no repayment provided for FY 2019-20 as current liabilities as against commented by Statutory Auditor

11. PROVISION

Particulars	As on 31-03-2020 (Rs. In Lakh)	As on 31-03-2019 (Rs. In Lakh) Restated
Provision For Employees Benefits		
Provision For Employees Benefits	9,511.30	8,502.02
Total	9,511.30	8,502.02

(i) Claim for recovery of appropriate share (82.31%) of GPF & (57.02%) of LEB as past unfunded liabilities receivable from Pension Trust as per GoA notification No.PEL.190/2004/69 dtd. 4-02-05. The details is given as follows :

Receivable against GPF :	Rs. In Lakh	1,009.28
Receivable against LEB :	Rs. In Lakh	644.65
Total Receivable during the year		1,653.94

12. OTHER NON CURRENT LIABILITIES

Particulars	As on 31-03-2020 (Rs. In Lakh)	As on 31-03-2019 (Rs. In Lakh) Restated
GPF	2,877.49	6,586.94
Liability pending write off	3,215.50	-
Total	6,092.98	6,586.94



13. FINANCIAL LIABILITIES

(I). TRADE PAYABLES

Particulars	As on 31-03-2020 (Rs. In Lakh)	As on 31-03-2019 (Rs. In Lakh) Restated
Total outstanding dues of micro and small enterprises		
Total outstanding dues of creditors other than micro and small enterprises *		
Liabilities for Supply of Gas	3,553.74	3,034.61
Liabilities for Transportation of Gas	2,037.97	1,914.71
Total	5,591.70	4,949.32

*** Terms and conditions of the above financial liabilities:**

Trade payables are interest bearing and are normally settled on 15-30-day terms
For explanations on the companies credit risk management processes, refer note

GAS SUPPLIERS & TRANSPORTERS	Rs. In Crore
OIL	2,053.01
AGCL	3,273.62
GAIL	265.07
TOTAL	5,591.70

(II). OTHER FINANCIAL LIABILITIES (AT AMORTIZED COST)

Particulars	As on 31-03-2020 (Rs. In Lakh)	As on 31-03-2019 (Rs. In Lakh) Restated
Current Maturities of Long Term Debt		
Repayment due to State Govt. Loan	31,647.34	26,274.60
Interest accrued but not due on Borrowings	735.18	476.96
Interest accrued and due on Borrowings*	37,581.53	30,404.46
Repayment due to PFC Loan	4,395.66	4,247.46
Total	74,359.71	61,403.48

* Interest accrued and due on borrowings includes :-

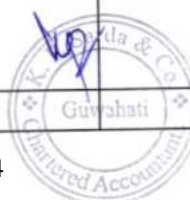
(a) State Govt Loan	36694.79
(b) PFC Loan	886.74

14. OTHERS CURRENT LIABILITIES

Particulars	As on 31-03-2020 (Rs. In Lakh)	As on 31-03-2019 (Rs. In Lakh) Restated
Provision For Employees Benefits		
Staff related gratuity provision (NPS)	1,258.56	1,016.85
Salaries, wages, bonus	461.86	281.41
Employees' contribution & recoveries	49.48	64.34
Employees' contribution & recoveries in Transfer scheme of ASEB	139.36	139.36
Other Payables		
Deposits and retention from suppliers and contractors	8,337.00	8,564.06
Liabilities for capital supplies /works	5,058.06	5,080.43
Liabilities for supplies/works(O&M)	1,639.07	1,606.83
Other Liabilities	5,321.44	2,061.58
Advance (to) /from AEGCL	(110.85)	(90.26)
Staff Pension Fund (DCP)	67.82	108.26
Liabilities to railways for Coal receipt	739.37	739.37
Total	22,961.16	19,572.23

15. PROVISION

Particulars	As on 31-03-2020 (Rs. In Lakh)	As on 31-03-2019 (Rs. In Lakh) Restated
Provision for Liability for Expenses	1,822.39	2,582.38
Liability for Pension	76.15	503.56
Provision of Audit Fees	4.38	4.38
Provision for Building & other Construction workers welfare cess	1.80	1.60
Prov. for Regulatory liability	2,870.39	5,745.79
Total	4,775.10	8,837.70



Assam Power Generation Corporation Limited

Notes to the Ind AS financial statements as at and for the year ended March 31, 2020

16. REVENUE FROM OPERATIONS

Particulars	For the year ended March 31, 2020 Rs. In Lakh	For the year ended March 31, 2019 Rs. In Lakh Restated
Sale of products		
Gross Sale of Power to APDCL	50,167.36	51,502.08
Other Adjustments**	230.69	1,752.00
Total Revenue from operations	50,398.05	53,254.08

** Other Adjustments 2019-20 includes Debit Note to AGCL towards Generation Loss

** Other Adjustments 2018-19 includes True up Gap allowed by AERC

17. OTHER INCOME

Particulars	For the year ended March 31, 2020 Rs. In Lakh	For the year ended March 31, 2019 Rs. In Lakh Restated
Rebate for timely payment	5.66	21.18
Misc. receipts (except 62.901 & 62.908)	528.78	526.51
Rentals from staff quarters	2.02	15.17
Other Income from trading	-	-
Sale of scrap	-	-
Total	536.46	562.87

18. FINANCE INCOME

Particulars	For the year ended March 31, 2020 Rs. In Lakh	For the year ended March 31, 2019 Rs. In Lakh Restated
Interest		
Interest on House Building Advances to Staff	-	-
Interest on Investment (Fixed Deposit)	5,159.29	4,849.76
Interest from Banks (other than interest on fixed deposits)	1.18	0.30
Rebate received for timely payment of dues of loans, interest, etc.	52.73	17.75
Total	5,213.20	4,867.81

19. COST OF MATERIALS CONSUMED

Particulars	For the year ended March 31, 2020 Rs. In Lakh	For the year ended March 31, 2019 Rs. In Lakh Restated
Indigenous		
Gas	655.82	1,761.50
Gas/Oil (Internal Combustion)	28,077.79	27,394.83
Lubricants and consumable stores	365.54	1.54
Total	29,099.14	29,157.88



20. EMPLOYEE BENEFITS EXPENSES

Particulars	For the year ended March 31, 2020 Rs. In Lakh	For the year ended March 31, 2019 Rs. In Lakh Restated
Salaries	6,343.03	7,640.34
Overtime	173.20	110.35
Dearness Allowance	945.49	517.95
Other Allowances	1,009.61	888.88
Bonus	13.44	14.08
Sub Total	8,484.78	9,171.60
Less:-Employees cost capitalised	638.12	287.78
Total Salaries and Wages	7,846.66	8,883.81
Contribution to provident and other funds	1,427.31	1,334.70
	1,427.31	1,334.70
Medical expenses reimbursement	11.74	10.09
Leave travel concession (L.T.C)	2.14	4.49
Earned leave encashment.	494.78	116.41
Other Staff Cost	0.51	1.46
Capacity building expenses	33.78	-
Staff Welfare	21.80	13.58
Total Staff Welfare Expenses	564.74	146.03
TOTAL:	9,838.71	10,364.55

Contribution to Provident and Other Funds' includes, 33.50% of Pay and DA of employees who joined in service prior to 01-01-2004 and 14% of Pay and DA of employees who joined in service after 01-01-2004.

21. OTHER EXPENSES

Particulars	For the year ended March 31, 2020 Rs. In Lakh	For the year ended March 31, 2019 Rs. In Lakh Restated
Manufacturing Expenses		
Repair and Maintenance of Plant and Machinery	1,574.86	1,353.48
Repair and Maintenance of Building	317.34	322.06
Repair and Maintenance of Hydraulic Works	89.29	109.67
Repair and Maintenance of Civil Works	52.38	169.28
Repair and Maintenance of Lines, Cable Net Works etc	1.65	0.10
Repair and Maintenance of Vehicles	2.78	1.41
Repair and Maintenance of Furniture and Fixures	4.38	2.98
Repair and Maintenance of Office Equipment	10.76	13.44
	-	-
Establishment Expenses		
Rent Rates and Taxes	70.41	24.51
Insurance	211.87	229.76
Telephone Charges,	2.94	6.20
Postage, Telegram & Tele Charges	8.57	4.22
Cost Audit Fees	0.66	0.54
Legal charges	10.20	13.07
Audit Fee	12.76	4.77
Consultancy charges	121.88	114.39
Technical Fee	-	-
Other Professional Charges	6.73	37.64
Conveyance and Travel	56.81	70.86
Other administrative expenses	340.53	611.64

Freight	0.08	1.65
Board Meeting expenses	12.74	5.59
Other misc. expenses	28.80	25.13
CSR	13.78	37.73
Penalty for delay in Taxes matter	-	192.89
Fees paid to AERC	115.00	112.70
Total	3,067.19	3,465.74
Less:- Administration and General Expenses capitalised	9.38	16.34
Total	3,057.80	3,449.40
Prior period incomes		
Other Excess Provision	-	585.07
Sub-Total-1	-	585.07
Prior period expenses		
Operating expenses for Prior Period	-	1.47
Sub-Total-2	-	1.47
Prior period items	-	(583.60)
Net Total	3,057.80	2,865.80

22. DEPRECIATION AND AMORTIZATION EXPENSE

Particulars	For the year ended March 31, 2020 Rs. In Lakh	For the year ended March 31, 2019 Rs. In Lakh Restated
Building	127.06	134.19
Hydraulic	941.20	940.95
Other civil works	763.17	619.17
Plant & machinery	3,374.56	3,144.34
Lines & cable network	112.73	121.61
Vehicles	0.67	1.71
Furniture & fixtures	6.60	5.51
Office equipment	10.95	10.38
Roads on land belonging to others	2.68	2.68
Capital spares at generating stations	283.16	283.79
Total	5,622.77	5,264.34

23. FINANCE COSTS

Particulars	For the year ended March 31, 2020 Rs. In Lakh	For the year ended March 31, 2019 Rs. In Lakh Restated
Interest Expenses		
Interest on State Govt. Loan	5,789.27	5,516.89
Interest on State Govt. Loan - Penal Interest	1,406.28	1,113.40
Interest on PFC Loan	4,467.76	4,819.64
Interest on GoA (ADB) Loan	258.22	236.95
Interest on GPF	248.95	435.98
Less: Interest Capitalised	4,192.58	4,251.48
Total	7,977.89	7,871.38
Other Borrowing Costs		
Bank charges	6.82	5.18
Other Costs	-	-
Total	6.82	5.18
Total	7,984.71	7,876.56

'Interest Expenses' capitalised against PFC loan of NRPP.

'Interest Expenses' capitalised against State Govt. Loan.

'Interest Expenses' capitalised against GoA (ADB) Loan.

₹ 3,666.59 Lakh

₹ 513.65 Lakh

₹ 12.35 Lakh



24. Basic Earning/(Loss) per share ('EPS')

Basic EPS amounts are calculated by dividing the profit/(loss) for the year attributable to equity holders of the company by the weighted average number of Equity shares outstanding during the year.

Diluted EPS amounts are calculated by dividing the profit/(loss) attributable to equity holders of the Company by the weighted average number of Equity shares outstanding during the year plus the weighted average number of Equity shares that would be issued on conversion of all the dilutive potential Equity shares into Equity shares.

The following reflects the profit/(loss) and share data used in the basic and diluted EPS computations:

Particulars	For the year ended March 31, 2020 Rs.	For the year ended March 31, 2019 Rs. Restated
Net profit/(loss) for calculation of basic and diluted EPS (Rs.)	4,28,35,567	24,28,63,682
Total number of equity shares outstanding at the end of the year	4,55,85,975	4,55,85,975
Weighted average number of equity shares in calculating basic and diluted EPS	4,55,85,975	4,55,85,975
Basic and diluted EPS (Rs.)	0.94	5.33

Note on Re-statement of Financial Statement

A. During the Financial Year 2019-20, the Company has restated its financial statement for the FY 2018-19 & earlier years for prior period years retrospectively in Compliance to Ind AS 8 - Accounting Policies, Changes in Accounting Estimates & Errors. The said restatements are due to reasons that are reported and commented by the Statutory/CAG auditors and other such errors.

B. Impact of the rectification are as follows:

1. The amount of correction at the beginning of earliest period i.e. on 01-04-2018
Other Equity decreased by Rs. 17.12 Lakhs as on 01-04-2018

2. FY 2018-19

On restatement of comments by the Statutory/CAG auditors and other errors the Profit before taxes increased by 226.67 Lakhs as on 31-03-2019

Current tax liability increased by Rs. 48.37 Lakhs



Assam Power Generation Corporation Limited

Notes to the Ind AS financial statements as at and for the year ended March 31, 2020

25. DISCLOSURE OF SIGNIFICANT ACCOUNTING JUDGEMENTS, ESTIMATES AND ASSUMPTIONS

The preparation of the Company's financial statements requires management to make judgements, estimates and assumptions that affect the reported amounts of revenues, expenses, assets and liabilities, and the accompanying disclosures, and the disclosure of contingent liabilities. Uncertainty about these assumptions and estimates could result in outcomes that require a material adjustment to the carrying amount of assets or liabilities affected in future periods.

Judgements, estimates and assumptions

The judgements and key assumptions concerning the future and other key sources of estimation uncertainty at the reporting date, that have a significant risk of causing a material adjustment to the carrying amounts of assets and liabilities within the next financial year, are described below. The Company based its judgements, assumptions and estimates on parameters available when the financial statements were prepared. Existing circumstances and assumptions about future developments, however, may change due to market changes or circumstances arising that are beyond the control of the Company. Such changes are reflected in the assumptions when they occur.

Taxes

Deferred tax assets are recognized for unused tax losses to the extent that it is probable that taxable profit will be available against which the losses can be utilized. Significant management judgement is required to determine the amount of deferred tax assets that can be recognized, based upon the likely timing and the level of future taxable profits together with future tax planning strategies.

The Company is having history of losses and unabsorbed depreciation that may not be used to offset taxable income. The Company does not have any tax planning opportunities available that could partly support the recognition of these losses as deferred tax assets. On this basis, the Company has determined that it cannot recognize deferred tax assets on the tax losses carried forward and unabsorbed depreciation.

Fair value measurement of financial instruments

When the fair values of financial assets and financial liabilities recorded in the balance sheet cannot be measured based on quoted prices in active markets, their fair value is measured using valuation techniques including the DCF model. The inputs to these models are taken from observable markets where possible, but where this is not feasible, a degree of judgement is required in establishing fair values at each reporting date. Judgements include considerations of inputs such as liquidity risk, credit risk and volatility. Changes in assumptions about these factors could affect the reported fair value of financial instruments.

26. FAIR VALUES

The Company assessed that cash and cash equivalents, trade receivables, other bank balances, trade payables, fixed rate borrowings, current maturity of long term borrowings, interest accrued but not due on borrowings, interest accrued but due on borrowings, dues payable towards purchase of property, plant and equipment, vehicles loan, security deposit, loan to employees, loans and advances etc. approximate their carrying amounts largely due to the short-term maturities of these instruments.

The fair value of the financial assets and liabilities is included at the amount at which the instrument could be exchanged in a current transaction between willing parties, other than in a forced or liquidation sale.

27. FINANCIAL RISK MANAGEMENT OBJECTIVES AND POLICIES

The Company's principal financial liabilities, comprise trade and other payables. The main purpose of these financial liabilities is to finance the Company's operations and to provide guarantee to support its operations. The Company's principal financial assets include loans, trade and other receivables, and cash and cash equivalents that derive directly from its operations.

The Company is exposed to market risk, credit risk and liquidity risk. The Company's senior management oversees the management of these risks and also ensure that the Company's financial risk activities are governed by appropriate policies and procedures and that financial risks are identified, measured and managed in accordance with the Company's policies and risk objectives.

The Board of Directors reviews and agrees policies for managing each of these risks, which are summarized below:



Market risk

Market risk is the risk that the fair value of future cash flows of a financial instrument will fluctuate because of changes in market prices. Market risk comprises of interest rate risk. Financial instruments affected by market risk include deposits.

The sensitivity analysis in the following sections relate to the position as at March 31, 2020 and March 31, 2019

The sensitivity analyses have been prepared on the basis that the amount of net debt, the ratio of fixed to floating interest rates of the debt are all nearly constant at March 31, 2020 and March 31, 2019

The analysis exclude the impact of movements in market variables on: the carrying values of gratuity and other post-retirement obligations, provisions.

The sensitivity of the relevant profit and loss item is the effect of the assumed changes in the respective market risks. This is based on the financial assets and financial liabilities held as of March 31, 2020 and March 31, 2019

a. Interest rate risk

Interest rate risk is the risk that the fair value or future cash flows of a financial instrument will fluctuate because of changes in market interest rates. The Company's exposure to the risk of changes in market interest rates relates primarily to the long-term debt obligations with floating interest rates.

Interest rate sensitivity

The following table demonstrates the sensitivity to a reasonably possible change in interest rates on that portion of loans and borrowings affected. With all other variables held constant, the Company's profit/(loss) before tax is affected through the impact on floating rate borrowings, as follows:

(Rs.)

Particulars	Increase / decrease in basis points	Effect on profit before tax
March 31, 2020		
INR	+50 bps	(3,31,24,163)
INR	-50 bps	3,31,24,163
March 31, 2019		
INR	+50 bps	(4,06,14,737)
INR	-50 bps	4,06,14,737

The assumed movement in basis points for the interest rate sensitivity analysis is based on the currently observable market environment, showing a significantly higher volatility than in prior years.

b. Credit risk

Credit risk is the risk that counterparty will not meet its obligations under a financial instrument or customer contract, leading to a financial loss. The Company is exposed to credit risk from its operating activities (primarily trade receivables) and from its financing activities, including deposits with banks and financial institutions and other financial instruments.

Trade receivables

Customer credit risk is managed subject to the Company's established policy, procedures and control relating to customer credit risk management. Credit quality of a customer is assessed based on individual credit limits are defined in accordance with this assessment. The entire sale of the company is made to APDCL (A Govt. of Assam company)

Financial instruments and cash deposits

Credit risk from balances with banks and financial institutions is managed by the Company's treasury department in accordance with the Company's policy. Investments of surplus funds are made in deposits only with approved banks/mutual funds/commercial papers and within limits assigned to each bank by the Company.



Liquidity risk

Liquidity risk is the risk that the Company will encounter in meeting the obligations associated with its financial liabilities that are settled by delivering cash or another financial asset. The approach of the Company to manage liquidity is to ensure, as far as possible, that these will have sufficient liquidity to meet their respective liabilities when they are due, under both normal and stressed conditions, without incurring unacceptable losses or risk damage to their reputation.

The Company monitors its risk of a shortage of funds through fund management exercise at regular intervals.

The table below summarizes the maturity profile of the Company's financial liabilities based on contractual undiscounted payments.

(Rs. In Lakh)

As at March 31, 2020	On demand	Less than 1 year	1 to 3 years	3 to 5 years	> 5 years	Total
Other financial liabilities						
Interest accrued and due on borrowings	37581.53	-	-	-	-	37581.53
Interest accrued and not due on borrowings	-	735.18	-	-	-	735.18
Trades and other payables*						
Trades payables (including dues payable towards purchase of property, plant and equipment)	-	5591.70	-	-	-	5591.70

As at March 31, 2019	On demand	Less than 1 year	1 to 3 years	3 to 5 years	> 5 years	Total
Other financial liabilities						
Interest accrued and due on borrowings	30404.46	-	-	-	-	30404.46
Interest accrued and not due on borrowings	-	476.96	-	-	-	476.96
Trades and other payables*						
Trades payables (including dues payable towards purchase of property, plant and equipment)	-	4949.32	-	-	-	4,949.32

*Trade payables are interest bearing and are normally settled on 15-30 days terms, however as per terms of agreements with certain vendors, the credit period may extend beyond normal terms.

28. CAPITAL AND OTHER COMMITMENTS

(Rs. In Lakh)

Particulars	As at March 31, 2020	As at March 31, 2019
Estimated amount of contracts remaining to be executed on capital account and not provided for (net of advances)	2,216.87	18,179.58

29. CONTINGENT LIABILITIES / LITIGATIONS :

(l) Oil India Ltd. by its mail dt. 08/05/2020 has claimed the following amount as due from the company in addition to the due payable for supply of natural gas.

For LTPS : 3.36 Crore (MGQ LTPS)

An amount of Rs. 111.63 Lakh towards MGQ- LTPS is agreed by APGCL in recent MoMs with OIL. Debit Note for the same is yet to issue from OIL.



(II) Assam Gas Company Ltd. by its mail dated 02-06-2020 has raised the following claims in addition to its due against its regular bill for transportation /transmission of Gas & supply of Gas.

LTPS : Rs. 38.73 Crore

NTPS : Rs. 9.82 Crore

APGCL on contrary has raised a debit note to AGCL for an amount of Rs. 4121.22 lac vide letter No. APGCL/LTPS/GM/2015/T-13 (A)/332 dt. 12/06/2015 for its failure to transport the compressed Gas with adequate flow and charging rate for transportation of compressed gas instead rate for uncompressed Gas. The claims are disputed and hence no provision against the above claim of AGCL is made. APGCL has adjusted Rs. 3263.69 lakh to AGCL towards Lakwa TPS for the period October'14 to March'20 with respect to the debit note raised..

(III) For implementation of MSHEP, 233 begha 1 katha & 5 lecha of land was handed over by Danka Circle to APGCL after payment of land allotment fee of Rs. 58313/- & at the time of handing over possession there was no intimation of adverse possession & no list of effected people was provided & question of land compensation was not raised. Later during implementation period Terenglangso project & Development Committee started demanding compensation to effected people & final amount of such demand is Rs. 858.00 lac . According to the Deputy Commissioner , Karbi Anglong Autonomous council there were flaws in determination of compensation amount and need review for amicable settlement. The matter is still under settlement. The land is already in possession & part of the project is under construction & part is already under production. No provision against this probable land compensation is made in the account.

30. CAPITAL MANAGEMENT

For the purpose of the Company's capital management, capital includes issued equity capital, share premium and all other equity reserves attributable to the equity holders of the Company. The primary objective of the Company's capital management is to maximize the shareholder value.

The Company manages its capital structure and makes adjustments in light of changes in economic conditions and the requirements of the financial covenants, if any. To maintain or adjust the capital structure, the Company may adjust the dividend payment to shareholders, return capital to shareholders or issue new shares. The Company monitors capital using a gearing ratio, which is net debt divided by total capital plus net debt. The Company policy is to keep gearing ratio between 20% to 40%. The Company includes within net debt, interest bearing loans and borrowings, less cash and cash equivalents.

Particulars	(Rs. In Lakh)		
	As at March 31, 2020	As at March 31, 2019	As at March 31, 2018
Borrowings (refer note 10 & 13(II))	64107.65	68389.00	94069.95
Less: Cash and cash equivalents (refer note 6(II))	5259.34	38962.87	12569.08
Net debt	58848.30	29426.13	81500.87
Equity share capital (refer note 8)	45585.98	45585.98	45585.98
Other equity (refer note 9)	92309.83	89920.64	78097.24
Capital and net debt	196744.11	164932.75	205184.08
Gearing ratio	30%	18%	40%

31. SEGMENT INFORMATION

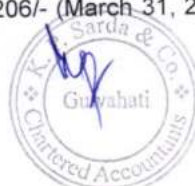
The Company is primarily engaged in a single business segment of manufacture and sale of power and hence this is the only reportable primary business segment. Since the entire sales of the Company are affected in the domestic market, there is only one reportable geographical segment i.e. India.

There are no revenues from transactions with a single external customer amounting to 10 per cent or more of an entity's revenues during the current and previous year.

32. DEFERRED TAX ASSET

The Company has deferred tax assets (primarily representing unabsorbed depreciation and losses under income tax law) in excess of deferred tax liabilities. In the absence of virtual certainty that sufficient future taxable income would be available against which such deferred tax assets can be realized, the Company has not recognized the net deferred tax assets.

33. The Company has earned a profit of Rs.4,28,35,567/- (March 31, 2019 : Rs.24,28,63,682/-) for the year ended March 31, 2020 and its net current assets stands at Rs.128,84,42,206/- (March 31, 2019 : Rs.301,75,72,858/-) as at the year end.



34. Disclosure as per Ind AS-24“Related party Disclosure”

a. Whole Time Directors:

V. K. Pipersenia	Chairman
Kalyani Baruah	Managing Director

b. Parent Entities

The Governor of Assam holds 99.98% ownership interest in APGCL including and as on March 31, 2020.

Particulars	As on 31-03-2020	As on 31-03-2019
Purchase or sales of Goods or services		
Other transaction	Nil	Nil
Dividend		

c. Key Managerial Personnel:

- i) Smti Bimala Brahma: Chief Financial Officer.
- ii) Smti Nayana Das: Company Secretary

d. Managing Director’s & Key Managerial Personnel’s Remuneration:

Particulars	Salary & Allowances, Contribution to PF and other benefits	
	Current Year	Previous Year
Smti Kalyani Baruah	Rs.24,59,944	Rs.28,57,024
Smti Bimala Brahma	Rs.15,67,545	Rs.15,07,274
Smti Nayana Das	Rs.14,87,865	Rs.15,52,450
Total:	Rs. 55,15,354	Rs. 59,16,748

e. Transaction with Related Parties:

Particulars	As on 31-03-2020	As on 31-03-2019
Sales and purchase of goods and services sale of goods to associates		
purchase of raw materials from associates	Nil	Nil
purchase of various goods and services from entities controlled by key management personnel Professional services		
Other transactions	Nil	Nil
Loans and outstanding balances		

35. Operational Performance:

The operational performance of the company is detailed in Annexure-A.

36. Disclosures vide notification No.GSR 719(E) of Ministry of Corporate Affairs dated 16-11-07:

Outstanding amount to fuel suppliers of APGCL as on 31-03-20 in rupees Lakh is as tabulated below –



Supplier	Outstanding principal (Rs. In Lakh)	Total (Rs. In Lakh)
OIL	2053.01	2053.01
GAIL	265.07	265.07
AGCL	3273.62	3273.62

There are no suppliers in APGCL who fall under Micro, Small & Medium Enterprises Development Act, 2006.

37. During the FY 2019-20, the fuel consumption data provided by AGCL for the period from April'2019 to September,2019 was observed to be erroneous comparing to the performance of generating sets of LTPS Ph-II and LRPP. The excess gas volume data provided by AGCL and billed by OIL for the above period has been evaluated in financial figure and a debit note is issued for recovering the excess billed amount. The debit note of Rs. 1394.47 Lakhs is accounted in this FY.

38. A Debit Note of Rs. 230.69 Lakh is raised to AGCL towards loss of Power Generation for exceeding the allowable no. of days for Gas Pipeline shut down availed by AGCL.

39. In the Tariff Order passed by AERC on 7th March, 2020, the Commission has approved an amount of Rs.20.40 Crore as revenue surplus which needs to be adjusted with APDCL. This surplus is to be passed on to APDCL in twelve monthly equal installments of Rs. 1.70 Crore in FY 20-21. The regulatory liability of Rs. 20.40 Crore has been provided in accounts against unadjusted balances of regulatory liability appearing in FY 2019-20. The Receivables from APDCL has been reduced to that extent.

40. Certain Staff quarters at KLHEP are occupied by a battalion of CRPF for which rental income is taken on cash basis in accounts due to uncertainty and irregularity of receipt of rent. Hence although bills are raised, accounting is done on as and when received.

41. During the FY, a debit note is issued to APDCL towards delay payment charges for Rs. 3.54 Crore in line with PPA and AERC Regulations.

42. In respect of Gratuity to the employees fall under NPS, a provision has been made in the Accounts for an amount of Rs. 1258.56 lakh.

Leave encashment benefit of employees under NPS are entitled at the time of retirement/ superannuation of the employee. During the period of service the employees avail earned leave at various time as per their need as well as per due approval of the competent authority. So, the ascertainment of the balance leave earned at the end of the year by each employee is not feasible and hence no provision for leave encashment benefit is provided in the accounts. However, the Company is going to implement ERP in the next financial year and the provision for leave encashment benefit shall be made accordingly.

43. Value of imports calculated on C.I.F. basis:
Value of imports calculated on C.I.F. basis incurred during the year 2019-20 on import of Capital goods is Rs. 7,85,08,350/-.

44. Expenditure in foreign currency:
The Expenditure in foreign currency incurred during the year 2019-20 on import of capital goods is Rs. 7,85,08,350/-.

45. Number of employees who are in receipt of emoluments aggregating to Rs.60, 00,000/- per annum or Rs.5,00,000/- per month as per Companies (Particulars of Employees) Rules, 1975 is NIL.

46. An amount of Rs.3,00,00,000/- was sanctioned as overdraft by pledging fixed deposit of Rs.3,00,00,000/- with State Bank of India, New Guwahati Branch.

Details of Fixed Deposits held as margin money or security against borrowing, guarantee, other commitment:



Sl. No	Purpose	Bank	Amount
1	LC against OIL	Indian Bank	2,00,00,000
2	LC against GAIL	Indian Bank	19,89,89,268
3	BG against Guwahati High Court	HDFC Bank	36,00,000
4	LC against M/S VOITH HYDRO	HDFC Bank	7,36,32,000
5	LC against M/S VOITH HYDRO	Axis Bank	2,52,06,811

47. The Company prepares Bank Reconciliation Statement regularly for each bank a/c in its name.

48. Corporate Social Responsibility and Sustainable development

- a) Gross amount required to be spent by the Company during the year: `Rs. 51.41 Lakh
b) Amount spent during the year on: Rs. 13.78 Lakh
c) Work order issued, bills not submitted: Rs.23.17 lakh

49. Details of remuneration to Auditors:

Particulars	Amount including Service Tax (in Rs.)
Statutory Audit Fee	3,56,950.00
Cost Audit Fee	51,600.00
Tax Audit	29,500.00
Total	4,38,050.00

As per our separate report of even date
For K.P SARDA & Co.

Chartered Accountants
Firm Registration No. 319206E

K.P. Sarma

(CA. K P SARDA)
Partner

Membership No.: 054555

Place: GUWAHATI

Date: 07/08/20

UDIN: 20054555AAAAFU3584



For and on behalf of
Assam Power Generation Corporation Limited

Sri V. K. Pipersenia
(Sri V. K. Pipersenia, IAS Retd)
Chairman

Bimala Brahma
(Smti. Bimala Brahma)
Chief Financial Officer
Place: Guwahati
Date: 28th July'2020

Kalyani Baruah
(Smti. Kalyani Baruah)
Managing Director

Nayana Das
(Smti. Nayana Das)
Company Secretary

ASSAM POWER GENERATION CORPORATION LIMITED

ANNEXURE - A

OPERATIONAL PERFORMANCE

Sl. No.	Particulars	2019-20	2018-19	
(1)	(2)	(3)	(4)	
1	Installed Capacity (MW)			
	(a) Thermal			
	(b) Hydel	110.50	105.04	
	(c) Gas	266.46	263.73	
	Total	376.96	368.77	
2	Power Generated (MU)			
	(a) Thermal			
	(b) Hydel			
		KLHEP	398.528	369.288
		MSHEP	28.795	8.731
	(c) Gas			
		NTPS	252.863	314.373
		LTPS	362.006	472.091
		LRPP	504.200	429.976
	Total Generation (MU)	1546.392	1594.459	
3	Auxiliary Consumption (MU)			
	(a) Hydel			
		KLHEP	1.680	1.846
		MSHEP	0.288	0.087
	(b) Gas			
		NTPS	15.012	21.206
		LTPS	37.612	48.603
		LRPP	14.722	12.945
	Total Auxiliary Consumption (MU)	69.314	84.688	
4	Total power available for sale (MU)	1477.077	1509.771	
5	Power sold (MU)	1477.077	1509.771	
6	Units generated per MW of installed capacity (in Lakh unit)	41.0	43.2	
7	Plant Load Factor (%)			
	(a) Thermal			
	(b) Hydel			
		KLHEP	45.41%	42.16%
		MSHEP	34.43%	19.87%
	(c) Gas			
		NTPS	28.50%	35.22%
		LTPS	40.21%	51.54%
		LRPP	82.78%	75.92%
8	Percentage of generation to installed capacity			
	(a) Thermal			
	(b) Hydel	44.15%	41.08%	
	(c) Gas	47.94%	52.65%	
9	Fuel			
	a) Gas Consumption (MMSCM)			
		NTPS	129.017	152.299
		LTPS	130.963	143.33
		LRPP	115.130	99.61
	b) Average calorific value of Gas (Kcal/SCM)			
		NTPS	9158	8279
		LTPS	9389	9149
		LRPP	9389	9149
	c) Gas Consumption per unit of generation (in SCM/Kwh)			
		NTPS	0.5102	0.4845
		LTPS	0.3618	0.3036
		LRPP	0.2283	0.2317

**COMMENTS OF THE COMPTROLLER AND AUDITOR GENERAL OF INDIA
UNDER SECTION 143(6)(b) OF THE COMPANIES ACT, 2013 ON THE ACCOUNTS
OF ASSAM POWER GENERATION CORPORATION LIMITED FOR THE YEAR
ENDED 31 MARCH 2020**

The preparation of financial statements of **Assam Power Generation Corporation Limited** for the year ended **31 March 2020** in accordance with the financial reporting framework prescribed under the Companies Act, 2013 is the responsibility of the Management of the Company. The Statutory Auditors appointed by the Comptroller and Auditor General of India under Section 139(5) of the Companies Act, 2013 are responsible for expressing an opinion on these financial statements under section 143 of the Companies Act, 2013 based on an independent audit in accordance with the auditing standards prescribed under section 143(10) of the Act. This is stated to have been done by them vide their Audit Report dated **7th August 2020**.

I, on behalf of the Comptroller and Auditor General of India have conducted the supplementary audit of the financial statements of **Assam Power Generation Corporation Limited** for the year ended **31 March 2020** under section 143(6)(a) of the Companies Act, 2013 . This supplementary audit has been carried out independently without access to the working papers of the Statutory Auditors and is limited primarily to inquiries of Statutory Auditors and Company personnel and a selective examination of some of the accounting records.

Based on my supplementary audit, I would like to highlight the following significant matters under section 143(6)(b) of the Companies Act, 2013 which have come to my attention and which, in my view, are necessary for enabling a better understanding of the financial statements and the related Audit Report.

A. COMMENTS ON PROFITABILITY

Statement of Profit and Loss

Expenses

Other expenses (Note 21)

Repair and Maintenance of Plant and Machinery ₹15.75 crore

A-1: This is understated by ₹ 2.15 crore due to non-accounting of fixed O&M support expenses payable in respect of Lakwa Thermal Power Station of the Company for the period November 2019 to March 2020. This has correspondingly resulted in understatement of “Other Current Liabilities” and overstatement of “Profit for the year” by 2.15 crore each.

B. COMMENTS ON FINANCIAL POSITION

Balance Sheet

Equities and Liabilities

Current Liabilities

Provisions (Note 15)

Provision for Regulatory liability ₹ 28.70 crore

B1: As per Tariff order for the financial year 2019-20, Namrup Thermal Power Station (NTPS) of the Company was to achieve the minimum availability index of 50 per cent for recovering full fixed cost. In the event of non-achievement of the prescribed minimum availability index, the proportionate annual fixed charges will not be allowed by AERC during truing up of tariff for 2019-20 (Regulation 51.1 of the Multi Year Tariff regulations 2018, read with clause 8.2.6 of the Tariff order for the year 2019-20).

AERC had provisionally allowed annual fixed cost of ₹22.50 crore for NTPS for the financial year 2019-20 subject to achievement of minimum availability index. Though the Company could achieve availability index of 32.44 per cent for NTPS during 2019-20, it did not make provision for proportionate annual fixed cost to be refunded to APDCL due to under achievement of availability index.

This has resulted in understatement of ‘Provision for Regularity liability’ by ₹ 7.90 crore with corresponding overstatement of ‘Profit for the year’ to the same extent.

B2: Refer comment (no. B 1) issued on the Accounts for the year 2018-19 regarding not writing back the excess ‘provision against regulatory liability’ (₹ 57.46 crore).

During the year 2019-20, AERC while truing up the tariff for 2018-19 and disposing Review petition on tariff order for 2017-18, declared refundable revenue surplus of ₹ 28.76 crore for 2018-19 (20.40 crore) and 2017-18 (₹ 8.36 crore).

The declared revenue surplus for two years (2018-19 and 2017-18) was to be refunded to APDCL during 2020-21 and 2019-20 respectively. Accordingly, out of the provisions for regulatory liability (₹ 57.46 crore) available as on 1 April 2019, the Company should have kept the closing balance of provisions at ₹ 20.40 crore (equivalent to revenue surplus (2018-19) refundable during 2020-21) and writing back the excess provision (₹ 28.70 crore) to 'Other Equity' after adjusting the revenue surplus of ₹ 8.36 crore (2017-18) refundable during 2019-20. On the contrary, the Company adjusted the entire declared refundable surplus (₹ 28.76 crore) against the aforesaid provision and credited (reduced) the corresponding amount to "Trade Receivables-receivables against sale of power-APDCL".

This has resulted in overstatement of 'Provision for Regulatory Liability' by ₹ 8.30 crore, understatement of 'Other Equity' by ₹28.70 crore with corresponding understatement of 'Trade Receivable-Current Financial Assets' (Note6-I) by ₹20.40 crore.

C. COMMENTS ON DISCLOSURE

C1: The Company booked ₹ 13.94 crore under 'fuel related receivables & claims (OIL)-other current assets' (Note-7) against excess gas volume billed by M/s Oil India Limited(Oil) for the period April 2019 to September 2019 based on a debit note issued (March 2020) on OIL. The claim of the Company has not been confirmed/accepted by OIL, while submitting 'station-wise' outstanding balances (as on 31 March 2020) to the Company, which was also accepted by the latter without any protest. The fact that the debit note has not been accepted merits for appropriate disclosure under 'Notes on Accounts'.

C2: The Company has not disclosed in Accounting policy for accounting of items of income/expense based on regulatory issues indicating "truing up" orders of AERC.

For and on the behalf of the

Comptroller and Auditor General of India

Place : Guwahati

Date : 06-11-2020

Principal Accountant General (Audit), Assam

AUDITORS' COMPLIANCE CERTIFICATE

We have conducted the audit of accounts of **ASSAM POWER GENERATION CORPORATION LIMITED** having its registered office at **BIJULEE BHAWAN, PALTAN BAZAR, GUWAHATI** for the financial year ended on March 31, 2020 in accordance with the directions/sub-directions issued by the Comptroller & Auditor General of India under section 143 (5) of the Companies Act 2013 and certify that we have complied with all the directions / sub directions issued to us.

UDIN : 20054555AAAAFU3584
Place : Guwahati
Date : 07/08/2020



For K P Sarda & Co.
Chartered Accountants
FRN : 319206E


(CA. K P Sarda)
Partner

Membership No. 054555

INDEPENDENT AUDITORS' REPORT

TO THE MEMBERS OF ASSAM POWER GENERATION CORPORATION LIMITED

Report on the Audit of the Standalone Financial Statements

1. Opinion

We have audited the accompanying standalone financial statements of **ASSAM POWER GENERATION CORPORATION LIMITED ("the company")** which comprises the Balance Sheet as at March 31, 2020, the Statement of Profit and Loss (including other comprehensive income), statement of changes in equity and statement of cash flows for the year then ended, and notes to the standalone financial statements, including a summary of significant accounting policies and other explanatory information (hereinafter referred to as "the standalone financial statements").

In our opinion and to the best of our information and according to the explanations given to us, except for the possible effects of the matter described in the Basis for Qualified Opinion paragraphs, the aforesaid standalone IND-AS financial statements give the information required by the Companies Act 2013 ("Act") in the manner so required and give a true and fair view in conformity with the accounting principles generally accepted in India, of the state of affairs of the Company as at March 31, 2020, and its profit, total comprehensive income, the changes in equity and cash flows for the year ended as on that date.

2. Basis for Qualified Opinion

We conducted our audit in accordance with the Standards on Auditing (SAs) specified under section 143(10) of the Companies Act, 2013. Our responsibilities under those Standards are further described in the Auditor's Responsibilities for the Audit of the Financial Statements section of our report. We are independent of the Company in accordance with the Code of Ethics issued by the Institute of Chartered Accountants of India together with the ethical requirements that are relevant to our audit of the financial statements under the provisions of the Companies Act, 2013 and the Rules thereunder, and we have fulfilled our other ethical responsibilities in accordance with these requirements and the Code of Ethics. Our observations on which our opinion is based have been attached as per Annexure C. We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our qualified opinion on the standalone Ind-AS financial statements.



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3. Key Audit Matters

Key audit matters are those matters that, in our professional judgment, were of most significance in our audit of the financial statements of the current period. These matters were addressed in the context of our audit of the financial statements as a whole, and in forming our opinion thereon, and we do not provide a separate opinion on these matters.

Reporting of key audit matters as per SA 701, Key Audit Matters are not applicable to the Company as it is an unlisted company.

4. Other Information

The Company's Board of Directors is responsible for the preparation of the other information. The other information comprises the information included in the Board's Report including annexures to Board's Report, Business Responsibility Report but does not include the standalone financial statements and our auditor's report thereon.

Our opinion on the standalone financial statements does not cover the other information and we do not express any form of assurance conclusion thereon.

In connection with our audit of the standalone financial statements, our responsibility is to read the other information and, in doing so, consider whether the other information is materially inconsistent with the standalone financial statements or our knowledge obtained during the course of our audit or otherwise appears to be materially misstated.

If, based on the work we have performed, we conclude that there is a material misstatement of this other information. we are required to report the fact. We have nothing to report in this regard.

5. Responsibility of Management for the Standalone Financial Statements

The Company's board of directors is responsible for the matters stated in section 134 (5) of the Act with respect to the preparation of these financial statements that give a true and fair view of the financial position, financial performance including other comprehensive income, cash flows and changes in equity of the Company in accordance with the Indian Accounting Standards (Ind AS) prescribed under section 133 of the Act read with the **Companies (Indian Accounting Standards) Rules, 2015** and **Companies (Indian Accounting Standards) Rules, 2016**, as amended from time to time, and other accounting principles generally accepted in India.



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This responsibility also includes maintenance of adequate accounting records in accordance with the provisions of the Act for safeguarding of the assets of the Company and for preventing and detecting frauds and other irregularities; selection and application of appropriate accounting policies; making judgments and estimates that are reasonable and prudent; and design, implementation and maintenance of adequate internal financial controls, that were operating effectively for ensuring the accuracy and completeness of the accounting records, relevant to the preparation and presentation of the financial statement that give a true and fair view and are free from material misstatement, whether due to fraud or error.

In preparing the financial statements, management is responsible for assessing the Company's ability to continue as a going concern, disclosing, as applicable, matters related to going concern and using the going concern basis of accounting unless management either intends to liquidate the Company or to cease operations, or has no realistic alternative but to do so.

The Board of Directors are also responsible for overseeing the company's financial reporting process.

6. Auditor's Responsibility for the Audit of the Financial Statements




Our objectives are to obtain reasonable assurance about whether the financial statements as a whole are free from material misstatement, whether due to fraud or error, and to issue an auditor's report that includes our opinion. Reasonable assurance is a high level of assurance, but is not a guarantee that an audit conducted in accordance with SAs will always detect a material misstatement when it exists. Misstatements can arise from fraud or error and are considered material if, individually or in the aggregate, they could reasonably be expected to influence the economic decisions of users taken on the basis of these financial statements.

As part of an audit in accordance with SAs, we exercise professional judgment and maintain professional skepticism throughout the audit. We also:



- Identify and assess the risks of material misstatement of the financial statements, whether due to fraud or error, design and perform audit procedures responsive to those risks, and obtain audit evidence that is sufficient and appropriate to provide a basis for our opinion. The risk of not detecting a material misstatement resulting from fraud is higher than for one resulting from error, as fraud may involve collusion, forgery, intentional omissions, misrepresentations, or the override of internal control.



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:: 4 ::

- Obtain an understanding of internal control relevant to the audit in order to design audit procedures that are appropriate in the circumstances. Under section 143(3)(i) of the **Companies Act, 2013**, we are also responsible for expressing our opinion on whether the company has adequate internal financial controls system in place and the operating effectiveness of such controls
- Evaluate the appropriateness of accounting policies used and the reasonableness of accounting estimates and related disclosures made by management.
- Conclude on the appropriateness of management's use of the going concern basis of accounting and, based on the audit evidence obtained, whether a material uncertainty exists related to events or conditions that may cast significant doubt on the Company's ability to continue as a going concern. If we conclude that a material uncertainty exists, we are required to draw attention in our auditor's report to the related disclosures in the financial statements or, if such disclosures are inadequate, to modify our opinion. Our conclusions are based on the audit evidence obtained up to the date of our auditor's report. However, future events or conditions may cause the Company to cease to continue as a going concern.
- Evaluate the overall presentation, structure and content of the financial statements, including the disclosures, and whether the financial statements represent the underlying transactions and events in a manner that achieves fair presentation.

We communicate with those charged with governance regarding, among other matters, the planned scope and timing of the audit and significant audit findings, including any significant deficiencies in internal control that we identify during our audit.

We also provide those charged with governance with a statement that we have complied with relevant ethical requirements regarding independence, and to communicate with them all relationships and other matters that may reasonably be thought to bear on our independence, and where applicable, related safeguards.

From the matters communicated with those charged with governance, we determine those matters that were of most significance in the audit of the financial statements of the current period and are therefore the key audit matters. We describe these matters in our auditor's report unless law or regulation precludes public disclosure about the matter or when, in extremely rare circumstances, we determine that a matter should not be communicated in our report because the adverse consequences of doing so would reasonably be expected to outweigh the public interest benefits of such communication.



Contd...P/5..

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7. Report on other legal and regulatory requirements

1. As required by the Companies (Auditor's Report) Order, 2016 ("the Order") issued by the Central Government of India in terms of sub-section (11) of section 143 of the Companies Act, 2013, we give in the Annexure "A" a statement on the matters specified in paragraphs 3 and 4 of the Order, to the extent applicable

2. As required by section 143 (3) of the Act, we report that:

- a. We have sought and except for the matters described in the Basis for qualified opinion paragraph, obtained all the information and explanations which to the best of our knowledge and belief were necessary for the purpose of our audit.
- b. Except for the possible effects of the matter described in the Basis for qualified opinion paragraph above, in our opinion proper books of account as required by law have been kept by the company so far as it appears from our examination of those books (and proper returns adequate for the purposes of our audit have been received from branches not visited by us)
- c. The Balance Sheet, the Statement of Profit and Loss and Cash Flow statement dealt with by this report are in agreement with the books of account (and with the returns received from branches not visited by us)
- d. Except for the possible effects of the matter described in the Basis for qualified opinion paragraph above, In our opinion, the aforesaid standalone financial statements comply with the Accounting Standards specified under section 133 of the Act, read with Rule 7 of the Companies (Accounts) Rules, 2014.
- e. In terms of MCA Notification dated 05.06.2015 under section 462 of the Companies Act, 2013, provisions relating to disqualification of directors for five years under section 164(2) of the act are not applicable to Government Companies.
- f. With respect to the adequacy of the internal financial controls over financial reporting of the Company and the operating effectiveness of such controls, refer to our separate report in "Annexure B".



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g. With respect to the other matters to be included in the Auditor's Report in accordance with Rule 11 of the Companies (Audit and Auditors) Rules, 2014, in our opinion and to the best of our information and according to the explanations given to us :

i) Necessary information has not been furnished in respect of other pending litigations existing as on the date of the financial statement and whether existence of such liability whether reported or not have material impact on the financial statement also not stated and hence unable to comment.

ii) The company did not have any long term contracts including derivative contracts for which there were any material foreseeable losses.

iii) There were no amounts which were required to be transferred to the Investor Education and Protection Fund by the Company.

3. As required under section 143 (5) of the Companies Act 2013, we give in Annexure-D to this report, a statement on the directions issued by the Comptroller and Auditor General of India.

UDIN : 20054555AAAAFU3584
Place : Guwahati
Date : 07/08/2020



For K P Sarda & Co.
Chartered Accountants
FRN : 319206E



(CA. K P Sarda)
Partner
Membership No. 054555

ANNEXURE A TO THE AUDITOR'S REPORT

With Reference to paragraph 1 under the heading "**Report on other legal and regulatory requirements**" of the report of the auditor's to the members of **ASSAM POWER GENERATION CORPORATION LIMITED** on the accounts for the year ended on 31st March, 2020 we report that:

- (i) (a) The company has not maintained proper records showing full particulars including quantitative details and situation of fixed assets.
- (b) As reported, the company does not have any policy of physical verification of fixed assets and hence question of adjustment of discrepancies if any does not arise. However, external agencies have been appointed for the verification of assets and the process is expected to be completed in FY 2020-21.
- (c) The title deeds of immovable properties held in the name of the company was not produced before us for verification. As per the previous auditor's comment, the title deeds of land measuring 19 Bighas, 1 Katha & 15 Lechas at Namrup Thermal Power Station, Namrup was not in the name of the corporation and same is still persisting.
- (ii) As explained to us, the Company has not conducted physical verification of inventories during the year end but they have already engaged external agencies for the same. The verification procedure is expected to completed in FY 2020-21.
- Moreover, the value of Other Material Account and Provision against stock are same as they were as at 31st March, 2017 and the same need to be reviewed.
- (iii) According to information and explanations given to us and on the basis of our examination of the books of accounts, the company has not granted any loans to bodies corporate & other parties covered in the register maintained under section 189 of the Companies Act, 2013 during the year. Accordingly, sub clause (a), (b) and (c) are not applicable.
- (iv) According to information and explanation given to us, the company has complied with the provisions of Section 185 & 186 of the Companies Act, 2013 in respect of loans, investments, guarantees and security.
- (v) Based on our scrutiny of the Company's records and according to information and explanation given to us, we are of the opinion that the company has not accepted any deposits from the public during the year.



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- (vi) We have broadly reviewed the cost records maintained by the company pursuant to the rules made by the Central Government for maintenance of cost records under Section 148(1) of the Companies Act, 2013 and we are of the opinion that prima facie the prescribed accounts and records have been made and maintained. We have however not made a detailed examination of the said records as we were unable to visit the production units of the company due to Covid-19 restrictions with a view to determine the accuracy or completeness of the record.
- (vii) According to information and explanation given to us and the books of accounts examined by us in respect of statutory dues of the Company :
- (a) According to the information and explanations given to us, and on the basis of our examination of the records of the company, amounts deducted/accrued in the books of account in respect of statutory dues including provident fund, income tax, sales tax, value added tax, wealth tax, service tax, duty of customs, excise duty, cess and other material statutory dues have been regularly deposited during the year by the company with appropriate authorities. There are no undisputed statutory dues as on the last day of the financial year concerned for a period of more than six months from the date they became payable.
- (b) According to the information and explanation given to us, there are no disputed amounts payable in respect of income tax, sales tax, value added tax, customs duty, excise duty, cess and other material statutory dues outstanding as at the year end.
- (viii) In our opinion and according to the information and explanations given to us, the Company has not defaulted in the repayment of dues to financial institutions, banks or debenture holders during the year except to the State Government where principal and interest is not being repaid.
- (ix) In our opinion and according to the information and the explanations given to us, the Company did not raise money either through Initial Public Offer or further Public Offer including debt instruments during the year. In our opinion and according to explanation given to us, we state that we cannot comment on the utilization of the term loans raised by the company as the company is not maintaining any project wise investment and source of investment details.



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- (x) During the course of our examination of the books and records of the company, carried out in accordance with the generally accepted auditing practice in India and according to information and explanation given to us, we have neither come across any instance of material fraud on or by the company, noticed or reported during the year, nor have we been informed of any such case by management.
- (xi) As per the Notification dated 05.06.2015 issued by Ministry of Corporate Affairs, the provisions of section 197 relating to managerial remuneration shall not apply to a Government company.
- (xii) In our opinion, the Company is not a Nidhi Company. Hence, the matters relating to Nidhi Company is not applicable in case of the company.
- (xiii) According to the information and explanations given to us and based on our examination of the records of the company, transactions entered by the company with the related parties are in compliance with section 177 and 188 of the Companies Act, 2013. Where applicable, the details of such transactions have been disclosed in the Financial Statements as required by the applicable accounting standards.
- (xiv) Based upon the audit procedures performed and the information and explanations given by the management, the company has not made any preferential allotment or private placement of shares or fully or partly convertible debentures during the year under review. Accordingly, the provisions of clause 3 (xiv) of the Order are not applicable to the Company and hence not commented upon.
- (xv) Based upon the audit procedures performed and the information and explanations given by the management, the company has not entered into any non-cash transactions with with directors or persons connected to him and therefore, provisions of clause 3(xv) of the order are not applicable to the Company.
- (xvi) According to available information and in our opinion, the company is not required to be registered under section 45 IA of the Reserve Bank of India Act, 1934. Accordingly the provisions of clause 3(xvi) of the order are not applicable to the Company.

For K P Sarda & Co.
Chartered Accountants
FRN : 319206E





(CA. K P Sarda)
Partner

Membership No. 054555

UDIN : 20054555AAAAFU3584
Place : G u w a h a t i
Date : 07/08/2020

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ANNEXURE 'B' TO THE INDEPENDENT AUDITOR'S REPORT

Report on the Internal Financial Controls under Clause (i) of Sub-section 3 of Section 143 of the Companies Act, 2013 ("the Act")

We have audited the internal financial controls over financial reporting of **ASSAM POWER GENERATION CORPORATION LIMITED** as of March 31, 2020 in conjunction with our audit of the financial statements of the Company for the year ended on that date.

Management's Responsibility for Internal Financial Controls

The Company's Management is responsible for establishing and maintaining internal financial controls based on the internal control over financial reporting criteria established by the Company considering the essential components of internal control stated in the Guidance Note on Audit of Internal Financial Controls Over Financial Reporting ('the Guidance Note') issued by the Institute of Chartered Accountants of India ('ICAI'). These responsibilities include the design, implementation and maintenance of adequate internal financial controls that were operating effectively for ensuring the orderly and efficient conduct of its business, including adherence to Company's policies, the safeguarding of its assets, the prevention and detection of frauds and errors, the accuracy and completeness of the accounting records, and the timely preparation of reliable financial information, as required under the Companies Act, 2013.

Auditors' Responsibility

Our responsibility is to express an opinion on the Company's internal financial controls over financial reporting based on our audit. We conducted our audit in accordance with the Guidance Note and the Standards on Auditing ('the Standards'), issued by the ICAI and deemed to be prescribed under section 143(10) of the Act, to the extent applicable to an audit of internal financial controls. Those Standards and the Guidance Note require that we comply with ethical requirements and plan and perform the audit to obtain reasonable assurance about whether adequate internal financial controls over financial reporting was established and maintained and if such controls operated effectively in all material respects.

Our audit involves performing procedures to obtain audit evidence about the adequacy of the internal financial controls system over financial reporting and their operating effectiveness. Our audit of internal financial controls over financial reporting includes obtaining an understanding of internal financial controls over financial reporting, assessing the risk that a material weakness exists, and testing and evaluating the design and operating effectiveness of internal control based on the assessed risk. The procedures selected depend on the auditor's judgement, including the assessment of the risks of material misstatement of the financial statements, whether due to fraud or error.

We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our audit opinion on the Company's internal financial controls system over financial reporting.

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Meaning of Internal Financial Controls over Financial Reporting

A Company's internal financial control over financial reporting is a process designed to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles. A Company's internal financial control over financial reporting includes those policies and procedures that (1) pertain to the maintenance of records that, in reasonable detail, accurately and fairly reflect the transactions and dispositions of the assets of the Company; (2) provide reasonable assurance that transactions are recorded as necessary to permit preparation of financial statements in accordance with generally accepted accounting principles, and that receipts and expenditures of the Company are being made only in accordance with authorizations of management and directors of the Company; and (3) provide reasonable assurance regarding prevention or timely detection of unauthorised acquisition, use, or disposition of the Company's assets that could have a material effect on the financial statements.

Inherent Limitations of Internal Financial Controls over Financial Reporting

Because of the inherent limitations of internal financial controls over financial reporting, including the possibility of collusion or improper management override of controls, material misstatements due to error or fraud may occur and not be detected. Also, projections of any evaluation of the internal financial controls over financial reporting to future periods are subject to the risk that the internal financial control over financial reporting may become inadequate because of changes in conditions, or that the degree of compliance with the policies or procedures may deteriorate.

Opinion

The system of internal financial controls over financial reporting with regard to the Company were not made available to us to determine if the Company has established adequate internal financial control over financial reporting and whether such internal financial controls were operating effectively as at March 31, 2020.

We have considered the disclaimer reported above in determining the nature, timing and extent of audit tests applied in our audit of the standalone financial statements of the Company, and the disclaimer has affected our opinion on the financial statements of the standalone Company and we have issued a qualified opinion on the financial statements.

UDIN : 20054555AAAAFU3584
Place : G u w a h a t i
Date : 07/08/2020



For K P Sarda & Co.
Chartered Accountants
FRN : 319206E



(CA. K P Sarda)
Partner

Membership No. 054555

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Annexure "D" to the Independent Auditors' Report

Referred to in paragraph 3 under the heading "Report on other legal and regulatory requirements" of our Report on even date

DIRECTIONS UNDER SECTION 143(5) OF THE COMPANIES ACT, 2013

S.No.	Directions	Reply
1	Whether the company has system in place to process all the accounting transactions through IT system? If yes, the implications of processing of accounting transactions outside IT system on the integrity of the accounts along with the financial implications, if any, may be stated.	As informed to us the Company doesn't have any system in place to process all the accounting transactions through IT system.
2	Whether there is any restructuring of an existing loan or cases of waiver/write off of debts /loans/interest etc. made by a lender to the company due to the company's inability to repay the loan? If yes, the financial impact may be stated.	As per information given to us, there was no case of restructuring of an existing loan or cases of waiver/ write off of debts/ loans/ interest etc. made by a lender to the company due to the company's inability to repay the loan,
3	Whether funds received/receivable for specific schemes from central/ state agencies were properly accounted for/ utilized as per its term and conditions? List the cases of deviation.	On our verification, it appeared that the company has maintained project wise details of expenses and while auditing the financial statement of the corporation we have not noticed any such deviations.

UDIN : 20054555AAAAFU3584

Date : 07/08/2020

Place : Guwahati



For M/s. K P Sarda & Co.
Chartered Accountants
FRN No. 319206E

(Handwritten signature)

(CA. K P Sarda)
Partner

Membership No. 054555

ANNEXURE C TO THE INDEPENDENT AUDITORS REPORT

FOR THE YEAR ENDED 31.03.2020

(Referred to in Paragraph 2 of our report of even date)

1. **BORROWINGS**

A) **UNSECURED LOAN**

GOVT LOAN

The company avails loan from State Govt for various projects under state plan. The sanction letter of Government in respect of Govt. Loans received during the year was produced during audit.

The Company is not repaying loans to GOA and consequently making provisions for penal interest in its books of accounts. During the year under audit the Company has booked an amount of Rs. 1406.28 lakhs against penal interest. It is pertinent to mention that the AERC does not allow/ consider, any penal interest amount paid by the company to the suppliers/vendors/lenders, for determination of tariff. Hence, the Company may have to absorb all penal interest amount payable to GOA as it may not be realisable through tariff as revenue.

As per last auditors observation relating to FY 2017-18, there was calculation error and penal interest amounting to Rs. 836.96 lakhs should have been booked instead of Rs. 871.00 lakhs. The difference amount to the tune of Rs. 34.04 lakhs pertaining to FY 2017-18 has been adjusted in the current year financials.

ADB LOAN

The Company is treating the amount received from ADB (Asian Development Bank) at par with amount received from Government of Assam (GOA). The funding pattern for the same is considered in the ratio 90:10, whereby 90% of the fund received is treated as Grant and remaining 10% is treated as loan (Circular regarding the same not made available to us). Consequently, the Company is providing interest on the loan component @ 10% p.a. at par with loan from GOA.



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As per Schedule III of The Companies Act, 2013 the amount of instalments payable in next twelve months from the Balance sheet Date shall be classified under the Head Other Current Liabilities – Current Maturities of Long Term Debt. But the said Disclosures requirements have not been duly complied in the case of ADB Loan as repayment terms and other conditions are yet to be confirmed by GoA. We suggest that the terms should be finalised as early as possible, in absense of which the Borrowings has been overstated and Other current liabilities has been understated in the balance sheet.

PFC LOAN

The difference of Rs. 10.74 lakhs pertaining to the PFC Loan Balance relating to FY 2018-19 have been adjusted with the CWIP Balance and the figure have been reinstated for FY 2018-19.

2. OTHER NON CURRENT LIABILITIES

GPF

A sum of Rs. 6092.98 lakhs is shown under the above head which represents the amount of subscription, GPF Advance made; recovery of such advance and final withdrawal of GPF of the employees of its erstwhile organisation ASEB who were absorbed by APGCL and interest provision made thereon. But, due to non inclusion of the name of APGCL in the schedule to the Provident Fund Act, 1925 and non-approval of the APGCL Trust Regulation and APGCL GPF Rules 2011 by the Govt. Of Assam, the above amount is still lying under the above head and is being used by the Company and no specific investment of the same is made. Also the learned AERC had directed the Company to maintain separate account for the amounts received from the employees towards provident fund & its utilisation to be duly audited by statutory audit but the same is not followed.

Employee wise liability of GPF as on 31.03.2020 for the purpose of verification of liability shown in the books of accounts was furnished to us and on verification of the same, it was found that Rs. 3215.50 lakhs is shown excess in the books of accounts of the corporation which needs to be rectified. The necessary rectification of the same is not yet made in the financials of the corporation. The same has been shown as "**Liability pending to be Written Off**" under the head "**OTHER NON CURRENT LIABILITIES**"



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TRADE PAYABLES

Trade Payable represents liability towards OIL & GAIL for supply of fuel to the power stations of the Company at Lakwa and Namrup and liability towards Assam Gas Company Ltd. (AGCL) for transportation of Gas. The total outstanding amount payable to these suppliers as per the books of accounts stood at Rs 5591.70 lakhs as on 31.03.2020. The balance of GAIL and OIL (subject to Rs. 336.36 lakhs related to MGQ Bill) is matching with the confirmation produced before us for verification but the balance of AGCL needs to be reconciled and actual liability shall be booked in the books of accounts. The present practice of recognising liability as per corporation's book and showing the balance liability as contingent liability should be done away with.

According to IND-AS-37, a contingent liability is :

(a) a possible obligation that arises from past events and whose existence will be confirmed only by the occurrence or non-occurrence of one or more uncertain future events not wholly within the control of the entity; or

(b) a present obligation that arises from past events but is not recognised because: (i) it is not probable that an outflow of resources embodying economic benefits will be required to settle the obligation; or (ii) the amount of the obligation cannot be measured with sufficient reliability.

Hence, a contingent liability should only be recognised if the above two parameters are met with and that should be properly disclosed in the notes to account of the company. We have not found reason to book the amount as contingent liability as the amount charged by AGCL is as per the agreement executed between APGCL and AGCL.



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3. OTHER CURRENT LIABILITIES

A) PROVISIONS FROM EMPLOYEE BENEFIT

Employees' contribution and recoveries – Miscellaneous Recoveries from Staff amounting to Rs 139.35 lakhs

The amount of miscellaneous recoveries from staff amounting to Rs. 139.35 lacs are long outstanding entries and need to be reviewed.

B) OTHER PAYABLES

(i) Deposits and Retention from Suppliers and Contractors – Rs 8337 Lakhs.

The details of liability as shown under the above head were not available during the audit.

**(ii) Liabilities For Capital Supplies/Works – Rs 5066.43 Lakhs
Liabilities for Supplies Works (O&M) – Rs 1639.07 Lakhs.**

No age wise, party wise, bill wise breakup of the above two heads was furnished. The company has not maintained any sub ledger maintained as such we could not verify whether the liability is long outstanding requiring write off if any and its impact on the financial statements. Further, no balance confirmation from the parties was produced for verification.

(iii) Other liabilities – Rs 5321.44 lakhs

The following amount are shown under the above head

Railway Credit Notes –Coal – Rs 1851.15 lakhs

Income Tax deducted at source on payment to contractors – Rs 37.80 lakhs

Amounts received from Govt. towards settlement of Bordikorai liability – Rs 2204.25 lakhs

Liability for Assam Sales Tax (VAT)/GST – Rs 53.02 lakhs.

Liability for Entry Tax – Rs. 3.73 lakhs

Income received in Advances – Rs. 1067.85 lakhs

Other miscellaneous liabilities – Rs 103.63 lakhs



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Out of above, Railway Credit Notes-Coal & Other Miscellaneous Liability of Rs 1851.15 lakhs and Rs 103.63 lakhs are long outstanding and are brought forward balances. Moreover, liabilities to railways for coal amounting to Rs. 739.37 lakhs are also long outstanding.

These long outstanding entries need to be reviewed and restructuring of the accounts should be done as early as possible.

4. **FIXED ASSETS**

The company has not maintained records, showing particulars including details and situation of Fixed Assets. Further title deeds of freehold land as on 31.03.2020 was not produced to us for our verification.

We have been informed that the Fixed Assets have not been physically verified by the management during the year. However, as reported to us, the management has started the process for valuation and verification of fixed assets and the same is expected to be completed during the FY 20-21.

5. **INVENTORY**

As explained to us, the Company has not conducted any physical verification of inventories during the year end but we have been informed by the management that the company has started the process for valuation and verification of inventories and the same is expected to be completed during the FY 20-21. Hence the accuracy of the figure of inventories as shown in the financial statements cannot be relied upon.

Further, the Company has made a provision against stock for Rs 3203.05 lakhs and other material account amounting to Rs. 1,312.04 lakhs which is being continued as such since last several years and no basis for such provision could be produced to the audit. Therefore, we cannot comment on such provision. However, the process of verification and valuation of inventories have already been started and according to the management commentary, the same will be adjusted once the entire verification process is completed.

An amount of ₹ 0.39 lakhs which was the figure of negative stock during the year 2018-19 has been rectified in the current year financials.



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6. **BALANCE WITH BANK**

Account Balance statements of bank accounts were produced before audit and verified. The old non reconciled entries appearing in the bank reconciliation statement of the corporation has been rectified and necessary adjustments has been made in the current year financials.

A credit balance of Rs. 49,680/- was shown under Cash at bank during the FY 2018-19 in the name of Inter Unit Accounts (fund transfer from head office). The ledger was in the nature of Cash in Transit. The same has been rectified in the current year financials.

7. **FIXED DEPOSIT WITH BANK**

As per the observations of the last financial year 2018-19, there was a difference to the tune of Rs. 874.69 lakhs in the book balance and bank balance of the fixed deposits. The same has been rectified during the current financial year by reinstating the financial statements of the last year.

The balance as per FD Statements received from banks is matching with the balance as per books of accounts. However the interest on FD as recorded in the financial statements could not be verified from the Form 26AS of the Income Tax Department as the same was not updated till the date of our verification.

8. **LOANS**

The following amount are shown under the above head
Advance for O&M supplies/works – Rs 6756.89 lakhs
Loans and advances to staff – Rs 31.78 lakhs
Others - Rs. 52.59 lakhs

Party wise details and staff wise details of the above figure along with ledgers (if any) was not made available to us.



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9. **OTHER CURRENT ASSETS**

Other Current Assets include Fuel related Receivables & Claims {Railway claims for Coal}, Advance recoverable from Contractors, Deposits and Miscellaneous Receivable having Closing Balance of Rs 747.91 lakhs, Rs 144.05 lakhs, Rs 0.35 lakhs, Rs 9790.44 lakhs are all opening figures and old outstanding carried forward balances which requires proper adjustment or write off after fulfilment of necessary formalities. As the figures are long outstanding and proper details are also not available on record, such figures cannot be classified as current assets. Necessary adjustments are required to be made in the books of the accounts.

As per the notes of the corporation, other receivables includes portion of unfunded liabilities to be received from the Pension Trust on account of GPF & LEB payment, which is receivable since past many years and is not yet received. Such long outstanding receivables cannot be classified as current assets. The same should be rectified and reclassified as non current assets since the time frame involved in more than 12 months.

10. **OTHER INCOME**

It has been observed from the internal audit report of FY 2018-19 that an army unit is residing at LTPS campus, however APGCL has not recovered any amount with respect to rent and electricity consumption amounting to Rs. 21.70 lakhs and the same issue was also pointed out in the previous year audit report. Such blockade of outstanding revenue receipts are costing huge financial loss for the company.

Further more, a battalion of CRPF has occupied staff quarters at Karbi Langpi (KLHEP) on rent. The company is raising bill but the same has not been accounted for in the books of the company which is in gross violation of Ind AS 115. The total amount not accounted for during FY 2019-20 is amounting to Rs. 371,904/- and no realisation has been made against the same.

Both the above point has resulted in an understatement of income and current assets in the financial statements.



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11. EMPLOYEE BENEFIT EXPENSES

The company has two categories of employees one being those who were in service of erstwhile ASEB and became employee of the company on bifurcation and other category being employees appointed by the company after its formation. As regard to employees of erstwhile ASEB the company is contributing @33.50% of basic pay plus D.A. to the pension trust for all post employment benefit of those employees including pension, gratuity & leave encashment. But settlement of claim relating to P.F % leave encashment is done by the company and is claimed form the pension trust with as defined ratio of the past unfunded liability. Thus the contribution made for such employees are in the nature of defined benefit plan and no actuarial gain or losses is ascertained & provided for. Due to non accounting of actuarial gain or loss & non availability of details of plan we could not ascertain its impact on the financial statement & profitability of the company. As regard other category of the employees employed by the company it is making contribution towards national pension scheme which is defined contributory plan. But for leave encashment no provision is made & no actuarial liability is ascertained. However disclosure has been made in the notes to accounts attached to the financial statements.

As such the loss of the company is understated by understating long term liability to the extent of actuarial amount of leave encashment payable for the service rendered during the year under audit & in past years.

No proper explanation could be furnished before audit and hence we cannot comment on the employee benefit cost incurred by the Company.

As per Section 21 of the Contract Labour (Regulation and Abolition) Act, 1970, the principal employer and contractor have responsibility to maintain registers and records of contract labours, work performed by them, wages and other particulars as specified in the rule. The Company however is not maintaining any registers and records of contract labours and thus violating provisions of contract Labour (Regulation and Abolition) Act, 1970.



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12. **OTHER EXPENSES**

The company had included in point 21 of the notes to the statement of profit and loss wherein an amount of Rs. 33.65 lakhs was claimed as other expenses being tax payable raised by the Income tax Department relating to AY 2010-11. The same was rectified during the course of our audit and adjusted with the Surplus/(Deficit) in the Statement of Profit and Loss under the head "OTHER EQUITY".

13. **PROVISIONS, CONTINGENT LIABILITIES AND CONTINGENT ASSETS**

Further, as mentioned in Point no. 2 above, the company has not booked any liability towards interest for delayed payment instead the company has shown the entire amount of difference payable to AGCL by way of footnotes under the head Contingent Liabilities.

No suit register, if any maintained as such we could not verify whether any suit against the company is pending and amount involved therein.

No register of contingent liability and / or of capital commitment, if any maintained is maintained and no such sum is shown as contingent liability and capital commitment by the company where huge capital commitment was outstanding as at 31/03/2020 in respect of ongoing projects of NRPP, LRPP, LWHRP, NWHRP, LKHEP etc. quantification of which cannot be done by us for want of details.

Therefore, in our opinion the requirements of INS-AS: 37 have not been compiled.

14. **IMPAIRMENT OF ASSETS**

The company has adopted the policy of determination of impairment loss and charging the same to the statement of profit and loss and the same is spelt out in policy no. M of significant accounting policies.

There are indication that asset of company might have impaired as the company has undertaken replacement power project for both of its main producing units viz. LTPS, NTPS and CTPS is shut down long ago but no exercise is carried out to find whether there is any impairment loss. However, as per the management comments, the company has started the process of verification and valuation of assets and ascertainment of impairment of assets will be done once the process is completed in FY 20-21.

Contd...P/10..

15. OTHER POINTS AND DISCLAIMER REGARDING NON VISIT OF UNITS

1. We were not able to visit various units of the corporation viz. LTPS, NTPS and KHLEP due to the travel restrictions in place all over the state with a view to combat the spread of Covid-19 virus. As such, we have relied upon the management statements regarding the transactions in the units. We have not physically verified any of the records of the units and hence we cannot comment on the accuracy of the same.

2. The internal audit reports for the FY 2019-20 with respect to various units were not made available to us as the same was not completed till the date of our audit. The delay is attributable to the outbreak of Covid-19 and travel restrictions in place. We have also not verified the compliance status of the observations pointed out in the internal audit report of FY 2018-19 due to non-visit of the units. As such, we cannot comment on the compliance status of the same.

3. Although, bank statements and BRS of the various units were produced before us for verification, we were unable to make an in-depth analysis of the transactions due to non visit of units. The vouching and physical verification have not been made due to the reasons listed above in point no. 1.

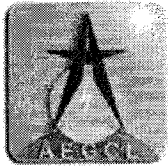
UDIN : 20054555AAAAFU3584
Place : Guwahati
Date : 07/08/2020



For K P Sarda & Co.
Chartered Accountants
FRN : 319206E



(CA. K P Sarda)
Partner
Membership No. 054555



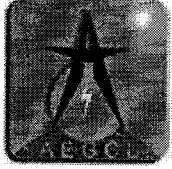
TO WHOM IT MAY CONCERN

This is to certify that the plant wise Gross Generation, Import, Export, Auxiliary Consumption and Plant Availability Factor of LTPS, LRPP, NTPS and KLHEP of APGCL for the FY 2019-20 are as stated below:

APGCL GENERATION DATA FOR THE FY 2019-20
FOR LTPS, LRPP, NTPS and KLHEP
 (Gross Gen., Export, Import, Auxiliary Consumption and Plant Availability Factor)

STATION	CAPACITY (MW)	Apr-19	May-19	Jun-19	Jul-19	Aug-19	Sep-19	Oct-19	Nov-19	Dec-19	Jan-20	Feb-20	Mar-20	TOTAL
LTPS+LRPP Import & Export														
Energy Imported (MU)		1.631	1.041	1.728	2.535	2.772	0.996	1.007	1.304	1.282	11.993	5.516	0.937	32.742
Energy Exported (MU)		65.263	73.795	73.707	72.276	73.312	71.357	76.328	80.557	78.976	49.906	53.566	78.302	847.347
Actual Energy Sent Out (MU)		63.633	72.755	71.979	69.741	70.541	70.361	75.321	79.253	77.695	37.913	48.050	77.364	814.605
LTPS														
LTPS Actual Gross (MU)	97.2	23.373	32.555	32.340	27.609	31.529	32.646	39.546	41.347	44.565	4.985	13.510	38.002	362.006
LTPS Pro-rata Energy Sent out (MU)		20.615	28.960	28.781	24.431	28.129	28.859	35.606	37.636	40.405	4.293	11.880	34.799	324.393
Total Aux. Cons. (MU)		2.758	3.595	3.558	3.179	3.400	3.787	3.940	3.710	4.160	0.691	1.630	3.203	37.612
LTPS Avg. Declared Capacity(MW)		33.39	42.97	45.34	39.65	43.75	44.500	50.330	52.210	54.870	68.970	68.420	50.390	49.525
Plant Availability LTPS(%)		36.35%	46.78%	49.36%	43.17%	47.63%	48.45%	54.79%	56.84%	59.74%	75.09%	74.49%	54.86%	53.92%
LRPP														
LRPP Actual Gross (MU)	69.755	44.285	45.075	44.488	46.247	43.794	42.862	41.116	42.917	38.400	34.368	37.841	42.807	504.200
LRPP Pro-rata Energy Sent out (MU)		43.018	43.795	43.198	45.310	42.412	41.502	39.716	41.616	37.290	33.620	36.170	41.831	489.478
Total Aux. Cons. (MU)		1.267	1.281	1.290	0.937	1.382	1.360	1.401	1.300	1.110	0.748	1.671	0.976	14.722
LRPP Avg. Declared Capacity(MW)		60.23	61.57	61.70	61.53	60.02	61.05	58.33	61.40	58.52	52.21	59.16	60.84	59.66
Plant Availability LRPP(%)		89.48%	91.47%	91.67%	91.41%	89.16%	90.69%	86.65%	91.21%	86.94%	77.56%	87.89%	90.38%	88.63%
NTPS														
NTPS Actual Gross (MU)	99.5	23.546	18.411	19.191	21.570	19.496	12.678	20.324	24.700	23.995	27.210	17.932	23.810	252.863
NTPS Energy Imported (MU)		0.041	0.618	0.202	0.259	0.605	3.219	1.356	0.082	1.090	0.002	0.779	0.007	8.262
NTPS Energy Exported (MU)		22.024	18.060	17.702	20.281	18.589	14.912	20.503	23.606	23.769	26.025	17.814	22.829	246.113
NTPS Energy Sent out (MU)		21.983	17.442	17.500	20.022	17.983	11.693	19.147	23.524	22.678	26.023	17.035	22.821	237.851
Total Aux. Cons. (MU)		1.563	0.969	1.691	1.548	1.513	0.985	1.177	1.176	1.317	1.187	0.897	0.989	15.012
NTPS Avg. Declared Capacity(MW)		35.07	26.01	27.68	28.75	31.50	24.02	30.06	34.23	32.74	37.91	28.45	33.29	30.83
Plant Availability NTPS(%)		36.91%	27.37%	29.13%	30.25%	33.15%	25.27%	31.63%	36.02%	34.45%	39.90%	29.94%	35.03%	32.44%
KLHEP														
KLHEP Actual Gross (MU)	100	16.539	24.078	40.007	63.230	38.292	52.505	65.813	46.226	26.333	20.282	5.223	0.000	398.528
KLHEP Energy Sent out (MU)		16.456	23.958	39.807	62.914	38.101	52.242	65.484	46.152	26.286	20.242	5.205	0.000	396.848
KLHEP Energy Imported (MU)														
KLHEP Energy Exported (MU)		16.456	23.958	39.807	62.914	38.101	52.242	65.484	46.152	26.286	20.242	5.205	0.000	396.848
Total Aux. Cons. (MU)		0.083	0.120	0.200	0.316	0.191	0.263	0.329	0.074	0.047	0.040	0.018	0.000	1.680
KLHEP Avg. Declared Capacity (MW)		57.00	100.00	100.00	100.00	82.26	86.67	100.00	100.00	95.16	100.00	95.00	0.00	84.60
Plant Availability KLHEP(%)		57.29%	100.50%	100.50%	100.50%	82.67%	87.10%	100.50%	100.16%	95.33%	101.99%	95.03%	0.00%	85.03%

M. Shayan
25/11/2020



Assam Electricity Grid Corporation Limited
Registered Office: 1st Floor, Bijulee Bhawan, Paltanbazar, Guwahati-781 001
CIN: U40101AS2003SGC007238
Phone-036 1-2739520 / Fax-0361 -2739513 Web: www.aegcl.co.in

Note: For LTPS and LRPP the Export and Import are shown commonly as both the power stations are exporting and importing power through the common Switchyard. The Sent out energy has been derived on pro-rata basis as already submitted to the SLDC in the monthly Sent out Energy statements.

Date: 23/11/2020

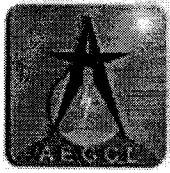
The Gross generation, Export, Import, Aux. Consumption & plant availability as submitted by LTPS, LRPP, NTPS & KLHEP are found to be correct.

H. Bhuyan
25/11/2020

A.G.M. (SAMAST)
SLDC, AEGCL, Kahilipara, Ghy-19

H. Sharm
25/11/2020

Deputy General Manager (Logistics),
SLDC, AEGCL, Kahilipara, Guwahati-19



Assam Electricity Grid Corporation Limited

Registered Office: 1st Floor, Bijulee Bhawan, Paltanbazar, Guwahati-781 001

CIN: U40101AS2003SGC007238

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TO WHOM IT MAY CONCERN

After verification of the data submitted by APGCL, this is to certify that the generation loss of NTPS for the FY 2018-19 due to Grid Restrictions and Auto Transformer Constraints are as stated below:

MU lost for NTPS in 2019-20	MU lost due to grid disturbance	MU lost due to Auto transformer constraints
Apr-19	0.13	0.23
May-19	0.24	0.02
Jun-19	-	-
Jul-19	0.30	0.03
Aug-19	0.26	-
Sep-19	0.17	-
Oct-19	-	-
Nov-19	-	-
Dec-19	0.01	3.21
Jan-20	0.44	4.96
Feb-20	0.33	1.78
Mar-20	0.19	0.09
Total	2.07	10.32
Grand total	12.40	

Date:

The submitted figures are verified & found correct.

M. J. Bhuyan
25/11/2020

A.G.M. (SAMAST)
SLDC, AEGCL, Kahilipara, Ghy-19

Hanshan
25/11/2020

Deputy General Manager (Logistics),
SLDC, AEGCL, Kahilipara, Guwahati-19



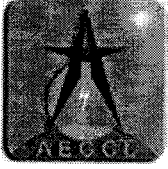
TO WHOM IT MAY CONCERN

This is to certify that the plant wise Gross Generation, Import, Export, Auxiliary Consumption and Plant Availability Factor of LTPS, LRPP, NTPS and KLHEP of APGCL for the period from April'20 to September'20 are as stated below:

**APGCL GENERATION DATA FOR THE FY 2020-21
FOR LTPS, LRPP, NTPS and KLHEP
(Gross Gen., Export, Import, Auxiliary Consumption and Plant Availability Factor)**

STATION	CAPACITY (MW)	Apr-20	May-20	Jun-20	Jul-20	Aug-20	Sep-20	TOTAL
LTPS+LRPP Import & Export								
Energy Imported (MU)		1.542	1.785	0.687	1.518	4.130	3.065	12.727
Energy Exported (MU)		61.859	70.516	73.366	65.861	65.573	66.244	403.419
Actual Energy Sent Out (MU)		60.317	68.732	72.679	64.343	61.443	63.179	390.691
LTPS								
LTPS Actual Gross (MU)	97.2	19.682	28.669	34.529	40.238	27.167	33.348	183.633
LTPS Pro-rata Energy Sent out (MU)		17.391	26.033	31.440	36.691	24.534	30.612	166.701
Total Aux. Cons. (MU)		2.291	2.636	3.089	3.547	2.632	2.736	16.932
LTPS Avg. Declared Capacityn(MW)		26.96	39.11	47.74	53.84	43.28	45.740	42.821
Plant Availability LTPS(%)		29.35%	42.58%	51.97%	58.61%	47.12%	49.80%	46.62%
LRPP								
LRPP Actual Gross (MU)	69.755	43.876	42.891	41.886	28.479	37.665	33.258	228.055
LRPP Pro-rata Energy Sent out (MU)		42.925	42.092	41.118	27.652	36.724	32.567	223.077
Total Aux. Cons. (MU)		0.951	0.799	0.768	0.827	0.942	0.691	4.978
LRPP Avg. Declared Capacityn(MW)		60.61	60.80	59.79	48.64	51.99	58.54	56.06
Plant Availability LRPP(%)		90.04%	90.32%	88.82%	72.26%	77.24%	86.97%	83.28%
NTPS								
NTPS Actual Gross (MU)	99.5	20.355	10.660	18.212	14.359	12.069	13.265	88.920
NTPS Energy Imported (MU)		0.044	2.157	0.521	2.143	2.270	3.700	10.835
NTPS Energy Exported (MU)		19.542	11.994	17.744	15.516	13.299	15.850	93.945
NTPS Energy Sent out (MU)		19.498	9.838	17.223	13.373	11.029	12.150	83.111
Total Aux. Cons. (MU)		0.857	0.822	0.989	0.986	1.040	1.115	5.809
NTPS Avg. Declared Capacityn(MW)		29.30	21.74	27.83	26.28	16.19	16.88	23.01
Plant Availability NTPS(%)		30.83%	22.88%	29.29%	27.66%	17.04%	17.76%	24.22%
KLHEP								
KLHEP Actual Gross (MU)	100	0.000	13.165	35.624	35.325	32.343	30.825	147.282
KLHEP Energy Sent out (MU)		0.000	13.138	35.564	35.261	32.269	30.763	146.995
KLHEP Energy Imported (MU)								
KLHEP Energy Exported (MU)		0.000	13.138	35.564	35.261	32.269	30.763	146.995
Total Aux. Cons. (MU)		0.000	0.027	0.060	0.064	0.074	0.062	0.287
KLHEP Avg. Declared Capacity (MW)		0.00	50.00	50.00	50.00	50.00	43.33	40.71
Plant Availability KLHEP(%)		0.00%	50.11%	50.09%	50.09%	50.12%	43.42%	40.91%

M. Bhuyan
22/11/2020



Assam Electricity Grid Corporation Limited

Registered Office: 1st Floor, Bijulee Bhawan, Paltanbazar, Guwahati-781 001

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Phone-036 1-2739520 / Fax-0361 -2739513 Web: www.aegcl.co.in

Note: For LTPS and LRPP the Export and Import are shown commonly as both the power stations are exporting and importing power through the common Switchyard. The Sent out energy has been derived on pro-rata basis as already submitted to the SLDC in the monthly Sent out Energy statements.

Date: 23/11/2020

The Gross generation, Export, Import, Aux. Consumption & plant availability as submitted by LTPS, LRPP, NTPS & KLHEP are found to be correct.

M. Bhuyan
25/11/2020

A.G.M. (SAMAST)
SLDC, AEGCL, Kahilipara Gh.

Hansham
25/11/2020

Deputy General Manager (Logistics),
SLDC, AEGCL, Kahilipara, Guwahati-19

Office of the Chief General Manager, SLDC, 1st Floor, SLDC Building, AEGCL, Kahilipara, Guwahati-781019

Phone: 0361-2380537 / Fax: 0361-2382263 / e-mail: sldcaseb@rediffmail.com / Web: www.aegclsldc.org



ASSAM POWER GENERATION CORPORATION LIMITED

Registered Office: Bijulee Bhawan, Paltanbazar, Guwahati-781 001, Assam

CIN: U40101AS2003SGC007139

Tel No: 0361 27 9502, Fax No: 0361 27 9546 22

e-mail: md@apgcl.com, Website: www.apgcl.org

58^e

No. MD/APGCL/GA/2008/840/257

Date: 27/09/2019

ORDER

Managing Director, APGCL is pleased to approve release of arrear pay with regard to Generation Allowance for the period w.e.f. April'2016 to February'2019 to be paid in 5 (Five) instalments to the eligible employees of the Power Plants/Establishments of APGCL in line with APDCL order No APDCL/MD/PC/01/2018/107 dated 06/07/2019.

The mode of payment of arrear pay with regard to Generation Allowance shall be in the following manner:

1. 5 (Five) months arrear w.e.f. April'2016 to August'2016.
2. 5 (Five) months arrear w.e.f. September'2016 to January'2017.
3. 6 (Six) months arrear w.e.f. February'2017 to July'2017.
4. 7 (Seven) months arrear w.e.f. August'2017 to February'2018.
5. 12 (Twelve) months arrear w.e.f. March'2018 to February'2019.

The said arrears shall be paid from the month of October'2019 to February'2020.

By Order etc....

Utpal Gohain 27.9.19

**General Manager (HR),
APGCL, Bijulee Bhawan, Guwahati-1**

Memo No. MD/APGCL/GA/2008/840/257 (A)

Date: 27/09/2019

Copy to:

1. The Managing Director, APGCL, Bijulee Bhawan, Guwahati-1.
2. The CGM (Gen)/CGM (H&C)/ CGM (F&A), APGCL, Bijulee Bhawan, Guwahati-1.
3. The GM, NTPS/LTPS/KLHEP, APGCL, Namrup/Maibella/Lengery.
4. The DGM (F&A), APGCL, Bijulee Bhawan, Guwahati-1—He is requested to release the 1st installment of Generation Allowance arrear before ensuing Durga Puja.
5. Office Copy.

**General Manager (HR),
APGCL, Bijulee Bhawan, Guwahati-1**

Utpal Gohain, GM (HR)

E-mail: gmhr@apgcl.com

Tel. No: 0361-2635812



सत्यमेव जयते

भारत सरकार

Government of India

विद्युत मंत्रालय

Ministry of Power

केन्द्रीय विद्युत प्राधिकरण

Central Electricity Authority

पी. डी. एम. प्रभाग

Power Data Management Division

To,

Sh. A. Bhuyan,
Chief General Manager (G),
Assam Power Generation Corporation Limited (APGCL),
BijuleeBhawan, Paltanbazar,
Guwahati-781001
Assam.

Subject: Decommissioning of Unit No. 4 (11 MW) & Unit No. 5 (24 MW) of Namrup CCPP, Assam Power Generation Corporation Ltd. (APGCL)-regarding.

Ref: Letter No. APGCL/CGM (G)/Derating/2007-08/38/part/1 dated 10.08.2020 from Chief General Manager (Generation), Assam Power Generation Corporation Ltd. (APGCL)

Sir,

Reference is invited to above letter from Chief General Manager (Generation), APGCL regarding decommissioning of Unit No. 4 (11MW) & Unit No. 5 (24 MW) of Namrup CCPP, Assam Power Generation Corporation Ltd. (APGCL). The details furnished by APGCL have been seen by the Central Electricity Authority.

APGCL informed that these units are facing the problems of obsolescence due to unacceptable levels of per unit cost of generation due to high heat rate and also low availability and reliability due to aging. It is seen from extract of minutes of meeting of 86th Board meeting held on 28.07.2020 that Board of Directors of APGCL has granted approval for decommissioning of Unit-4 and Unit-5 of Namrup CCPP.

The decision to decommission of Unit No.4 (11MW) & Unit No. 5 (24MW) of Namrup CCPP has been taken by APGCL based on techno-economic reasons. Based on their decision, the capacity of these units is being deleted from the database of All India Installed Capacity.

Yours faithfully

Sd/-
(P.C.Kureel)
Secretary, CEA

Copy for information to:

- | | | | |
|----|---|----|---|
| 1. | PPS, Secretary, MoP | 2. | SA to Chairperson, CEA |
| 3. | All Chief Engineers of CEA | 4. | All Heads of Subordinate offices, CEA |
| 5. | SA to Member (Planning/Hydro/ Thermal/6. E&C/ GO&D/PS), CEA | | IT Division, CEA for uploading on CEA website |



सत्यमेव जयते

भारतसरकार

Government of India

विद्युतमंत्रालय

Ministry of Power

केंद्रीय विद्युतप्राधिकरण

Central Electricity Authority

पी. डी.एम. प्रभाग

Power Data Management Division

सेवा में,

Sh. A. Bhuyan,
Chief General Manager (G),
Assam Power Generation Corporation Limited (APGCL),
BijuleeBhawan, Paltanbazar,
Guwahati-781001
Assam.

विषय: असम पावर जनरेशन कॉरपोरेशन लिमिटेड (APGCL), Namrup CCPP की इकाई सं. 4 (11 MW) और इकाई सं. 5 (24 MW) की डीकमीशनिंग – के बारे में।

संदर्भ: Letter No. APGCL/CGM (G)/Derating/2007-08/38/part/1 dated 10.08.2020 from Chief General Manager (Generation), Assam Power Generation Corporation Ltd. (APGCL)

महोदय,

चीफ जनरल मैनेजर (जनरेशन), असम पावर जनरेशन कॉर्पोरेशन लिमिटेड (APGCL) से Namrup CCPP की इकाई सं. 4 (11MW) और इकाई सं. 5 (24 MW) की डीकमीशनिंग के सम्बन्ध में प्राप्त उपर्युक्त पत्र की ओर संदर्भ आमंत्रित किया गया है। APGCL द्वारा प्रस्तुत विवरण केंद्रीय विद्युत प्राधिकरण द्वारा देख लिए गए हैं।

APGCL ने बताया है कि ये इकाइयाँ high heat rate की वजह से per unit cost of generation के अस्वीकार्य स्तरों के कारण एवं उम्र बढ़ने की वजह से कम उपलब्धता व कम विश्वसनीयता के कारण अप्रचलन / Obsolescence की समस्याओं का सामना कर रही हैं। 28.07.2020 को आयोजित 86 वीं बोर्ड की बैठक के मिनट्स के Extracts से यह देखा गया है कि APGCL के बोर्ड ऑफ डायरेक्टर्स ने Namrup CCPP की इकाई सं. 4 और इकाई सं. 5 की डीकमीशनिंग के लिए मंजूरी दे दी है।

Namrup CCPP की इकाई सं. 4 (11MW) और इकाई सं. 5 (24MW) को डीकमीशन करने का निर्णय तकनीकी-आर्थिक कारणों के आधार पर APGCL द्वारा लिया गया है। उनके निर्णय के आधार पर इन इकाइयों की क्षमता को अखिल भारतीय स्थापित क्षमता के डेटाबेस से हटाया जा रहा है।

भवदीय,

(पी.सी. कुरील)
सचिव, के.वि.प्रा.

प्रति निम्नलिखित को सूचनार्थ :-

- | | |
|--|--|
| 1. पी.पी.एस., सचिव (विद्युत), विद्युत मंत्रालय | 2. अध्यक्ष, के.वि.प्रा. के विशेष सहायक |
| 3. के.वि.प्रा. के सभी अधिनस्थ कार्यालयों के प्रधान | 4. के.वि.प्रा. के सभी मुख्य अभियंता |
| 5. सदस्य (योजना/ जल विद्युत/ तापीय/ आ.एवं वा. / जी.ओ.एंड डी./ पी.एस.), के.वि.प्रा. | 6. आई.टी.प्रभाग, के.वि.प्रा. को के.वि.प्रा की वेबसाइट पर अपलोड करने के लिए |

REGULATORY FORMATS FOR
ARR & TARIFF FILING BY
GENERATION LICENSEE -
NAMRUP THERMAL POWER
STATION

ASSAM POWER GENERATION CORPORATION LIMITED
NAMRUP THERMAL POWER STATION

Summary			Form No:	F1		
			Rs Cr			
		Form	2019-20 Actual	2020-21 Estimated	2021-22 Projected	
A	Generation					
1	Gross Generation (MU)	F4	252.86	173.73	145.21	
2	Aux Consumption (%)	F4	5.94%	5.54%	4.50%	
3	Net Generation (MU)	F4	237.85	164.10	138.68	
B	Capacity Charges (Annual Fixed Charges)					
1	O&M expenses		39.04	36.06	21.35	
a	Employee Expenses	F21	32.58	0.00		
b	R & M Expense	F20	4.63	0.00		
c	A&G Expense	F22	1.83	0.00		
	Increase in AERC Tariff Fees			0.10	0.10	
2	Depreciation	F23	1.46	0.95	0.52	
3	Interest on Loans	F14B	0.10	0.05	0.04	
4	Return on Equity	F25	8.53	5.57	3.10	
5	Interest on Working Capital	F26	4.06	2.96	1.70	
6	Income Tax	F29	0.21	0.00	0.00	
7	Prior period items		0.00	0.00	0.00	
8	Special allowance in lieu of R&M or separate compensation allowance		0.00	0.00	0.00	
	Less: Other Income	F30	-15.44	-7.13	-7.13	
	Capacity Building		0.11	0.10	0.13	
	Total		38.08	38.67	19.80	
C	Variable Charges (Energy Charges)					
	Energy Charges from Primary Fuel (Rs Cr) ^{C1, C2, C3, C4}	F4	80.88	37.37	21.90	
	Energy Charges from Primary Fuel (Rs/ kWh)	F4	3.20	2.15	1.51	
	C1 - If multifuel is used simultaneously, energy charges to be given in respect of every fuel individually					
	C2 - Energy charge shall be computed for open cycle operation and combined cycle operation separately in case of gas/ liquid fuel fired plants					
	C3 - Energy charge shall be worked out based on ex-bus energy scheduled to be sent out					

Name of Company:		ASSAM POWER GENERATION CORPORATION LIMITED					
Name of Plant/ Station:		NAMRUP THERMAL POWER STATION					
Plant Characteristics-Thermal						Form No:	F2a
	Unit(s)/ Block(s) Parameters	Unit I	Unit II	Unit III	Unit IV	Unit V	Unit VI
	Installed Capacity (MW)	20	21	21	11	24	22.5
	Schedule COD as per Investment Approval						
	Actual COD /Date of Taken Over (as applicable)	1965	1965	1965	1975	1976	1985
	Pit Head or Non Pit Head	Not applicable					
	Name of the Boiler Manufacture	Not applicable				BHEL	BHEL
	Name of Turbine Generator Manufacture	Westinghouse, USA				BHEL	BHEL
	Main Steams Pressure at Turbine inlet (kg/Cm2) abs ¹ .	Not applicable				60	12
	Main Steam Temperature at Turbine inlet (oC) ¹	Not applicable				480	330
	Reheat Steam Pressure at Turbine inlet (kg/Cm2) ¹	N/A					
	Reheat Steam Temperature at Turbine inlet (oC) ¹	N/A					
	Main Steam flow at Turbine inlet under MCR condition (tons /hr) ²	Not applicable				150	117
	Main Steam flow at Turbine inlet under VVO condition (tons /hr) ²	Not applicable					
	Unit Gross electrical output under MCR /Rated condition (MW) ²	20	21	21	11	24	22.5
	Unit Gross electrical output under VVO condition (MW) ²	20	21	21	11	24	22.5
	Guaranteed Design Gross Turbine Cycle Heat Rate (kCal/kWh) ³	3987	3987	3987	4032	3278	NA
	Conditions on which design turbine cycle heat rate guaranteed	NCV	NCV	NCV	NCV	NCV	
	% MCR						
	% Makeup Water Consumption	Not applicable				10	5
	Design Capacity of Make up Water System	Not applicable				375	
	Design Capacity of Inlet Cooling System					6915	
	Design Cooling Water Temperature (0C)					27-32	
	Back Pressure						
	Steam flow at super heater outlet under BMCR condition (tons/hr)	Not applicable				150	117
	Steam Pressure at super heater outlet under BMCR condition) (kg/Cm2)	Not applicable				63	22
	Steam Temperature at super heater outlet under BMCR condition (0C)	Not applicable				485	375
	Steam Temperature at Reheater outlet at BMCR condition (0C)	Not applicable					
	Design / Guaranteed Boiler Efficiency (%) ⁴	Not applicable				90	85
	Design Fuel with and without Blending of domestic/imported coal	Not applicable					
	Type of Cooling Tower	Not applicable				Cross flow	
	Type of cooling system ⁵	Not applicable				Close circuit	
	Type of Boiler Feed Pump ⁶	Not applicable				Motor driven	
	Fuel Details ⁷	Natural gas					WHRU
	-Primary Fuel	Natural gas					WHRU
	-Secondary Fuel	N/A					
	-Alternate Fuels	N/A					
	Special Features/ Site Specific Features ⁸	MAKEUP WATER SYSTEM					
	Special Technological Features ⁹	N/A					
	Environmental Regulation related features ¹⁰						
	Any other special features						

Name of Company:		SSAM POWER GENERATION CORPORATION LIMITED			
Name of Plant/ Station:		NAMRUP THERMAL POWER STATION			
Normative Parameters Considered for Tariff Computations-Thermal			Form No:	F3 (a)	
	Particulars	Unit	2019-20	2020-21	2021-22
			Actual	Estimated	Projected
1	Base Rate of Return on Equity	%	15.50	15.50	15.50
2	Target Availability	%	50.00%	50.00%	50.00%
3	Auxiliary Energy Consumption	%	4.50%	4.50%	4.50%
4	Gross Station Heat Rate	kCal/ kWh	3900	3900	3900
5	Specific Fuel Oil Consumption ml/kWh	ml/ kWh			
6	Cost of Coal/ Lignite	Rs/ Ton			
7	Cost of Main Secondary Fuel Oil	Rs/ kL			
8	Cost of Gas	Rs/ SCM	6.39	4.15	3.54
9	Primary Fuel (Coal/ Lignite/ Gas) for Working Capital	in Months			
10	Secondary Fuel for Working Capital	in Months			
11	O&M Expenses	Rs/ MW			
12	Maintenance Spares for Working Capital	% of O&M	30	30	30
13	Receivables for Working Capital	in Months	2 months	2 months	2 months
14	Base Rate of SBI as on _____	%	10.00%	10.00%	10.00%

		ASSAM POWER GENERATION CORPORATION LIMITED			
		NAMRUP THERMAL POWER STATION			
	Particulars	Unit	2019-20	2020-21	2021-22
			Actual	Estimated	Projected
1	Installed Capacity	MW	99.50	78.12	43.50
2	Plant Load Factor	%	28.50%	35.81%	38.11%
3	Gross Generation	MU	252.86	173.73	145.213
4	Auxiliary Consumption	%	5.94%	5.54%	4.50%
5	Auxiliary Consumption	MU	15.012	9.626	6.535
6	Net Generation	MU	237.85	164.10	138.678
7	Station Heat Rate	kCal/ kWh	4584	4608	3900
Primary Fuel Consumption (Gas/ LNG/ Liquid)					
16	GCV of Gas/ LNG/ Liquid Fuel	kCal/ SCM	9157.63	9147.27	9147.27
17	Quantity of Gas/ LNG/ Liquid Fuel	MMSCM	126.56	87.53	61.91
18	Specific Fuel Consumption	SCM/ kWh	0.50	0.50	0.43
19	Rate of Gas/ LNG/ Liquid Fuel	Rs/ SCM	6.39	4.15	3.54
20	Cost of Gas/ LNG/ Liquid Fuel	Rs. Cr	80.88	37.37	21.90
Secondary Fuel Oil Consumption					
21	GCV of Secondary Fuel Oil	kCal/ kL			
22	Quantity of Secondary Fuel Oil	kL			
23	Specific Secondary Fuel Oil Consumption	ml/ kWh			
24	Rate of Secondary Fuel Oil	Rs/ kL			
25	Cost of Secondary Fuel Oil	Rs. Cr			
Primary Fuel Cost (Coal/ Lignite)		Rs. Cr			
Primary Fuel Cost (Gas/ LNG/ Liquid)		Rs. Cr	80.88	37.37	21.90
Secondary Fuel Cost		Rs. Cr			
C	Variable Charges (Energy Charges)				
	Energy Charges from Primary Fuel (Coal/ Lignite)	Rs/ kWh			
	Energy Charges from Primary Fuel (Gas/ LNG/ Liquid)	Rs/ kWh	3.20	2.15	1.51

Name of Company:
Name of Plant/ Station:

ASSAM POWER GENERATION CORPORATION LIMITED
NAMRUP THERMAL POWER STATION

Form No: 5

	Particulars	Unit	Details
	Last date of order of Commission for the project as on 31.03.2019		
1	Capital Cost as admitted by AERC	Rs. Cr	190.49
2	Amount of un-discharged liabilities included in above (& forming part of admitted capital cost)	Rs. Cr	NIL
3	Amount of un-discharged liabilities corresponding to above admitted capital cost (but not forming part of admitted capital cost being allowed on cash basis)	Rs. Cr	NIL
4	Gross Normative Debt	Rs. Cr	122.33
5	Cumulative Repayment	Rs. Cr	142.72
6	Net Normative Debt	Rs. Cr	-20.39
7	Normative Equity	Rs. Cr	55
8	Cumulative Depreciation	Rs. Cr	142.72
9	Freehold land	Rs. Cr	NIL

Name of Company:

ASSAM POWER GENERATION CORPORATION LIMITED

Name of Plant/ Station:

NAMRUP THERMAL POWER STATION

Statement showing claimed capital cost

Form No:

F5a

	Particulars	Unit	2019-20	2020-21	2021-22
1	Opening Capital Cost	Rs. Cr	190.49	189.75	190.69
2	Add: Addition during the year / period	Rs. Cr	1.40	0.94	1.58
3	Less: Decapitalisation during the year / period	Rs. Cr	2.13	0.00	0.00
4	Less: Reversal during the year / period	Rs. Cr	0.00	0.00	0.00
5	Add: Discharges during the year / period	Rs. Cr	0.00	0.00	0.00
6	Closing Capital Cost	Rs. Cr	189.75	190.69	192.28
7	Average Capital Cost	Rs. Cr	190.12	190.22	191.49

Name of Company:
Name of Plant/ Station:

ASSAM POWER GENERATION CORPORATION LIMITED
NAMRUP THERMAL POWER STATION

Details of Project Specific Loans

Form No: F13

Rs Cr.

Particulars	R&M NTPS	Package 2	Package 3	Package 4	Package 5	Package 6
Source of Loan ¹	I GOA -Loans					
Currency ²	INR					
Amount of Loan sanctioned (Opening Balance)	204.71					
Amount of Gross Loan drawn upto 31.03.2020 COD ^{3,4,5,13,15} (Closing Balance)	206.37					
Interest Type ⁶	Fixed					
Fixed Interest Rate, if applicable	10%					
Base Rate, if Floating Interest ⁷						
Margin, if Floating Interest ⁸	Yes/No	Yes/No	Yes/No	Yes/No	Yes/No	Yes/No
Are there any Caps/Floor ⁹						
If above is yes,specify caps/floor						
Moratorium Period ¹⁰						
Moratorium effective from						
Repayment Period ¹¹						
Repayment effective from						
Repayment Frequency ¹²						
Repayment Instalment ^{13,14}						
Base Exchange Rate ¹⁶						
Are foreign currency loan hedged?						
If above is yes,specify details ¹⁷						

Note:

¹ Source of loan means the agency from whom the loan has been taken such as WB, ADB, WMB, PNB, SBI, ICICI, IFC, PFC etc.

² Currency refers to currency of loan such as US\$, DM, Yen, Indian Rupee etc.

³ Details are to be submitted as on 31.03.2015 for existing assets and as on COD for the remaining assets.

⁴ Where the loan has been refinanced, details in the Form is to be given for the loan refinanced. However, the details of the original loan is to be given separately in the same form.

⁵ If the Tariff in the petition is claimed separately for various units, details in the Form is to be given separately for all the units in the same form.

⁶ Interest type means whether the interest is fixed or floating.

⁷ Base rate means the base as PLR, LIBOR etc. over which the margin is to be added. Applicable base rate on different dates from the date of drawl may also be enclosed.

⁸ Margin means the points over and above the floating rate.

⁹ At times caps/ floor are put at which the floating rates are frozen. If such a condition exists, specify the limits.

¹⁰ Moratorium period refers to the period during which loan servicing liability is not required.

¹¹ Repayment period means the repayment of loan such as 7 years, 10 years, 25 years etc.

¹² Repayment frequency means the interval at which the debt servicing is to be done such as monthly, quarterly, half yearly, annual, etc.

¹³ Where there is more than one drawl/repayment for a loan, the date & amount of each drawl/repayment may also be given separately

¹⁴ If the repayment instalment amount and repayment date can not be worked out from the data furnished above, the repayment schedule to be furnished

¹⁵ In case of Foreign loan, date of each drawal & repayment alongwith exchange rate at that date may be given.

¹⁶ Base exchange rate means the exchange rate prevailing as on 31.03.2015 for existing assets and as on COD for the remaining assets.

¹⁷ In case of hedging, specify details like type of hedging, period of hedging, cost of heging, etc.

¹⁸ In case of foreign loans, provide details of exchange rate considered on date of each repayment of principal and date of interest payment.

¹⁹ At the time of truing up rate of interest with relevant reset date (if any) to be furnished separately.

²⁰ At the time of truing up provide details of refinancing of loans considered earlier. Details such as date on which refinancing done, amount of refinanced loan, terms and conditions of refinanced loan, financing and other charges incurred for refinancing etc.

ISSAM POWER GENERATION CORPORATION LIMITE			
NAMRUP THERMAL POWER STATION			
			Rs. Cr
Particulars	2019-20	2020-21	2021-22
	Actual	Estimated	Projected
Loan-1 from PFCL			
Gross loan - Opening			
Cumulative repayments of Loans upto previous year			
Net loan - Opening	387.03	364.92	321.53
Add: Drawal(s) during the Year	21.28	0.00	0.00
Less: Repayment (s) of Loans during the year	43.39	43.39	41.30
Net loan - Closing	364.92	321.53	280.23
Average Net Loan	375.97	343.23	300.88
Rate of Interest on Loan on annual basis	11.54%	11.21%	11.19%
Interest on loan	44.68	40.91	35.97
Loan-2 Govt. of Assam			
Gross loan - Opening			
Cumulative repayments of Loans upto previous year			
Net loan - Opening	239.80	271.48	318.46
Add: Drawal(s) during the Year	9.98	25.29	11.10
Less: Repayment (s) of Loans during the year	-21.69	-21.69	-21.69
Net loan - Closing	271.48	318.46	351.25
Average Net Loan	255.64	294.97	334.85
Rate of Interest on Loan on annual basis	7.61%	8.73%	8.82%
Interest on loan	18.25	23.71	28.09
Total Loan			
Gross loan - Opening			
Cumulative repayments of Loans upto previous year			
Net loan - Opening	626.83	636.40	639.99
Add: Drawal(s) during the Year	31.26	25.29	11.10
Less: Repayment (s) of Loans during the year	21.69	21.69	19.61
Net loan - Closing	636.40	639.99	631.48
Average Net Loan	631.61	638.19	635.74
Interest on loan	62.93	64.62	64.06
Weighted average Rate of Interest on Loans	10.04%	10.15%	10.01%
Note:			
1. In case of Foreign Loans, the calculations in Indian Rupees is to be furnished. However, the calculations in Original currency is also to be furnished separately in the same form.			
2. As per the Regulation 35.5, the weighted average rate of interest has to be calculated on the basis of the actual loan portfolio at the beginning of each year. Hence the weighted average rate of interest has			
3. the above actual loan portfolio is shown as for APGCL as a whole, as the same is to be used for calculation			

		ASSAM POWER GENERATION CORPORATION LIMITED		
		NAMRUP THERMAL POWER STATION		
		Rs. Cr		
S. No.	Particulars	2019-20	2020-21	2021-22
		Actual	Estimated	Projected
1	Gross Normative loan – Opening			
2	Cumulative repayment of Normative loan upto previous year			
3	Net Normative loan – Opening	0.85	0.79	0.81
4	Add: Increase due to addition during the year / period	1.40	1.47	1.90
5	Less: Decrease due to de-capitalisation during the year / period			
6	Less: Decrease due to reversa/repayment during the year / period	1.46	1.45	1.42
7	Add: Increase due to discharges during the year / period			
8	Net Normative loan - Closing	0.79	0.81	1.29
9	Average Normative loan	0.82	0.80	1.05
10	Weighted average rate of interest	10.04%	10.15%	10.01%
	Interest on Loan	0.08	0.08	0.10
	Bank charges	0.02	0.00	0.00
11	Interest on Loan with Bank charges	0.10	0.08	0.10

Name of Company:
Name of Plant/ Station:

ASSAM POWER GENERATION CORPORATION LIMITED
NAMRUP THERMAL POWER STATION

Rs Cr.

Particulars	Revival of TPS	EAP consulting service	Solar NTPS	NTPS(R&M)	Station heat Rate	Package 6
Source of Loan ¹	I GOA -Loans	I GOA -Loans	I GOA -Loans	I PFC Loans	I GOA -Loans	
Currency ²	INR	INR	INR	INR	INR	
Amount of Loan sanctioned (Opening Balance)	0.74	0.37	4.04	-	158.46	
Amount of Gross Loan drawn upto 31.03.2020/ COD ^{3,4,5,13,15} (Closing Balance)	0.74	0.37	4.04	-	158.46	
Interest Type ⁶	Fixed	Fixed	Fixed	Fixed	Fixed	
Fixed Interest Rate, if applicable	10%	10%	10%	0%	10%	
Base Rate, if Floating Interest ⁷						
Margin, if Floating Interest ⁸	Yes/No	Yes/No	Yes/No	Yes/No	Yes/No	Yes/No
Are there any Caps/Floor ⁹						
If above is yes,specify caps/floor						
Moratorium Period ¹⁰						
Moratorium effective from						
Repayment Period ¹¹						
Repayment effective from						
Repayment Frequency ¹²						
Repayment Instalment ^{13,14}						
Base Exchange Rate ¹⁶						
Are foreign currency loan hedged?						
If above is yes,specify details ¹⁷						

Distribution of loan packages to various projects

Name of the Projects					Total
Project 1					
Project 2					
Project 3 and so on					

Note:

¹ Source of loan means the agency from whom the loan has been taken such as WB, ADB, WMB, PNB, SBI, ICICI, IFC, PFC etc.

² Currency refers to currency of loan such as US\$, DM, Yen, Indian Rupee etc.

³ Details are to be submitted as on 31.03.2015 for existing assets and as on COD for the remaining assets.

⁴ Where the loan has been refinanced, details in the Form is to be given for the loan refinanced. However, the details of the original loan is to be given seperately in the same form.

⁵ If the Tariff in the petition is claimed seperately for various units, details in the Form is to be given seperately for all the units in the same form.

⁶ Interest type means whether the interest is fixed or floating.

⁷ Base rate means the base as PLR, LIBOR etc. over which the margin is to be added. Applicable base rate on different dates from the date of drawl may also be enclosed.

⁸ Margin means the points over and above the floating rate.

⁹ At times caps/ floor are put at which the floating rates are frozen. If such a condition exists, specify the limits.

¹⁰ Moratorium period refers to the period during which loan servicing liability is not required.

¹¹ Repayment period means the repayment of loan such as 7 years, 10 years, 25 years etc.

¹² Repayment frequency means the interval at which the debt servicing is to be done such as monthly, quarterly, half yearly, annual, etc.

¹³ Where there is more than one drawl/repayment for a loan, the date & amount of each drawl/repayment may also be given seperately

¹⁴ If the repayment instalment amount and repayment date can not be worked out from the data furnished above, the repayment schedule to be

¹⁵ In case of Foreign loan, date of each drawl & repayment alongwith exchange rate at that date may be given.

¹⁶ Base exchange rate means the exchange rate prevailing as on 31.03.2015 for existing assets and as on COD for the remaining assets.

¹⁷ In case of hedging, specify details like type of hedging, period of hedging, cost of heging, etc.

¹⁸ In case of foreign loans, provide details of exchange rate considered on date of each repayment of principal and date of interest payment.

¹⁹ At the time of truing up rate of interest with relevant reset date (if any) to be furnished seperately.

²⁰ At the time of truing up provide details of refinancing of loans considered earlier. Details such as date on which refinancing done, amount of refinanced loan, terms and conditions of refinanced loan, financing and other charges incurred for refinancing etc.

Name of Company: **ASSAM POWER GENERATION CORPORATION LIMITED**
 Name of Plant/ Station: **NAMRUP THERMAL POWER STATION**

Statement of Additional Capitalisation after COD

Form No:

F16

Rs Cr.

No	Head of Work/ Equipment				Regulations under which claimed	Justification	Admitted Cost by Commission if any
		2019-20	2020-21	2021-22			
1	Land	-	-	-			
2	Building	-	-	-			
3	Hydraulic works	-	-	-			
4	Other civil works	0.74	0.94	0.35			
5	Plant & machinery- Gas	0.41	-	0.78			
6	Plant & machinery- Hydel	-	-	-			
7	Lines & cables	-	-	-			
8	Vehicle	-	-	-			
9	Furniture	0.06	-	-			
10	Other office equipment	0.19	-	0.46			
11	Roads on land belonging to other	-	-	-			
12	Capital spares at Generating Sta	-	-	-			

Note:

- 1 Fill the form in chronological order year wise along with detailed justification clearly bring out the necessity and the
- 2 In case initial spares are purchased alongwith any equipment, then the cost of such spares should be indicated
- 3 Actual/Projected additional capital expenditure claimed for past period shall be governed by Tariff Regulation for the

**ASSAM POWER GENERATION CORPORATION LIMITED
NAMRUP THERMAL POWER STATION**

Details of Assets De-capitalized during the period **Form No: F16a**

Rs. Cr

No	Name of the Asset	Nature of de-capitlization (whether claimed under exclusion or as additional capital expenditure)	Original Value of the Asset Capitalised	Year Put to use	Depreciation recovered till date of de-capitalization
1					
2					
3					
4					
5					

Note: Year wise detail need to be submitted

Name of Company:

AM POWER GENERATION CORPORATION LIMITED

Name of Plant/ Station:

NAMRUP THERMAL POWER STATION

Date of Commercial Operation:

Financing of Additional Capitalisation

Form No: F17

Rs Cr.

Financial Year (Starting from COD)					
	2019-20	2020-21	2021-22		
Amount capitalised in Work/ Equipment					
Financing Details					
GOA Loan	1.40	1.47	1.90		
Loan-2					
Total Loan²	1.40	1.47	1.90		
Grant	0.00	4.75	2.80		
Equity	0.00	0.00	0.00		
Internal Resources					
Others					
Total	1.40	6.22	4.70		

¹ Year 1 refers to Financial Year of COD and Year 2, Year 3 etc. are the subsequent financial

² Loan details for meeting the additional capitalisation requirement should be given as per Form 14 and Form 15 whichever is relevant.

**LM POWER GENERATION CORPORATION LIM
NAMRUP THERMAL POWER STATION**

		Rs. Cr		
	Particulars	2019-20	2020-21	2021-22
		Actual	Estimated	Projected
1	Plant and Machinery	3.01	Consolidated O&M approved for the year	Consolidated O&M approved for the year
2	Building	1.54		
3	Civil Works	0.04		
4	Hydraulic Works	-		
5	Lines, Cables Net Works etc.	-		
6	Vehicles	0.00		
7	Furniture and Fixtures	0.00		
8	Office Equipments	0.02		
9	Station Supplies	-		
10	Lubricants & Consumable stores	0.02		
11	Oil/Turbine Oil consumed in internal combustion	-		
12	Any other items (Spl R&M)	-		
	Total	4.63		

NAM POWER GENERATION CORPORATION LIM
NAMRUP THERMAL POWER STATION

	Particulars	2019-20	2020-21	2021-22
		Actual	Estimated	Projected
1	Salaries	17.82		
2	Additional Pay	-		
3	Dearness Allowance (DA)	4.03		
4	Other Allowances & Relief	3.70		
5	Addl. Pay & C.Off Encashment	-		
6	Interim Relief / Wage Revision	-		
7	Overtime	0.78		
8	Bonus	0.07		
9	Medical Expenses Reimbursement	0.07		
10	Travelling Allowance(Conveyance Allowance)	-		
11	Leave Travel Assistance	0.01		
12	Earned Leave Encashment	2.05		
13	Payment Under Workman's Compensation And Gratuity	-		
14	Subsidised Electricity To Employees	-		
15	Any Other Item	-		
16	Staff Welfare Expenses	0.05		
17	Capacity Building Exercise	-		
18	Apprentice And Other Training Expenses	-		
19	Contribution To Terminal Benefits	4.00		
20	Provident Fund Contribution	-		
21	Provision for PF Fund	-		
22	Any Other Items (Revision of pay@% of salary)	0.00		
	Total Employee Costs	32.58		
23	Less: Employee expenses capitalised	0.00		
	Net Employee expenses (D)-(E)	32.58		

Consolidated
O&M
approved for
the year

Consolidated
O&M
approved for
the year

				NAM POWER GENERATION CORPORATION LIM	
				NAMRUP THERMAL POWER STATION	
				Rs. Cr	
	Particulars	2019-20	2020-21	2021-22	
		Actual	Estimated	Projected	
1	Lease/ Rent	0.13			
2	Insurance	0.21			
3	Revenue Stamp Expenses Account	-			
4	Telephone, Postage, Telegram & Telex Charges	0.02			
5	Incentive & Award To Employees/Outsiders	-			
6	Consultancy Charges	0.23			
7	Technical Fees	-			
8	Other Professional Charges	0.02			
9	Conveyance And Travelling	0.12			
10	License and Registration Fees	-			
11	Vehicle Expenses	0.37			
12	Security / Service Charges Paid To Outside Agencies	-			
13	Fee And Subscriptions Books And Periodicals	0.05			
14	Fees paid to AERC	0.33			
15	Printing And Stationery	0.04			
16	Advertisement Expenses	0.09			
17	Contributions/Donations To Outside Institutes / Associations	0.06			
18	Electricity Charges To Offices	0.00			
19	Water Charges	0.00			
20	Entertainment Charges	0.03			
21	Miscellaneous Expenses	0.06			
22	Legal Charges	0.03			
23	Auditor's Fee	0.02			
24	Freight On Capital Equipments	-			
25	Purchase Related Advertisement Expenses	-			
26	Vehicle Running Expenses Truck / Delivery Van	-			
27	Vehicle Hiring Expenses Truck / Delivery Van	-			
28	Other Freight	-			
29	Transit Insurance	-			
30	Octroi	-			
31	Incidental Stores Expenses	-			
32	Fabrication Charges	-			
33	CSR	0.04			
	Total A&G Expenses	1.83			
34	Less: A&G Expenses Capitalised	0.00			
	Total A&G Expenses	1.83			

Consolidated
O&M
approved for
the year

Consolidated
O&M
approved for
the year

ASSETS

ASSAM POWER GENERATION CORPORATION LIMITED
NAMRUP THERMAL POWER STATION

NTPS		FY2019-20								
Group of Asset	Rate of Depreciation AERC 2015 REG	Opening balance		Adjustment as on 01/04/2017		Addition during the year		Deletion during the year		Closing balance
		Asset	Depr	Asset	Depr	Asset	Depr	Asset	Depr	
Land	0.00%	9.71	-	-	-	-	-	-	-	9.71
Building	3.34%	11.18	8.81	-	-	-	0.00	-	-	11.18
Hydraulic works	5.28%	0.04	0.00	-	-	-	0.00	-	-	0.04
Other civil works	3.34%	26.82	8.55	-	-	0.74	0.40	(2.03)	(2.03)	25.53
Plant & machinery- Gas	5.28%	96.38	85.24	-	-	0.41	0.33	-	-	96.79
Plant & machinery- Hydel	5.28%	-	-	-	-	-	-	-	-	-
Lines & cables	5.28%	1.95	0.73	-	-	-	0.05	-	-	1.95
Vehicle	9.50%	0.55	0.50	-	-	-	0.01	(0.11)	(0.09)	0.45
Furniture	6.33%	1.13	0.95	-	-	0.06	0.04	-	-	1.19
Other office equipment	6.33%	1.28	0.81	-	-	0.19	0.08	-	-	1.47
Roads on land belonging to others	3.34%	-	-	-	-	-	-	-	-	-
Capital spares at Generating Stations	5.28%	41.46	37.32	-	-	-	0.65	-	-	41.46
		190.49	142.90	-	-	1.40	1.56	(2.13)	(2.13)	189.75
Less: Depreciation on Grant										
Total Grant in Capital Asset							13.16			
Rate of Depreciation							0.01			
Depreciation on 90% of the Assets funded by Grants/subsidies							0.11			
Net Depreciation							1.46			

ASSETS

NTPS		
Group of Asset	Rate of Depreciation AERC 2015 REG	Balance
		Depr
Land	0.00%	-
Building	3.34%	8.81
Hydraulic works	5.28%	0.00
Other civil works	3.34%	6.91
Plant & machinery- Gas	5.28%	85.57
Plant & machinery- Hydel	5.28%	-
Lines & cables	5.28%	0.78
Vehicle	9.50%	0.41
Furniture	6.33%	0.99
Other office equipment	6.33%	0.89
Roads on land belonging to others	3.34%	-
Capital spares at Generating Stations	5.28%	37.97
		142.34
Less: Depreciation on Grant		
Total Grant in Capital Asset		
Rate of Depreciation		
Depreciation on 90% of the Assets funded by Grants/subsidies		
Net Depreciation		

ASSETS

ASSAM POWER GENERATION CORPORATION LIMITED
NAMRUP THERMAL POWER STATION

NTPS		FY2020-21									
Group of Asset	Rate of Depreciation AERC 2015 REG	Balance depreciable asset	Opening balance		Adjustment as on 01/04/2018		Addition during the year		Deletion during the year		Closing Asset
			Asset	Depr	Asset	Depr	Asset	Depr	Asset	Depr	
Land	0.00%	9.71	9.71	-	-	-	-	-	-	-	9.71
Building	3.34%	1.25	11.18	8.81	-	-	-	0.00	-	-	11.18
Hydraulic works	5.28%	0.03	0.04	0.00	-	-	-	0.00	-	-	0.04
Other civil works	3.34%	16.06	25.53	6.91	-	-	0.94	0.41	-	-	26.47
Plant & machinery- Gas	5.28%	1.54	96.79	85.57	-	-	-	0.33	-	-	96.79
Plant & machinery- Hydel	5.28%	-	-	-	-	-	-	-	-	-	-
Lines & cables	5.28%	0.97	1.95	0.78	-	-	-	0.05	-	-	1.95
Vehicle	9.50%	(0.01)	0.45	0.41	-	-	-	0.01	-	-	0.45
Furniture	6.33%	0.08	1.19	0.99	-	-	-	0.04	-	-	1.19
Other office equipment	6.33%	0.43	1.47	0.89	-	-	-	0.08	-	-	1.47
Roads on land belonging to others	3.34%	-	-	-	-	-	-	-	-	-	-
Capital spares at Generating Stations	5.28%	(0.65)	41.46	37.97	-	-	-	0.65	-	-	41.46
		29.41	189.75	###	-	-	0.94	1.58	-	-	190.69
Less: Depreciation on Grant											
Total Grant in Capital Asset								17.91			
Rate of Depreciation								0.01			
Depreciation on 90% of the Assets funded by Grants/subsidies								0.13			
Net Depreciation								1.45			

ASSETS

NTPS		
Group of Asset	Rate of Depreciation AERC 2015 REG	balance
		Depr
Land	0.00%	-
Building	3.34%	8.82
Hydraulic works	5.28%	0.00
Other civil works	3.34%	7.33
Plant & machinery- Gas	5.28%	85.90
Plant & machinery- Hydel	5.28%	-
Lines & cables	5.28%	0.84
Vehicle	9.50%	0.42
Furniture	6.33%	1.02
Other office equipment	6.33%	0.97
Roads on land belonging to others	3.34%	-
Capital spares at Generating Stations	5.28%	38.62
		143.92
Less: Depreciation on Grant		
Total Grant in Capital Asset		
Rate of Depreciation		
Depreciation on 90% of the Assets funded by Grants/subsidies		
Net Depreciation		

ASSETS

ASSAM POWER GENERATION CORPORATION LIMITED
NAMRUP THERMAL POWER STATION

NTPS		FY2021-22									
Group of Asset	Rate of Depreciation AERC 2015 REG	Balance depreciable asset	Opening balance		Adjustment as on 01/04/2018		Addition during the year		Deletion during the year		Closing Asset
			Asset	Depr	Asset	Depr	Asset	Depr	Asset	Depr	
Land	0.00%	9.71	9.71	-	-	-	-	-	-	-	9.71
Building	3.34%	1.24	11.18	8.82	-	-	-	0.37	-	-	11.18
Hydraulic works	5.28%	0.03	0.04	0.00	-	-	-	0.00	-	-	0.04
Other civil works	3.34%	16.50	26.47	7.33	-	-	0.35	0.89	-	-	26.82
Plant & machinery- Gas	5.28%	1.21	96.79	85.90	-	-	0.78	0.06	-	-	97.57
Plant & machinery- Hydel	5.28%	-	-	-	-	-	-	-	-	-	-
Lines & cables	5.28%	0.92	1.95	0.84	-	-	-	0.10	-	-	1.95
Vehicle	9.50%	(0.02)	0.45	0.42	-	-	-	-	-	-	0.45
Furniture	6.33%	0.04	1.19	1.02	-	-	-	0.04	-	-	1.19
Other office equipment	6.33%	0.35	1.47	0.97	-	-	0.46	0.11	-	-	1.92
Roads on land belonging to others	3.34%	-	-	-	-	-	-	-	-	-	-
Capital spares at Generating Stations	5.28%	(1.30)	41.46	38.62	-	-	-	-	-	-	41.46
		28.68	190.69	143.92	-	-	1.58	1.58	-	-	192.28
Less: Depreciation on Grant											
Total Grant in Capital Asset								20.71			
Rate of Depreciation								0.01			
Depreciation on 90% of the Assets funded by Grants/subsidies								0.16			
Net Depreciation								1.42			

ASSETS

NTPS		
Group of Asset	Rate of Depreciation AERC 2015 REG	balance
		Depr
Land	0.00%	-
Building	3.34%	9.19
Hydraulic works	5.28%	0.01
Other civil works	3.34%	8.22
Plant & machinery- Gas	5.28%	85.96
Plant & machinery- Hydel	5.28%	-
Lines & cables	5.28%	0.94
Vehicle	9.50%	0.42
Furniture	6.33%	1.07
Other office equipment	6.33%	1.08
Roads on land belonging to others	3.34%	-
Capital spares at Generating Stations	5.28%	38.62
		145.50
Less: Depreciation on Grant		
Total Grant in Capital Asset		
Rate of Depreciation		
Depreciation on 90% of the Assets funded by Grants/subsidies		
Net Depreciation		

**ASSAM POWER GENERATION CORPORATION LIMITED
NAMRUP THERMAL POWER STATION**

Form No: 24

Loan Details	Loan Tenure (yrs)	2019-20						
		Actual						
		Rate of Interest	Opening Balance	Amount received	Principal repayment	Interest Due	Closing Balance	
A	Secured Loans	0	10.1%	2294	0	-834	190	1460
	I PFC Loans	0	0.0%	0	0	0	0	0
	KLHEP	15	12.0%	5765	0	-1335	611	4430
	NTPS(R&M)	13	12.0%	30643	2128	-2169	3667	30602
	LTPS(R&M)	20	11.9%	38703	2128	-4339	4468	36492
	NRPP	15	0.0%	0	0	0	0	0
	Sub-total		0.0%	0	0	0	0	0
			0.0%	0	0	0	0	0
B	Unsecured Loans	0	10.0%	10	0	0	1	10
	I GOA -Loans	0	10.0%	1473	264	0	147	1737
	Rural electrification	10	10.0%	886	0	0	89	886
	NRPP Ph-I	10	10.0%	1975	0	0	198	1975
	LWHRP	10	10.0%	4109	166	0	411	4275
	Lower Kopili HEP	10	10.0%	2992	1129	0	300	4121
	R&M NTPS	10	10.0%	153	0	0	15	153
	R&M LTPS	10	0.0%	0	0	0	0	0
	LRPP	10	10.0%	400	0	0	40	400
	0	0	10.0%	1165	0	0	117	1165
	Lungnit SHEP	10	10.0%	1805	0	0	181	1805
	Myntriang SHEP	10	10.0%	100	0	0	10	100
	LTPS, Ph-II	10	10.0%	70	0	0	7	70
	Development of SHEP	10	10.0%	40	0	0	4	40
	Survey & Investigation of HEP	10	10.0%	9601	1698	0	972	11299
	Non-Conventional source of energy	10	10.0%	215	0	0	22	215
	KLHEP	10	10.0%	250	0	0	25	250
	KLHEP (upper)	10	0.0%	0	0	0	0	0
	KLHEP (intermediate)	10	10.0%	104	0	0	10	104
	0	0	10.0%	15	0	0	2	15
	Dhansiri HEP	10	10.0%	425	0	0	43	425
	Setting up of a 200MW (CCGT)	10	10.0%	74	0	0	7	74
	Borgolai	10	10.0%	50	0	0	5	50
	Revival of TPS	10	10.0%	37	0	0	4	37
	Development of Amguri	10	10.0%	37	0	0	4	37
	EAP consulting service	10	10.0%	54	0	0	5	54
	Golaghat	10	10.0%	31325	0	0	3133	31325
	Boundary wall of Jagiroad	10	0.0%	0	0	0	0	0
	Station heat Rate	10	10.0%	404	0	0	40	404
	Disaster	0	0.0%	0	0	0	0	0
	Sub-total	0	0.0%	0	0	0	0	0
	0	0	10.0%	2317	126	0	242	2444
C	II GOA -Loans (Source -ADB)	0	10.0%	39	7	0	4	46
	LRPP	0	10.0%	82	58	0	12	140
	ADB Consultancy	0	0.0%	2439	191	0	258	2630
	Lower Kopili HEP	0	0.0%	0	0	0	0	0
	Sub-total	0	0.0%	0	0	0	7	0
D	Other Interest & Finance Charges	0	0.0%	0	0	0	0	0
	Cost of raising Finance / Bank Charges	0	0.0%	0	0	0	0	0
	Interest on Security Deposit	0	0.0%	0	0	0	0	0
	Penal Interest Charges	0	0.0%	0	0	0	7	0
	Lease Rentals	0	0.0%	0	0	0	0	0
	Sub-total	0	0.0%	98911	5578	-4339	10522	100151
E	nd Total Of Interest & Finance Charges (A + B + C)	0	0.0%	98911	5578	-4339	6329	100151
F	Less: Interest & Finance Charges Capitalised	0	0.0%	0	0	0	0	0
G	Net Total Of Interest & Finance Charges (E - F)	0	0.0%	0	0	0	0	0

**ASSAM POWER GENERATION CORPORATION LIMITED
NAMRUP THERMAL POWER STATION**

Form No: 24

Loan Details		2020-21					
		Estimated					
		Rate of Interest	Opening Balance	Amount received	Principal repayment	Interest Due	Closing Balance
A	Secured Loans	10.1%	1460	0	-834	105	626
	I PFC Loans	0.0%	0	0	0	0	0
	KLHEP	12.0%	4430	0	-1335	451	3095
	NTPS(R&M)	12.0%	30602	0	-2169	3534	28433
	LTPS(R&M)	0.0%	36492	0	-4339	4091	32153
	NRPP	0.0%	0	0	0	0	0
	Sub-total	0.0%	0	0	0	0	0
		0.0%	0	0	0	0	0
		0.0%	0	0	0	0	0
B	Unsecured Loans	10.0%	10	0	0	1	10
	I GOA -Loans	10.0%	1737	0	0	174	1737
	Rural electrification	10.0%	886	0	0	89	886
	NRPP Ph-I	10.0%	1975	0	0	198	1975
	LWHRP	10.0%	4275	147	0	435	4423
	Lower Kopili HEP	10.0%	4121	737	0	449	4858
	R&M NTPS	10.0%	153	0	0	15	153
	R&M LTPS	0.0%	0	0	0	0	0
	LRPP	10.0%	400	0	0	40	400
	0	10.0%	1165	0	0	117	1165
	Lungnit SHEP	10.0%	1805	0	0	181	1805
	Myntriang SHEP	10.0%	100	0	0	10	100
	LTPS, Ph-II	10.0%	70	0	0	7	70
	Development of SHEP	10.0%	40	0	0	4	40
	Survey & Investigation of HEP	10.0%	11299	1645	0	1212	12944
	Non-Conventional source of energy	10.0%	215	0	0	22	215
	KLHEP	10.0%	250	0	0	25	250
	KLHEP (upper)	0.0%	0	0	0	0	0
	KLHEP (intermediate)	10.0%	104	0	0	10	104
	0	10.0%	15	0	0	2	15
	Dhansiri HEP	10.0%	425	0	0	43	425
	Setting up of a 200MW (CCGT)	10.0%	74	0	0	7	74
	Borgolai	10.0%	50	0	0	5	50
	Revival of TPS	10.0%	37	0	0	4	37
	Development of Amguri	10.0%	37	0	0	4	37
	EAP consulting service	10.0%	54	0	0	5	54
	Golaghat	10.0%	31325	0	0	3133	31325
	Boundary wall of Jagiroad	0.0%	0	0	0	0	0
	Station heat Rate	10.0%	404	0	0	40	404
	Disaster	0.0%	0	0	0	0	0
	Sub-total	0.0%	0	0	0	0	0
	0	10.0%	2444	0	0	244	2444
C	II GOA -Loans (Source_ADB)	10.0%	46	0	0	5	46
	LRPP	10.0%	140	0	0	14	140
	ADB Consultancy	0.0%	2630	0	0	263	2630
	Lower Kopili HEP	0.0%	0	0	0	0	0
	Sub-total	0.0%	0	0	0	0	0
D	Other Interest & Finance Charges	0.0%	0	0	0	0	0
	Cost of raising Finance / Bank Charges	0.0%	0	0	0	0	0
	Interest on Security Deposit	0.0%	0	0	0	0	0
	Penal Interest Charges	0.0%	0	0	0	0	0
	Lease Rentals	0.0%	0	0	0	0	0
	Sub-total	0.0%	100151	2529	-4339	10583	98341
E	nd Total Of Interest & Finance Charges (A + B + C)	0	100151	2529	-4339	10583	98341
F	Less: Interest & Finance Charges Capitalised	0	0	0	0	0	0
G	Net Total Of Interest & Finance Charges (E - F)	0	0	0	0	0	0

**ASSAM POWER GENERATION CORPORATION LIMITED
NAMRUP THERMAL POWER STATION**

Form No: 24

Loan Details	2021-22						
	Projected						
	Rate of Interest	Opening Balance	Amount received	Principal repayment	Interest Due	Closing Balance	
A	Secured Loans	10.1%	626	0	-626	32	0
	I PFC Loans	0.0%	0	0	0	0	0
	KLHEP	12.0%	3095	0	-1335	291	1760
	NTPS(R&M)	12.0%	28433	0	-2169	3274	26263
	LTPS(R&M)	0.0%	32153	0	-4130	3597	28023
	NRPP	0.0%	0	0	0	0	0
	Sub-total	0.0%	0	0	0	0	0
		0.0%	0	0	0	0	0
		0.0%	0	0	0	0	0
B	Unsecured Loans	10.0%	10	0	0	1	10
	I GOA -Loans	10.0%	1737	0	0	174	1737
	Rural electrification	10.0%	886	0	0	89	886
	NRPP Ph-I	10.0%	1975	0	0	198	1975
	LWHRP	10.0%	4423	190	0	452	4612
	Lower Kopili HEP	10.0%	4858	710	0	521	5568
	R&M NTPS	10.0%	153	0	0	15	153
	R&M LTPS	0.0%	0	0	0	0	0
	LRPP	10.0%	400	0	0	40	400
	0	10.0%	1165	0	0	117	1165
	Lungnit SHEP	10.0%	1805	0	0	181	1805
	Myntriang SHEP	10.0%	100	0	0	10	100
	LTPS, Ph-II	10.0%	70	0	0	7	70
	Development of SHEP	10.0%	40	0	0	4	40
	Survey & Investigation of HEP	10.0%	12944	210	0	1305	13154
	Non-Conventional source of energy	10.0%	215	0	0	22	215
	KLHEP	10.0%	250	0	0	25	250
	KLHEP (upper)	0.0%	0	0	0	0	0
	KLHEP (intermediate)	10.0%	104	0	0	10	104
	0	10.0%	15	0	0	2	15
	Dhansiri HEP	10.0%	425	0	0	43	425
	Setting up of a 200MW (CCGT)	10.0%	74	0	0	7	74
	Borgolai	10.0%	50	0	0	5	50
	Revival of TPS	10.0%	37	0	0	4	37
	Development of Amguri	10.0%	37	0	0	4	37
	EAP consulting service	10.0%	54	0	0	5	54
	Golaghat	10.0%	31325	0	0	3133	31325
	Boundary wall of Jagiroad	0.0%	0	0	0	0	0
	Station heat Rate	10.0%	404	0	0	40	404
	Disaster	0.0%	0	0	0	0	0
	Sub-total	0.0%	0	0	0	0	0
	0	10.0%	2444	0	0	244	2444
C	II GOA -Loans (Source -ADB)	10.0%	46	0	0	5	46
	LRPP	10.0%	140	0	0	14	140
	ADB Consultancy	0.0%	2630	0	0	263	2630
	Lower Kopili HEP	0.0%	0	0	0	0	0
	Sub-total	0.0%	0	0	0	0	0
D	Other Interest & Finance Charges	0.0%	0	0	0	0	0
	Cost of raising Finance / Bank Charges	0.0%	0	0	0	0	0
	Interest on Security Deposit	0.0%	0	0	0	0	0
	Penal Interest Charges	0.0%	0	0	0	0	0
	Lease Rentals	0.0%	0	0	0	0	0
	Sub-total	0.0%	98341	1110	-4130	10272	95321
E	nd Total Of Interest & Finance Charges (A + B + C)	0	98341	1110	-4130	10272	95321
F	Less: Interest & Finance Charges Capitalised	0	0	0	0	0	0
G	Net Total Of Interest & Finance Charges (E - F)	0	0	0	0	0	0

ASSAM POWER GENERATION CORPORATION LIMITED					
NAMRUP THERMAL POWER STATION					
	Loan Details	Unit	2019-20	2020-21	2021-22
			Actual	Estimated	Projected
1	Equity (Opening Balance)	Rs. Cr	55	55	55
2	Add: Increase due to discharges during the year / period	Rs. Cr	0	0	0
3	Less: Decrease due to de-capitalisation during the year / period	Rs. Cr	0	0	0
4	Less: Decrease due to reversal during the year / period	Rs. Cr	0	0	0
5	Equity (Closing Balance)	Rs. Cr	55	55	55
6	Average Equity	Rs. Cr	55	55	55
7	Rate of Return on Equity	%	15.5%	15.5%	15.5%
8	Return on Equity	Rs. Cr	8.53	5.57	3.10

ASSAM POWER GENERATION CORPORATION LIMITED					
NAMRUP THERMAL POWER STATION					
	Particulars	Unit	2018-19	2019-20	2020-21
			Actual	Estimated	Projected
For Coal Based Generating Stations					
1	Cost of Coal for 1.5 months for pithead & 2 months for non-pit head generating station*	Rs. Cr			
2	Cost of Secondary Fuel Oil for 2 months*	Rs. Cr			
3	Maintenance Spares @ 20% of O&M	Rs. Cr			
4	O&M expenses for 1 month	Rs. Cr			
5	Receivables equivalent to 2 months of capacity and energy charge^	Rs. Cr			
Total Working Capital Requirement		Rs. Cr			
Rate of Interest #		%			
Interest on Normative Working Capital Requirement		Rs. Cr			
For Open-cycle Gas Turbine/ Combined Cycle thermal generating stations					
1	Fuel expenses for 1 month *	Rs. Cr	6.74	3.11	1.82
2	Liquid fuel stock for 15 days*	Rs. Cr	-	-	-
3	Maintenance spares @ 30% of O&M	Rs. Cr	10.97	10.82	6.40
4	O&M expenses for 1 month	Rs. Cr	3.05	3.01	1.78
5	Receivables equivalent to 2 months of capacity and energy charge^	Rs. Cr	19.83	12.67	6.95
Total Working Capital Requirement		Rs. Cr	40.58	29.61	16.96
Rate of Interest #		%	10.00%	10.00%	10.00%
Interest on Normative Working Capital Requirement		Rs. Cr	4.06	2.96	1.70
For Hydro Generating stations					
1	O&M expenses for 1 month	Rs. Cr			
2	Maintenance spares @ 15% of O&M	Rs. Cr			
3	Receivables equivalent to 2 months of annual fixed charge	Rs. Cr			
Total Working Capital Requirement		Rs. Cr			
Rate of Interest #		%			
Interest on Normative Working Capital Requirement		Rs. Cr			
* corresponding to target availability					
^ calculated on target availability					
# shall be equal to the interest rate equivalent to State Bank of India base rate as on 1st April of the respective					

Name of Company:					
Name of Plant/ Station:					
Detailed Information in respect of fuel for computation of Energy Charges				Form No:	F27
	Particulars	Unit	Preceeding 3rd Month*	Preceeding 2nd Month*	Preceeding 1st Month*
1	Quantity of Coal/ Lignite supplied by Coal/ Lignite Company	MMT	Gas price sheets included seperately (Sheet : Gas Price)		
2	Adjustment (+/-) in quantity supplied made by Coal/ Lignite Company	MMT			
3	Coal supplied by Coal/ Lignite Company (1+2)	MMT			
4	Normative Transit & Handling Losses (For Coal/ Lignite Projects)	MMT			
5	Net coal / Lignite Supplied (3-4)	MMT			
6	Amount charged by the Coal /Lignite Company	Rs Cr.			
7	Adjustment (+/-) in amount charged made by Coal/Lignite Company	Rs Cr.			
8	Total amount Charged (6+7)	Rs Cr.			
9	Transportation charges by rail/ship/road transport	Rs Cr.			
10	Adjustment (+/-) in amount charged made by Railways/Transport Company	Rs Cr.			
11	Demurrage Charges, if any	Rs Cr.			
12	Cost of diesel in transporting coal through MGR system, if applicable	Rs Cr.			
13	Total Transportation Charges (9+/-10-11+12)	Rs Cr.			
14	Total amount Charged for coal/lignite supplied including Transportation (8+13)	Rs Cr.			
15	Landed cost of coal/ Lignite	Rs./MT			
16	Blending Ratio (Domestic/Imported)				
17	Weighted average cost of coal/ Lignite for preceding three months	Rs./MT			
18	GCV of Domestic Coal as per bill of Coal Company				
19	GCV of Imported Coal as per bill Coal Company				
20	Weighted average GCV of coal/ Lignite as Billed	kCal/ kg			
21	GCV of Domestic Coal as received at Station				
22	GCV of Imported Coal as received at Station				
23	Weighted average GCV of coal/ Lignite as Received	kCal/ kg			
* From COD of 1/4/2016 as the case may be					
Similar details to be furnished for natural gas/liquid fuel for CCGT station and secondary fuel oil for coal/lignite based thermal plants					

ASSAM POWER GENERATION CORPORATION LIMITED				
NAMRUP THERMAL POWER STATION				
Details of Expenses Capitalised			Form No: F 28	
			(Rs. Cr)	
		2018-19	2019-20	2020-21
		Actual	Estimated	Projected
1	Interest & Finance charges Capitalised	0.00	0.00	0.00
2	Employee expenses	0.00	0.00	0.00
3	A&G Expenses	0.00	0.00	0.00
4	Others, if any	0.00	0.00	0.00
Grand Total		0.00	0.00	0.00

REGULATORY FORMATS FOR
ARR & TARIFF FILING BY
GENERATION LICENSEE -
LAKWA THERMAL POWER
STATION

Name of Company:		ASSAM POWER GENERATION CORPORATION LIMITED			
Name of Plant/ Station:		LAKWA THERMAL POWER STATION			
Annual Revenue Requirement Summary			Form No:		F1
					Rs Cr.
		Form	2019-20	2020-21	2021-22
			Actual	Estimated	Projected
A	Generation				
1	Gross Generation (MU)	F4	362.01	395.92	425.74
2	Aux Consumption (%)	F4	10.39%	7.23%	5.50%
3	Net Generation (MU)	F4	324.39	367.31	402.32
B	Capacity Charges (Annual Fixed Charges)				
1	O&M expenses		41.53	37.26	39.61
a	Employee Expenses	F21	28.54	0.00	
b	R & M Expense	F20	8.96	0.00	
c	A&G Expense	F22	4.02	0.00	
	Increase in AERC Filing Fees			0.10	0.10
2	Depreciation	F23	11.15	7.70	7.74
3	Interest on Loans	F14B	0.03	0.00	0.00
4	Return on Equity	F25	22.18	15.16	15.16
5	Interest on Working Capital	F26	5.11	4.13	4.57
6	Income Tax	F29	0.41	0.00	0.00
7	Prior Period items				
8	Special allowance in lieu of R&M or separate compensation allowance		0.00	0.00	18.00
9	Other income		-25.37	-9.22	-9.22
	Capacity Building		0.11	0.10	0.13
	Total		55.15	55.23	76.09
C	Variable Charges (Energy Charges)				
	Energy Charges from Primary Fuel (Rs Cr) ^{C1, C2, C3, C4}	F4	108.21	71.29	71.21
	Energy Charges from Primary Fuel (Rs/ kWh)	F4	2.99	1.80	1.67
	C1 - If multifuel is used simultaneously, energy charges to be given in respect of every fuel individually				
	C2 - Energy charge shall be computed for open cycle operation and combined cycle operation separately in case of gas/ liquid fuel fired plant				
	C3 - Energy charge shall be worked out based on ex-bus energy scheduled to be sent out				

Name of Company:		ASSAM POWER GENERATION CORPORATION LIMITED						
Name of Plant/ Station:		LAKWA THERMAL POWER STATION						
Plant Characteristics-Thermal							Form No:	F2a
Unit(s)/ Block(s) Parameters	Unit I	Unit II	Unit III	Unit IV	Unit V	Unit VI	Unit VII	Unit VIII
Installed Capacity (MW)	15	15	15	15	20	20	20	37.2
Schedule COD as per Investment Approval								30/06/2008
Actual COD /Date of Taken Over (as applicable)	30/07/1983	26/04/1981	08-02-1981	28/11/1986	01-03-1994	26/07/1994	24/05/1999	17/01/2012
Pit Head or Non Pit Head	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Name of the Boiler Manufacture	N/A	N/A	N/A	N/A	N/A	N/A	N/A	BHEL,TRICHI
Name of Turbine Generator Manufacture	Westinhouse Canada Ltd.	WCL	WCL	Mitsubishi Heavy Industries	BHEL HYD	BHEL HYD	BHEL HYD	BHEL HYDERABAD
Main Steams Pressure at Turbine inlet (kg/Cm2) abs ¹ .	N/A	N/A	N/A	N/A	N/A	N/A	N/A	HP-60 Kg/CM ² LP-4.5 Kg/CM ²
Main Steam Temperature at Turbine inlet (oC) ¹	N/A	N/A	N/A	N/A	N/A	N/A	N/A	HP-460 ^o C LP-200 ^o C
Reheat Steam Pressure at Turbine inlet (kg/Cm2) ¹	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Reheat Steam Temperature at Turbine inlet (oC) ¹	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Main Steam flow at Turbine inlet under MCR condition (tons /hr) ²	N/A	N/A	N/A	N/A	N/A	N/A	N/A	HP-122.84 TPH LP-31.64 TPH
Main Steam flow at Turbine inlet under VVO condition (tons /hr) ²	N/A	N/A	N/A	N/A	N/A	N/A	N/A	HP-122.84 TPH LP-31.64 TPH
Unit Gross electrical output under MCR /Rated condition (MW) ²	15	15	15	15	20	20	20	37.2
Unit Gross electrical output under VVO condition (MW) ²	15	15	15	15	20	20	20	N/A
Guaranteed Design Gross Turbine Cycle Heat Rate (kCal/kWh) ³	3513	3513	3513	3589	3292	3292	3292	N/A
Conditions on which design turbine cycle heat rate guaranteed	NCV	NCV	NCV	NCV	NCV	NCV	NCV	
% MCR	N/A	N/A	N/A	N/A	N/A	N/A	N/A	100%
% Makeup Water Consumption	N/A	N/A	N/A	N/A	N/A	N/A	N/A	2.72%
Design Capacity of Make up Water System	N/A	N/A	N/A	N/A	N/A	N/A	N/A	256 m ³ /hr
Design Capacity of Inlet Cooling System	N/A	N/A	N/A	N/A	N/A	N/A	N/A	8700 TPH
Design Cooling Water Temperature (0C)	N/A	N/A	N/A	N/A	N/A	N/A	N/A	32 ^o C
Back Pressure	N/A	N/A	N/A	N/A	N/A	N/A	N/A	0.098 Kg/cm ² (ABS)
Steam flow at super heater outlet under BMCR condition (tons/hr)	N/A	N/A	N/A	N/A	N/A	N/A	N/A	HP-123.6 TPH LP-33 TPH
Steam Pressure at super heater outlet under BMCR condition (kg/Cm2)	N/A	N/A	N/A	N/A	N/A	N/A	N/A	HP-63 Kg/CM ² LP-5 Kg/CM ²
Steam Temperature at super heater outlet under BMCR condition (0C)	N/A	N/A	N/A	N/A	N/A	N/A	N/A	HP-463 ^o C LP-202 ^o C
Steam Temperature at Reheater outlet at BMCR condition (0C)	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Design / Guaranteed Boiler Efficiency (%) ⁴	N/A	N/A	N/A	N/A	N/A	N/A	N/A	78.16%
Design Fuel with and without Blending of domestic/imported coal	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Type of Cooling Tower	N/A	N/A	N/A	N/A	N/A	N/A	N/A	Mechanical Draft Cooling Tower
Type of cooling system ⁵	N/A	N/A	N/A	N/A	N/A	N/A	N/A	Induced draft cooling
Type of Boiler Feed Pump ⁶	N/A	N/A	N/A	N/A	N/A	N/A	N/A	Motor driver
Fuel Details ⁷								
-Primary Fuel	Natural gas	Natural gas	Natural gas	Natural gas	Natural gas	Natural gas	Natural gas	Flue gas of GT #5,#6,#7 of LTPS
-Secondary Fuel	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
-Alternate Fuels	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Special Features/ Site Specific Features ⁸	N/A	N/A	N/A	N/A	N/A	N/A	N/A	Intake Water pump house
Special Technological Features ⁹	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Environmental Regulation related features ¹⁰	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Any other special features	N/A							
1: At Turbine MCR condition.								
2: with 0% (Nil) make up and design Cooling water temperature								
3: at TMCR output based on gross generation, 0% (Nil) makeup and design Cooling water temperature.								
4: With Performance coal based on Higher Heating Value (HHV) of fuel and at BMCR) out put								
5: Closed circuit cooling, once through cooling, sea cooling, natural draft cooling, induced draft cooling etc.								
6: Motor driven, Steam turbine driven etc.								
7: Coal or natural gas or Naptha or lignite etc.								
8: Any site specific feature such as Merry-Go-Round, Vicinity to sea, Intake /makeup water systems etc. scrubbers etc. Specify all such features								
9: Any Special Technological feature like Advanced class FA technology in Gas Turbines, etc.								
10: Environmental Regulation related features like FGD, ESP etc.,								
Note 1: In case of deviation from specified conditions in Regulation, correction curve of manufacturer may also be submitted.								
Note 2: Heat Balance Diagram has to be submitted along with above information in case of new stations.								
Note 3: The Terms – MCR, BMCR, HHV, Performance coal, are as defined in CEA Technical Standards for Construction of Electric Plants and Electric Lines Regulations – 2010 notified by the Central Electricity Authority								

Name of Company:		SSAM POWER GENERATION CORPORATION LIMITED			
Name of Plant/ Station:		LAKWA THERMAL POWER STATION			
Normative Parameters Considered for Tariff Computations-Thermal			Form No:	F3 (a)	
	Particulars	Unit	2019-20	2020-21	2021-22
			Actual	Estimated	Projected
1	Base Rate of Return on Equity	%	15.50	15.50	15.50
2	Target Availability	%	50.00%	50.00%	50.00%
3	Auxiliary Energy Consumption	%	5.50%	5.50%	5.50%
4	Gross Station Heat Rate	kCal/ kWh	3200	3200	3200
5	Specific Fuel Oil Consumption ml/kWh	ml/ kWh			
6	Cost of Coal/ Lignite	Rs/ Ton			
7	Cost of Main Secondary Fuel Oil	Rs/ kL			
8	Cost of Gas	Rs/ SCM	8.26	5.78	4.92
9	Primary Fuel (Coal/ Lignite/ Gas) for Working Capital	in Months			
10	Secondary Fuel for Working Capital	in Months			
11	O&M Expenses	Rs/ MW			
12	Maintenance Spares for Working Capital	% of O&M	30	30	30
13	Receivables for Working Capital	in Months	2 months	2 months	2 months
14	Base Rate of SBI as on 01-04-2017	%	10.0%	10.0%	10.00%

Name of Company:		ASSAM POWER GENERATION CORPORATION LIMITED			
Name of Plant/ Station:		LAKWA THERMAL POWER STATION			
Generation Details and Variable Cost			Form No:	F4	
	Particulars	Unit	2019-20	2020-21	2021-22
			Actual	Estimated	Projected
1	Installed Capacity	MW	97.20	97.20	97.20
2	Plant Load Factor	%	40.21%	45.66%	50.00%
3	Gross Generation	MU	362.01	395.92	425.74
4	Auxiliary Consumption	%	10.39%	7.23%	5.50%
5	Auxiliary Consumption	MU	37.612	28.61	23.42
6	Net Generation	MU	324.393	367.31	402.324
7	Station Heat Rate	kCal/ kWh	3397	2981	3200
	Primary Fuel Consumption (Coal/ Lignite)				
8	GCV of Coal/ Lignite	kCal/ kg			
9	Quantity of Coal/ Lignite (Fired)	MT			
10	Specific Coal Consumption (Fired)	kg/ kWh			
11	Transit Loss	MT			
12	Transit Loss	%			
13	Gross Quantity of Coal (Purchased)	MT			
14	Rate of Coal/ Lignite	Rs/ Ton			
15	Cost of Coal/ Lignite	Rs Cr.			
	Primary Fuel Consumption (Gas/ LNG/ Liquid)				
16	GCV of Gas/ LNG/ Liquid Fuel	kCal/ SCM	9388.83	9419.27	9419.27
17	Quantity of Gas/ LNG/ Liquid Fuel	MMSCM	130.96	125.31	144.64
18	Specific Fuel Consumption	SCM/ kWh	0.36	0.32	0.34
19	Rate of Gas/ LNG/ Liquid Fuel	Rs/ SCM	8.26	5.78	4.92
20	Cost of Gas/ LNG/ Liquid Fuel	Rs Cr.	108.21	71.29	71.21
	Secondary Fuel Oil Consumption				
21	GCV of Secondary Fuel Oil	kCal/ kL			
22	Quantity of Secondary Fuel Oil	kL			
23	Specific Secondary Fuel Oil Consumption	ml/ kWh			
24	Rate of Secondary Fuel Oil	Rs/ kL			
25	Cost of Secondary Fuel Oil	Rs Cr.			
	Primary Fuel Cost (Coal/ Lignite)	Rs Cr.			
	Primary Fuel Cost (Gas/ LNG/ Liquid)	Rs Cr.	108.21	71.29	71.21
	Secondary Fuel Cost	Rs Cr.			
C	Variable Charges (Energy Charges)				
	Energy Charges from Primary Fuel (Coal/ Lignite)	Rs/ kWh			
	Energy Charges from Primary Fuel (Gas/ LNG/ Liquid)	Rs/ kWh	2.99	1.80	1.67

Name of Company:

Name of Plant/ Station:

Abstract of admitted Capital Cost for the existing Project

Form No:

F5

	Particulars	Unit	Details
	Last date of order of Commission for the project as on 31.03.2018		
1	Capital Cost as admitted by AERC	Rs Cr.	477.51
2	Amount of un-discharged liabilities included in above (& forming part of admitted capital cost)	Rs Cr.	NIL
3	Amount of un-discharged liabilities corresponding to above admitted capital cost (but not forming part of admitted capital cost being allowed on cash basis)	Rs Cr.	NIL
4	Gross Normative Debt	Rs Cr.	268.93
5	Cumulative Repayment	Rs Cr.	281.41
6	Net Normative Debt	Rs Cr.	-12.48
7	Normative Equity	Rs Cr.	143.08
8	Cumulative Depreciation	Rs Cr.	281.41
9	Freehold land	Rs Cr.	NIL

Name of Company:

ASSAM POWER GENERATION CORPORATION LIMITED

Name of Plant/ Station:

LAKWA THERMAL POWER STATION

Statement showing claimed capital cost

Form No:

F5a

	Particulars	Unit	2019-20	2020-21	2021-22
1	Opening Capital Cost	Rs Cr.	482.53	485.91	492.76
2	Add: Addition during the year / period	Rs Cr.	3.38	6.85	7.16
3	Less: Decapitalisation during the year / period	Rs Cr.	0	0	0
4	Less: Reversal during the year / period	Rs Cr.	0.00	0	0
5	Add: Discharges during the year / period	Rs Cr.	0	0	0
6	Closing Capital Cost	Rs Cr.	485.91	492.76	499.91
7	Average Capital Cost	Rs Cr.	484.22	489.33	496.34

Name of Company:
Name of Plant/ Station:

ASSAM POWER GENERATION CORPORATION LIMITED
LAKWA THERMAL POWER STATION

Details of Project Specific Loans

Form No:

F13

Rs Cr.

Particulars	LTPS	LTPS	Package 3	Package 4	Package 5	Package 6
Source of Loan ¹	I GOA -Loans	PFC Loan				
Currency ²	INR					
Amount of Loan sanctioned (Opeing Balance)	213.15	57.65				
Amount of Gross Loan drawn upto 31.03.2016 COD ^{3,4,5,13,15} (Closing Balance)	224.44	44.30				
Interest Type ⁶	FIXED	Floating				
Fixed Interest Rate, if applicable	10%	12.0%				
Base Rate, if Floating Interest ⁷						
Margin, if Floating Interest ⁸	Yes/No	Yes/No	Yes/No	Yes/No	Yes/No	Yes/No
Are there any Caps/Floor ⁹ If above is yes,specify caps/floor						
Moratorium Period ¹⁰ Moratorium effective from						
Repayment Period ¹¹ Repayment effective from						
Repayment Frequency ¹²						
Repayment Instalment ^{13,14}						
Base Exchange Rate ¹⁶						
Are foreign currency loan hedged? If above is yes,specify details ¹⁷						

Note:

¹ Source of loan means the agency from whom the loan has been taken such as WB, ADB, WMB, PNB, SBI, ICICI, IFC, PFC etc.

² Currency refers to currency of loan such as US\$, DM, Yen, Indian Rupee etc.

³ Details are to be submitted as on 31.03.2015 for existing assets and as on COD for the remaining assets.

⁴ Where the loan has been refinanced, details in the Form is to be given for the loan refinanced. However, the details of the original loan is to be given seperately in the same form.

⁵ If the Tariff in the petition is claimed seperately for various units, details in the Form is to be given seperately for all the units in the same form.

⁶ Interest type means whether the interest is fixed or floating.

⁷ Base rate means the base as PLR, LIBOR etc. over which the margin is to be added. Applicable base rate on different dates from the date of drawl may also be enclosed.

⁸ Margin means the points over and above the floating rate.

⁹ At times caps/ floor are put at which the floating rates are frozen. If such a condition exists, specify the limits.

¹⁰ Moratorium period refers to the period during which loan servicing liability is not required.

¹¹ Repayment period means the repayment of loan such as 7 years, 10 years, 25 years etc.

¹² Repayment frequency means the interval at which the debt servicing is to be done such as monthly, quarterly, half yearly, annual, etc.

¹³ Where there is more than one drawal/repayment for a loan, the date & amount of each drawal/repayment may also be given seperately

¹⁴ If the repayment instalment amount and repayment date can not be worked out from the data furnished above, the repayment schedule to be furnished

¹⁵ In case of Foreign loan, date of each drawal & repayment alongwith exchange rate at that date may be given.

¹⁶ Base exchange rate means the exchange rate prevailing as on 31.03.2015 for existing assets and as on COD for the remaining assets.

¹⁷ In case of hedging, specify details like type of hedging, period of hedging, cost of heging, etc.

¹⁸ In case of foreign loans, provide details of exchange rate considered on date of each repayment of principal and date of interest payment.

¹⁹ At the time of truing up rate of interest with relevant reset date (if any) to be furnished seperately.

²⁰ At the time of truing up provide details of refinancing of loans considered earlier. Details such as date on which refinancing done, amount of refinanced loan, terms and conditions of refinanced loan, financing and other charges incurred for refinancing etc.

ASSAM POWER GENERATION CORPORATION LIMITED			
LAKWA THERMAL POWER STATION			
Calculation of Weighted Average Rate of Interest on Actual Loans		Form No:	F14a
		Rs. Cr	
Particulars	2019-20	2020-21	2021-22
	Actual	Estimated	Projected
Loan-1 from PFCL			
Gross loan - Opening			
Cumulative repayments of Loans upto previous year			
Net loan - Opening	387.03	364.92	321.53
Add: Drawal(s) during the Year	21.28	0.00	0.00
Less: Repayment (s) of Loans during the year	43.39	43.39	41.30
Net loan - Closing	364.92	321.53	280.23
Average Net Loan	375.97	343.23	300.88
Rate of Interest on Loan on annual basis	11.54%	11.21%	11.19%
Interest on loan	44.68	40.91	35.97
Loan-2 Govt. of Assam			
Gross loan - Opening			
Cumulative repayments of Loans upto previous year			
Net loan - Opening	239.80	271.48	318.46
Add: Drawal(s) during the Year	9.98	25.29	11.10
Less: Repayment (s) of Loans during the year	-21.69	-21.69	-21.69
Net loan - Closing	271.48	318.46	351.25
Average Net Loan	255.64	294.97	334.85
Rate of Interest on Loan on annual basis	7.61%	8.73%	8.82%
Interest on loan	18.25	23.71	28.09
Total Loan			
Gross loan - Opening			
Cumulative repayments of Loans upto previous year			
Net loan - Opening	626.83	636.40	639.99
Add: Drawal(s) during the Year	31.26	25.29	11.10
Less: Repayment (s) of Loans during the year	21.69	21.69	19.61
Net loan - Closing	636.40	639.99	631.48
Average Net Loan	631.61	638.19	635.74
Interest on loan	62.93	64.62	64.06
Weighted average Rate of Interest on Loans	10.04%	10.15%	10.01%
Note:			
1. In case of Foreign Loans, the calculations in Indian Rupees is to be furnished. However, the calculations in Original currency is also to be furnished separately in the same form.			
2. As per the Regulation 35.5, the weighted average rate of interest has to be calculated on the basis of the actual loan portfolio at the beginning of each year. Hence the weighted average rate of interest has			
3. the above actual loan portfolio is shown as for APGCL as a whole, as the same is to be used for calculation			

Name of Company:		POWER GENERATION CORPORATION LIMITED		
Name of Plant/ Station:		AKWA THERMAL POWER STATION		
Calculation of Interest on Normative Loan		Form No:		F14b
		Rs Cr.		
S. No.	Particulars	2019-20	2020-21	2021-22
		Actual	Estimated	Projected
1	Gross Normative loan – Opening			
2	Cumulative repayment of Normative loan upto previous year			
3	Net Normative loan – Opening	0.00	0.00	0.00
4	Add: Increase due to addition during the year / period	3.38	7.37	7.10
5	Less: Decrease due to de-capitalisation during the year / period	0.00		
6	Less: Decrease due to reversal/repayment during the year / period	11.15	11.26	11.32
7	Add: Increase due to discharges during the year / period			
8	Net Normative loan - Closing	0.00	0.00	0.00
9	Average Normative loan	0.00	0.00	0.00
10	Weighted average rate of interest	10.04%	10.15%	10.01%
11	Interest on Loan	0.00	0.00	0.00
12	Bank charges	0.03	0.00	0.00
13	Interest on Loan plus bank charges	0.03	0.00	0.00

Name of Company:
Name of Plant/ Station:

ASSAM POWER GENERATION CORPORATION LIMITED
LAKWA THERMAL POWER STATION

Details of Allocation of corporate loans to various projects

Form No: F15

Particulars	Rs Cr.					
	Rural electrification	Non-Conventional source of energy	Development of Amguri	LTPS(R&M)	Station heat Rate	Package 6
Source of Loan ¹	I GOA -Loans	I GOA -Loans	I GOA -Loans	I PFC Loans	I GOA -Loans	
Currency ²	INR	INR	INR	INR	INR	
Amount of Loan sanctioned (Opening Balance)	0.10	0.40	0.50	57.65	154.79	
Amount of Gross Loan drawn upto 31.03.2016/ COD ^{3,4,5,13,15} (Closing Balance)	0.10	0.40	0.50	44.30	154.79	
Interest Type ⁶	Fixed	Fixed	Fixed	Fixed	Fixed	
Fixed Interest Rate, if applicable	10%	10%	10%	11.99%	10%	
Base Rate, if Floating Interest ⁷						
Margin, if Floating Interest ⁸	Yes/No	Yes/No	Yes/No	Yes/No	Yes/No	Yes/No
Are there any Caps/Floor ⁹						
If above is yes,specify caps/floor						
Moratorium Period ¹⁰						
Moratorium effective from						
Repayment Period ¹¹						
Repayment effective from						
Repayment Frequency ¹²						
Repayment Instalment ^{13,14}						
Base Exchange Rate ¹⁶						
Are foreign currency loan hedged?						
If above is yes,specify details ¹⁷						

Distribution of loan packages to various projects

Name of the Projects						Total
Project 1						
Project 2						
Project 3 and so on						

Note:

¹ Source of loan means the agency from whom the loan has been taken such as WB, ADB, WMB, PNB, SBI, ICICI, IFC, PFC etc.

² Currency refers to currency of loan such as US\$, DM, Yen, Indian Rupee etc.

³ Details are to be submitted as on 31.03.2015 for existing assets and as on COD for the remaining assets.

⁴ Where the loan has been refinanced, details in the Form is to be given for the loan refinanced. However, the details of the original loan is to be given separately in the same form.

⁵ If the Tariff in the petition is claimed separately for various units, details in the Form is to be given separately for all the units in the same form.

⁶ Interest type means whether the interest is fixed or floating.

⁷ Base rate means the base as PLR, LIBOR etc. over which the margin is to be added. Applicable base rate on different dates from the date of drawl may also be enclosed.

⁸ Margin means the points over and above the floating rate.

⁹ At times caps/ floor are put at which the floating rates are frozen. If such a condition exists, specify the limits.

¹⁰ Moratorium period refers to the period during which loan servicing liability is not required.

¹¹ Repayment period means the repayment of loan such as 7 years, 10 years, 25 years etc.

¹² Repayment frequency means the interval at which the debt servicing is to be done such as monthly, quarterly, half yearly, annual, etc.

¹³ Where there is more than one drawal/repayment for a loan, the date & amount of each drawal/repayment may also be given separately

¹⁴ If the repayment instalment amount and repayment date can not be worked out from the data furnished above, the repayment schedule to be furnished separately.

¹⁵ In case of Foreign loan, date of each drawal & repayment alongwith exchange rate at that date may be given.

¹⁶ Base exchange rate means the exchange rate prevailing as on 31.03.2015 for existing assets and as on COD for the remaining assets.

¹⁷ In case of hedging, specify details like type of hedging, period of hedging, cost of heding, etc.

¹⁸ In case of foreign loans, provide details of exchange rate considered on date of each repayment of principal and date of interest payment.

¹⁹ At the time of truing up rate of interest with relevant reset date (if any) to be furnished separately.

²⁰ At the time of truing up provide details of refinancing of loans considered earlier. Details such as date on which refinancing done, amount of refinanced loan, terms and conditions of refinanced loan, financing and other charges incurred for refinancing etc.

Name of Company: POWER GENERATION CORPORATION
 Name of Plant/ Station: KWA THERMAL POWER STATION

Statement of Additional Capitalisation after COD

Form No:

F16

Rs Cr.

No	Head of Work/ Equipment				Regulations under which claimed	Justification	Admitted Cost by Commission if any
		2019-20	2020-21	2021-22			
1	Land	-	-	-			
2	Building	-	0.04	2.00			
3	Hydraulic works	-	-	-			
4	Other civil works	0.44	0.63	-			
5	Plant & machinery- Gas	2.75	5.85	4.37			
6	Plant & machinery- Hydel	-	-	-			
7	Lines & cables	-	-	-			
8	Vehicle	-	-	-			
9	Furniture	0.14	-	-			
10	Other office equipment	0.05	0.33	0.35			
11	Roads on land belonging to others	-	-	-			
12	Capital spares at Generating Station	-	-	0.44			
		3.38	6.85	7.16			

Note:

- 1 Fill the form in chronological order year wise along with detailed justification clearly bring out the necessity and the benefits
- 2 In case initial spares are purchased alongwith any equipment, then the cost of such spares should be indicated separately.
- 3 Actual/Projected additional capital expenditure claimed for past period shall be governed by Tariff Regulation for the

Name of Company: ASSAM POWER GENERATION CORPORATION LIMITED
 Name of Plant/ Station: LAKWA THERMAL POWER STATION

Details of Assets De-capitalized during the period Form No: F16a
 Rs Cr.

No	Name of the Asset	Nature of de-capitalization (whether claimed under exclusion or as additional capital expenditure)	Original Value of the Asset Capitalised	Year Put to use	Depreciation recovered till date of de-capitalization
FY 2018-19					
1	Building				0.00
2	Plant & machinery- Gas				0.00

Note: Year wise detail need to be submitted

Name of Company: **POWER GENERATION CORPORATION I**
Name of Plant/ Station: **AKWA THERMAL POWER STATIC**
Date of Commercial Operation:

Financing of Additional Capitalisation

Financial Year (Starting from COD)			
	2019-20	2020-21	2021-22
Amount capitalised in Work/ Equipment			
Financing Details			
GOA Loan	3.38	7.37	7.10
Loan-2			
Total Loan²	3.38	7.37	7.10
Grant	0.00	4.64	3.49
Equity	0.00	0.00	0.00
Internal Resources			
Others			
Total	3.38	12.00	10.59

¹ Year 1 refers to Financial Year of COD and Year 2, Year 3 etc. are the subsequent financial years respectively.

² Loan details for meeting the additional capitalisation requirement should be given as per Form 14 and Form 15 whichever is relevant.

Name of Company:		ASSAM POWER GENERATION CORPORATION LIMITED		
Name of Plant/ Station:		LAKWA THERMAL POWER STATION		
R&M Expenses		Form No:		F20
				Rs Cr.
	Particulars	2019-20	2020-21	2021-22
		Actual	Estimated	Projected
1	Plant and Machinery	4.39	Consolidated O&M approved for the year	Consolidated O&M approved for the year
2	Building	0.64		
3	Civil Works	0.14		
4	Hydraulic Works	0.09		
5	Lines, Cables Net Works etc.	-		
6	Vehicles	0.00		
7	Furniture and Fixtures	0.03		
8	Office Equipments	0.04		
9	Station Supplies	-		
10	Lubricants & Consumable stores	3.64		
11	Oil/Turbine Oil consumed in internal combustion	-		
12	Any other items (Spl R&M)	-		
	Total	8.96		

Name of Company:		AM POWER GENERATION CORPORATION LIM		
Name of Plant/ Station:		LAKWA THERMAL POWER STATION		
Employee Expenses		Form No:		F21
				Rs Cr.
	Particulars	2019-20	2020-21	2021-22
		Actual	Estimated	Projected
1	Salaries	16.83	Consolidated O&M approved for the year	Consolidated O&M approved for the year
2	Additional Pay	-		
3	Dearness Allowance (DA)	2.07		
4	Other Allowances & Relief	1.93		
5	Addl. Pay & C.Off Encashment	-		
6	Interim Relief / Wage Revision	-		
7	Overtime	0.55		
8	Bonus	0.01		
9	Medical Expenses Reimbursement	0.02		
10	Travelling Allowance(Conveyance Allowance)	-		
11	Leave Travel Assistance	0.00		
12	Earned Leave Encashment	2.60		
13	Payment Under Workman's Compensation And Gratuity	-		
14	Subsidised Electricity To Employees	-		
15	Any Other Item	-		
16	Staff Welfare Expenses	0.12		
17	Capacity Building Expenses	-		
18	Apprentice And Other Training Expenses	-		
19	Contribution To Terminal Benefits	4.40		
20	Provident Fund Contribution	-		
21	Provision for PF Fund	-		
22	Any Other Items(Revision of Pay @ 24% of Salary)	0.00		
	Total Employee Costs	28.54		
23	Less: Employee expenses capitalised	0.00		
	Net Employee expenses (D)-(E)	28.54		

Name of Company:		M POWER GENERATION CORPORATION LIM		
Name of Plant/ Station:		LAKWA THERMAL POWER STATION		
Administration & General Expenses		Form No:		F22
Rs Cr.				
	Particulars	2019-20	2020-21	2021-22
		Actual	Estimated	Projected
1	Lease/ Rent	0.57		
2	Insurance	0.72		
3	Revenue Stamp Expenses Account	-		
4	Telephone, Postage, Telegram & Telex Charges	0.05		
5	Incentive & Award To Employees/Outsiders	-		
6	Consultancy Charges	0.66		
7	Technical Fees	-		
8	Other Professional Charges	0.03		
9	Conveyance And Travelling	0.24		
10	License and Registration Fees	-		
11	Vehicle Expenses	0.82		
12	Security / Service Charges Paid To Outside Agencies	-		
13	Fee And Subscriptions Books And Periodicals	0.05		
14	Fees Paid to AERC	0.32		
15	Printing And Stationery	0.04		
16	Advertisement Expenses	0.08		
17	Contributions/Donations To Outside Institutes / Associations	0.06	Consolidated O&M approved for the year	Consolidated O&M approved for the year
18	Electricity Charges To Offices	0.00		
19	Water Charges	0.00		
20	Entertainment Charges	0.05		
21	Miscellaneous Expenses	0.20		
22	Legal Charges	0.05		
23	Auditor's Fee	0.05		
24	Freight On Capital Equipments	-		
25	Purchase Related Advertisement Expenses	-		
26	Vehicle Running Expenses Truck / Delivery Van	-		
27	Vehicle Hiring Expenses Truck / Delivery Van	-		
28	Other Freight	-		
29	Transit Insurance	-		
30	Octroi	-		
31	Incidental Stores Expenses	0.00		
32	Fabrication Charges	-		
33	CSR	0.04		
	Total A&G Expenses	4.02		
32	Less: A&G Expenses Capitalised	0.00		
	Total A&G Expenses	4.02		

CONSOLIDATED STATEMENT OF
APGCL ASSETS

ASSAM POWER GENERATION CORPORATION LIMITED

LAKWA THERMAL POWER STATION

Form No: 23

FY 2019-20												
Group of Asset	Rate of Depreciation AERC 2015 REG	Balance depreciab le asset	Opening balance		Adjustment as on 01/04/2017		Addition during the year		Deletion during the year		Closing balance	
			Asset	Depr	Asset	Depr	Asset	Depr	Asset	Depr	Asset	Depr
LTPS												
Group of Asset	Rate of Depreciation AERC 2015 REG	Balance depreciab le asset	Opening balance		Adjustment as on 01/04/2016		Addition during the year		Deletion during the year		Closing balance	
			Asset	Depr	Asset	Depr	Asset	Depr	Asset	Depr	Asset	Depr
Land	0.00%	4.75	4.75	-	-	-	-	-	-	-	4.75	-
Building	3.34%	17.33	33.58	12.89	-	-	-	0.69	-	-	33.58	13.58
Hydraulic works	5.28%	-	-	-	-	-	-	-	-	-	-	-
Other civil works	3.34%	29.45	42.75	9.02	-	-	0.44	1.20	-	-	43.19	10.22
Plant & machinery- Gas	5.28%	83.13	272.56	162.18	-	-	2.75	9.47	-	-	275.32	171.65
Plant & machinery- Hydel	5.28%	-	-	-	-	-	-	-	-	-	-	-
Lines & cables	5.28%	5.21	9.29	3.15	-	-	-	0.31	-	-	9.29	3.45
Vehicle	9.50%	0.00	0.24	0.22	-	-	-	-	-	-	0.24	0.22
Furniture	6.33%	0.04	0.46	0.38	-	-	0.14	0.02	-	-	0.60	0.40
Other office equipment	6.33%	0.16	0.33	0.13	-	-	0.05	0.02	-	-	0.37	0.15
Roads on land belonging to others	3.34%	-	-	-	-	-	-	-	-	-	-	-
Capital spares at Generating Stations	5.28%	3.29	118.57	103.43	-	-	-	1.19	-	-	118.57	104.62
		143.35	482.53	291.39	-	-	3.38	12.89	-	-	485.91	304.29
Less: Depreciation on Grant												
Total Grant in Capital Asset												
65.50												
Rate of Depreciation Depreciation on 90% of the Assets funded by Grants/subsidies												
0.03												
Net Depeciation												
11.15												

CONSOLIDATED STATEMENT OF
APGCL ASSETS

ASSAM POWER GENERATION CORPORATION LIMITED

LAKWA THERMAL POWER STATION

Form No: 23

		FY 2020-21										
Group of Asset	Rate of Depreciation AERC 2015 REG	Balance depreciab le asset	Opening balance		Adjustment as on 01/04/2018		Addition during the year		Deletion during the year		Closing balance	
			Asset	Depr	Asset	Depr	Asset	Depr	Asset	Depr	Asset	Depr
LTPS												
Group of Asset	Rate of Depreciation AERC 2015 REG	Balance depreciab le asset	Opening balance		Adjustment as on 01/04/2016		Addition during the year		Deletion during the year		Closing balance	
			Asset	Depr	Asset	Depr	Asset	Depr	Asset	Depr	Asset	Depr
Land	0.00%	4.75	4.75	-	-	-	-	-	-	-	4.75	-
Building	3.34%	16.64	33.58	13.58	-	-	0.04	0.69	-	-	33.62	14.27
Hydraulic works	5.28%	-	-	-	-	-	-	-	-	-	-	-
Other civil works	3.34%	28.65	43.19	10.22	-	-	0.63	1.21	-	-	43.82	11.43
Plant & machinery- Gas	5.28%	76.13	275.32	171.65	-	-	5.85	9.63	-	-	281.16	181.28
Plant & machinery- Hydel	5.28%	-	-	-	-	-	-	-	-	-	-	-
Lines & cables	5.28%	4.91	9.29	3.45	-	-	-	0.31	-	-	9.29	3.76
Vehicle	9.50%	0.00	0.24	0.22	-	-	-	-	-	-	0.24	0.22
Furniture	6.33%	0.14	0.60	0.40	-	-	-	0.02	-	-	0.60	0.42
Other office equipment	6.33%	0.18	0.37	0.15	-	-	0.33	0.03	-	-	0.70	0.18
Roads on land belonging to others	3.34%	-	-	-	-	-	-	-	-	-	-	-
Capital spares at Generating Stations	5.28%	2.09	118.57	104.62	-	-	-	1.19	-	-	118.57	105.81
		133.50	485.91	304.29	-	-	6.85	13.07	-	-	492.76	317.36
Less: Depreciation on Grant												
Total Grant in Capital Asset									70.14			
Rate of Depreciation Depreciation on 90% of the Assets funded by Grants/subsidies									0.03			
Net Depeciation									11.26			

CONSOLIDATED STATEMENT OF
APGCL ASSETS

ASSAM POWER GENERATION CORPORATION LIMITED

LAKWA THERMAL POWER STATION

Form No: 23

		FY2021-22										
Group of Asset	Rate of Depreciation AERC 2015 REG	Balance depreciab le asset	Opening balance		Adjustment as on 01/04/2018		Addition during the year		Deletion during the year		Closing balance	
			Asset	Depr	Asset	Depr	Asset	Depr	Asset	Depr	Asset	Depr
LTPS												
Group of Asset	Rate of Depreciation AERC 2015 REG	Balance depreciab le asset	Opening balance		Adjustment as on 01/04/2016		Addition during the year		Deletion during the year		Closing balance	
			Asset	Depr	Asset	Depr	Asset	Depr	Asset	Depr	Asset	Depr
Land	0.00%	4.75	4.75	-	-	-	-	-	-	-	4.75	-
Building	3.34%	15.99	33.62	14.27	-	-	2.00	0.72	-	-	35.62	14.99
Hydraulic works	5.28%	-	-	-	-	-	-	-	-	-	-	-
Other civil works	3.34%	28.01	43.82	11.43	-	-	-	1.21	-	-	43.82	12.64
Plant & machinery- Gas	5.28%	71.77	281.16	181.28	-	-	4.37	9.74	-	-	285.53	191.02
Plant & machinery- Hydel	5.28%	-	-	-	-	-	-	-	-	-	-	-
Lines & cables	5.28%	4.60	9.29	3.76	-	-	-	0.31	-	-	9.29	4.06
Vehicle	9.50%	0.00	0.24	0.22	-	-	-	-	-	-	0.24	0.22
Furniture	6.33%	0.12	0.60	0.42	-	-	-	0.02	-	-	0.60	0.45
Other office equipment	6.33%	0.46	0.70	0.18	-	-	0.35	0.04	-	-	1.05	0.22
Roads on land belonging to others	3.34%	-	-	-	-	-	-	-	-	-	-	-
Capital spares at Generating Stations	5.28%	0.90	118.57	105.81	-	-	0.44	1.20	-	-	119.01	107.01
		126.60	492.76	317.36	-	-	7.16	13.24	-	-	499.91	330.60
Less: Depreciation on Grant												
Total Grant in Capital Asset								73.63				
Rate of Depreciation Depreciation on 90% of the Assets funded by Grants/subsidies								0.03				
Net Depeciation								1.92				
								11.32				

**ASSAM POWER GENERATION CORPORATION LIMITED
LAKWA THERMAL POWER STATION**

Form No: 24

Loan Details	Loan Tenure (yrs)	2019-20						
		Actual						
		Rate of Interest	Opening Balance	Amount received	Principal repayment	Interest Due	Closing Balance	
A	Secured Loans	0	10.1%	2294	0	-834	190	1460
	I PFC Loans	0	0.0%	0	0	0	0	0
	KLHEP	15	12.0%	5765	0	-1335	611	4430
	NTPS(R&M)	13	12.0%	30643	2128	-2169	3667	30602
	LTPS(R&M)	20	11.9%	38703	2128	-4339	4468	36492
	NRPP	15	0.0%	0	0	0	0	0
	Sub-total		0.0%	0	0	0	0	0
			0.0%	0	0	0	0	0
B	Unsecured Loans	0	10.0%	10	0	0	1	10
	I GOA -Loans	0	10.0%	1473	264	0	147	1737
	Rural electrification	10	10.0%	886	0	0	89	886
	NRPP Ph-I	10	10.0%	1975	0	0	198	1975
	LWHRP	10	10.0%	4109	166	0	411	4275
	Lower Kopili HEP	10	10.0%	2992	1129	0	300	4121
	R&M NTPS	10	10.0%	153	0	0	15	153
	R&M LTPS	10	0.0%	0	0	0	0	0
	LRPP	10	10.0%	400	0	0	40	400
	0	0	10.0%	1165	0	0	117	1165
	Lungnit SHEP	10	10.0%	1805	0	0	181	1805
	Myntriang SHEP	10	10.0%	100	0	0	10	100
	LTPS, Ph-II	10	10.0%	70	0	0	7	70
	Development of SHEP	10	10.0%	40	0	0	4	40
	Survey & Investigation of HEP	10	10.0%	9601	1698	0	972	11299
	Non-Conventional source of energy	10	10.0%	215	0	0	22	215
	KLHEP	10	10.0%	250	0	0	25	250
	KLHEP (upper)	10	0.0%	0	0	0	0	0
	KLHEP (intermediate)	10	10.0%	104	0	0	10	104
	0	0	10.0%	15	0	0	2	15
	Dhansiri HEP	10	10.0%	425	0	0	43	425
	Setting up of a 200MW (CCGT)	10	10.0%	74	0	0	7	74
	Borgolai	10	10.0%	50	0	0	5	50
	Revival of TPS	10	10.0%	37	0	0	4	37
	Development of Amguri	10	10.0%	37	0	0	4	37
	EAP consulting service	10	10.0%	54	0	0	5	54
	Golaghat	10	10.0%	31325	0	0	3133	31325
	Boundary wall of Jagiroad	10	0.0%	0	0	0	0	0
	Station heat Rate	10	10.0%	404	0	0	40	404
	0	0	0.0%	0	0	0	0	0
	Solar NTPS	10	10.0%	0	2	0	0	2
	0	0	0.0%	57770	3260	0	5789	61029
	Disaster	0	0.0%	0	0	0	0	0
	Sub-total	0	0.0%	0	0	0	0	0
	0	0	10.0%	2317	126	0	242	2444
C	II GOA -Loans (Source_ADB)	0	10.0%	39	7	0	4	46
	LRPP	0	10.0%	82	58	0	12	140
	ADB Consultancy	0	0.0%	2439	191	0	258	2630
	Lower Kopili HEP	0	0.0%	0	0	0	0	0
	Sub-total	0	0.0%	0	0	0	7	0
D	Other Interest & Finance Charges	0	0.0%	0	0	0	0	0
	Cost of raising Finance / Bank Charges	0	0.0%	0	0	0	0	0
	Interest on Security Deposit	0	0.0%	0	0	0	0	0
	Penal Interest Charges	0	0.0%	0	0	0	7	0
	Lease Rentals	0	0.0%	0	0	0	0	0
	Sub-total	0	0.0%	98911	5578	-4339	10522	100151
E	Total Of Interest & Finance Charges (A + B + C + D)	0	0.0%	98911	5578	-4339	6329	100151
F	Less: Interest & Finance Charges Capitalised	0	0.0%	0	0	0	0	0
G	Total Of Interest & Finance Charges (E - F)	0	0.0%	0	0	0	0	0

**ASSAM POWER GENERATION CORPORATION LIMITED
LAKWA THERMAL POWER STATION**

Form No: 24

Loan Details	Loan Tenure (yrs)	2020-21 Estimated						
		Rate of Interest	Opening Balance	Amount received	Principal repayment	Interest Due	Closing Balance	
A	Secured Loans	0	10.1%	1460	0	-834	105	626
	I PFC Loans	0	0.0%	0	0	0	0	0
	KLHEP	15	12.0%	4430	0	-1335	451	3095
	NTPS(R&M)	13	12.0%	30602	0	-2169	3534	28433
	LTPS(R&M)	20	0.0%	36492	0	-4339	4091	32153
	NRPP	15	0.0%	0	0	0	0	0
	Sub-total		0.0%	0	0	0	0	0
			0.0%	0	0	0	0	0
B	Unsecured Loans	0	10.0%	10	0	0	1	10
	I GOA -Loans	0	10.0%	1737	0	0	174	1737
	Rural electrification	10	10.0%	886	0	0	89	886
	NRPP Ph-I	10	10.0%	1975	0	0	198	1975
	LWHRP	10	10.0%	4275	147	0	435	4423
	Lower Kopili HEP	10	10.0%	4121	737	0	449	4858
	R&M NTPS	10	10.0%	153	0	0	15	153
	R&M LTPS	10	0.0%	0	0	0	0	0
	LRPP	10	10.0%	400	0	0	40	400
	0	0	10.0%	1165	0	0	117	1165
	Lungnit SHEP	10	10.0%	1805	0	0	181	1805
	Myntriang SHEP	10	10.0%	100	0	0	10	100
	LTPS, Ph-II	10	10.0%	70	0	0	7	70
	Development of SHEP	10	10.0%	40	0	0	4	40
	Survey & Investigation of HEP	10	10.0%	11299	1645	0	1212	12944
	Non-Conventional source of energy	10	10.0%	215	0	0	22	215
	KLHEP	10	10.0%	250	0	0	25	250
	KLHEP (upper)	10	0.0%	0	0	0	0	0
	KLHEP (intermediate)	10	10.0%	104	0	0	10	104
	0	0	10.0%	15	0	0	2	15
	Dhansiri HEP	10	10.0%	425	0	0	43	425
	Setting up of a 200MW (CCGT)	10	10.0%	74	0	0	7	74
	Borgolai	10	10.0%	50	0	0	5	50
	Revival of TPS	10	10.0%	37	0	0	4	37
	Development of Amguri	10	10.0%	37	0	0	4	37
	EAP consulting service	10	10.0%	54	0	0	5	54
	Golaghat	10	10.0%	31325	0	0	3133	31325
	Boundary wall of Jagiroad	10	0.0%	0	0	0	0	0
	Station heat Rate	10	10.0%	404	0	0	40	404
	0	0	0.0%	0	0	0	0	0
	Solar NTPS	10	10.0%	2	0	0	0	2
	0	0	0.0%	61029	2529	0	6229	63558
	Disaster	0	0.0%	0	0	0	0	0
	Sub-total	0	0.0%	0	0	0	0	0
	0	0	10.0%	2444	0	0	244	2444
C	II GOA -Loans (Source_ADB)	0	10.0%	46	0	0	5	46
	LRPP	0	10.0%	140	0	0	14	140
	ADB Consultancy	0	0.0%	2630	0	0	263	2630
	Lower Kopili HEP	0	0.0%	0	0	0	0	0
	Sub-total	0	0.0%	0	0	0	0	0
D	Other Interest & Finance Charges	0	0.0%	0	0	0	0	0
	Cost of raising Finance / Bank Charges	0	0.0%	0	0	0	0	0
	Interest on Security Deposit	0	0.0%	0	0	0	0	0
	Penal Interest Charges	0	0.0%	0	0	0	0	0
	Lease Rentals	0	0.0%	0	0	0	0	0
	Sub-total	0	0.0%	100151	2529	-4339	10583	98341
E	Total Of Interest & Finance Charges (A + B + C + D)	0	0	100151	2529	-4339	10583	98341
F	Less: Interest & Finance Charges Capitalised	0	0	0	0	0	0	0
G	Total Of Interest & Finance Charges (E - F)	0	0	0	0	0	0	0

**ASSAM POWER GENERATION CORPORATION LIMITED
LAKWA THERMAL POWER STATION**

Form No: 24

Loan Details	Loan Tenure (yrs)	2021-22 Projected					
		Rate of Interest	Opening Balance	Amount received	Principal repayment	Interest Due	Closing Balance
A Secured Loans	0	10.1%	626	0	-626	32	0
I PFC Loans	0	0.0%	0	0	0	0	0
KLHEP	15	12.0%	3095	0	-1335	291	1760
NTPS(R&M)	13	12.0%	28433	0	-2169	3274	26263
LTPS(R&M)	20	0.0%	32153	0	-4130	3597	28023
NRPP	15	0.0%	0	0	0	0	0
Sub-total		0.0%	0	0	0	0	0
		0.0%	0	0	0	0	0
B Unsecured Loans	0	10.0%	10	0	0	1	10
I GOA -Loans	0	10.0%	1737	0	0	174	1737
Rural electrification	10	10.0%	886	0	0	89	886
NRPP Ph-I	10	10.0%	1975	0	0	198	1975
LWHRP	10	10.0%	4423	190	0	452	4612
Lower Kopili HEP	10	10.0%	4858	710	0	521	5568
R&M NTPS	10	10.0%	153	0	0	15	153
R&M LTPS	10	0.0%	0	0	0	0	0
LRPP	10	10.0%	400	0	0	40	400
0	0	10.0%	1165	0	0	117	1165
Lungnit SHEP	10	10.0%	1805	0	0	181	1805
Myntiang SHEP	10	10.0%	100	0	0	10	100
LTPS, Ph-II	10	10.0%	70	0	0	7	70
Development of SHEP	10	10.0%	40	0	0	4	40
Survey & Investigation of HEP	10	10.0%	12944	210	0	1305	13154
Non-Conventional source of energy	10	10.0%	215	0	0	22	215
KLHEP	10	10.0%	250	0	0	25	250
KLHEP (upper)	10	0.0%	0	0	0	0	0
KLHEP (intermediate)	10	10.0%	104	0	0	10	104
0	0	10.0%	15	0	0	2	15
Dhansiri HEP	10	10.0%	425	0	0	43	425
Setting up of a 200MW (CCGT)	10	10.0%	74	0	0	7	74
Borgolai	10	10.0%	50	0	0	5	50
Revival of TPS	10	10.0%	37	0	0	4	37
Development of Amguri	10	10.0%	37	0	0	4	37
EAP consulting service	10	10.0%	54	0	0	5	54
Golaghat	10	10.0%	31325	0	0	3133	31325
Boundary wall of Jagiroad	10	0.0%	0	0	0	0	0
Station heat Rate	10	10.0%	404	0	0	40	404
0	0	0.0%	0	0	0	0	0
Solar NTPS	10	10.0%	2	0	0	0	2
0	0	0.0%	63558	1110	0	6411	64668
Disaster	0	0.0%	0	0	0	0	0
Sub-total	0	0.0%	0	0	0	0	0
0	0	10.0%	2444	0	0	244	2444
C II GOA -Loans (Source_ADB)	0	10.0%	46	0	0	5	46
LRPP	0	10.0%	140	0	0	14	140
ADB Consultancy	0	0.0%	2630	0	0	263	2630
Lower Kopili HEP	0	0.0%	0	0	0	0	0
Sub-total	0	0.0%	0	0	0	0	0
D Other Interest & Finance Charges	0	0.0%	0	0	0	0	0
Cost of raising Finance / Bank Charges	0	0.0%	0	0	0	0	0
Interest on Security Deposit	0	0.0%	0	0	0	0	0
Penal Interest Charges	0	0.0%	0	0	0	0	0
Lease Rentals	0	0.0%	0	0	0	0	0
Sub-total	0	0.0%	98341	1110	-4130	10272	95321
E Total Of Interest & Finance Charges (A + B + C + D)	0	0	98341	1110	-4130	10272	95321
F Less: Interest & Finance Charges Capitalised	0	0	0	0	0	0	0
G Total Of Interest & Finance Charges (E - F)	0	0	0	0	0	0	0

	Loan Details	Loan Tenure (yrs)
A	Secured Loans	0
	I PFC Loans	0
	KLHEP	15
	NTPS(R&M)	13
	LTPS(R&M)	20
	NRPP	15
	Sub-total	
B	Unsecured Loans	0
	I GOA -Loans	0
	Rural electrification	10
	NRPP Ph-I	10
	LWHRP	10
	Lower Kopili HEP	10
	R&M NTPS	10
	R&M LTPS	10
	LRPP	10
	0	0
	Lungrit SHEP	10
	Myntriang SHEP	10
	LTPS, Ph-II	10
	Development of SHEP	10
	Survey & Investigation of HEP	10
	Non-Conventional source of energy	10
	KLHEP	10
	KLHEP (upper)	10
	KLHEP (intermediate)	10
	0	0
	Dhansiri HEP	10
	Setting up of a 200MW (CCGT)	10
	Borgolai	10
	Revival of TPS	10
	Development of Amguri	10
	EAP consulting service	10
	Golaghat	10
	Boundary wall of Jagiroad	10
	Station heat Rate	10
	0	0
	Solar NTPS	10
	0	0
	Disaster	0
	Sub-total	0
	0	0
C	II GOA -Loans (Source_ADB)	0
	LRPP	0
	ADB Consultancy	0
	Lower Kopili HEP	0
	Sub-total	0
D	Other Interest & Finance Charges	0
	Cost of raising Finance / Bank Charges	0
	Interest on Security Deposit	0
	Penal Interest Charges	0
	Lease Rentals	0
	Sub-total	0
E	Total Of Interest & Finance Charges (A + B + C + D)	0
F	Less: Interest & Finance Charges Capitalised	0
G	Total Of Interest & Finance Charges (E - F)	0

Name of Company:		SSAM POWER GENERATION CORPORATION LIMITED			
Name of Plant/ Station:		LAKWA THERMAL POWER STATION			
Return on Equity			Form No:		F25
	Loan Details	Unit	2019-20	2020-21	2021-22
			Actual	Estimated	Projected
1	Equity (Opening Balance)	Rs Cr.	143.08	143.08	143.08
2	Add: Increase due to discharges during the year / period	Rs Cr.	0	0	0
3	Less: Decrease due to de-capitalisation during the year / period	Rs Cr.	0	0	0
4	Less: Decrease due to reversal during the year / period	Rs Cr.	0	0	0
5	Equity (Closing Balance)	Rs Cr.	143.08	143.08	143.08
6	Average Equity	Rs Cr.	143.08	143.08	143.08
7	Rate of Return on Equity	%	15.5%	15.5%	15.5%
8	Return on Equity	Rs Cr.	22.18	15.16	15.16

Name of Company:		ASSAM POWER GENERATION CORPORATION LIMITED			
Name of Plant/ Station:		LAKWA THERMAL POWER STATION			
Working Capital Requirements			Form No:	F26	
	Particulars	Unit	2019-20	2020-21	2021-22
			Actual	Estimated	Projected
For Coal Based Generating Stations					
1	Cost of Coal for 1.5 months for pithead & 2 months for non-pit head generating station*	Rs Cr.			
2	Cost of Secondary Fuel Oil for 2 months*	Rs Cr.			
3	Maintenance Spares @ 20% of O&M	Rs Cr.			
4	O&M expenses for 1 month	Rs Cr.			
5	Receivables equivalent to 2 months of capacity and energy charge^	Rs Cr.			
	Total Working Capital Requirement	Rs Cr.			
	Rate of Interest #	%			
	Interest on Normative Working Capital Requirement	Rs Cr.			
For Open-cycle Gas Turbine/ Combined Cycle thermal generating stations					
1	Fuel expenses for 1 month *	Rs Cr.	9.02	5.94	5.93
2	Liquid fuel stock for 15 days*	Rs Cr.	0.00	0.00	0.00
3	Maintenance spares @ 30% of O&M	Rs Cr.	11.61	11.18	11.88
4	O&M expenses for 1 month	Rs Cr.	3.23	3.11	3.30
5	Receivables equivalent to 2 months of capacity and energy charge^	Rs Cr.	27.23	21.09	24.55
	Total Working Capital Requirement	Rs Cr.	51.09	41.31	45.67
	Rate of Interest #	%	10.00%	10.0%	10.00%
	Interest on Normative Working Capital Requirement	Rs Cr.	5.11	4.13	4.57
For Hydro Generating stations					
1	O&M expenses for 1 month	Rs Cr.			
2	Maintenance spares @ 15% of O&M	Rs Cr.			
3	Receivables equivalent to 2 months of annual fixed charge	Rs Cr.			
	Total Working Capital Requirement	Rs Cr.			
	Rate of Interest #	%			
	Interest on Normative Working Capital Requirement	Rs Cr.			
	* corresponding to target availability				
	^ calculated on target availability				
	# shall be equal to the interest rate equivalent to State Bank of India base rate as on 1st April of the respective				

Name of Company:					
Name of Plant/ Station:					
Detailed Information in respect of fuel for computation of Energy Charges				Form No: F27	
	Particulars	Unit	Preceding 3rd Month*	Preceding 2nd Month*	Preceding 1st Month*
1	Quantity of Coal/ Lignite supplied by Coal/ Lignite Company	MMT	Gas price sheets included seperately (Sheet : Gas Price)		
2	Adjustment (+/-) in quantity supplied made by Coal/ Lignite Company	MMT			
3	Coal supplied by Coal/ Lignite Company (1+2)	MMT			
4	Normative Transit & Handling Losses (For Coal/ Lignite Projects)	MMT			
5	Net coal / Lignite Supplied (3-4)	MMT			
6	Amount charged by the Coal /Lignite Company	Rs Cr.			
7	Adjustment (+/-) in amount charged made by Coal/Lignite Company	Rs Cr.			
8	Total amount Charged (6+7)	Rs Cr.			
9	Transportation charges by rail/ship/road transport	Rs Cr.			
10	Adjustment (+/-) in amount charged made by Railways/Transport Company	Rs Cr.			
11	Demurrage Charges, if any	Rs Cr.			
12	Cost of diesel in transporting coal through MGR system, if applicable	Rs Cr.			
13	Total Transportation Charges (9+/-10-11+12)	Rs Cr.			
14	Total amount Charged for coal/lignite supplied including Transportation (8+13)	Rs Cr.			
15	Landed cost of coal/ Lignite	Rs./MT			
16	Blending Ratio (Domestic/Imported)				
17	Weighted average cost of coal/ Lignite for preceding three months	Rs./MT			
18	GCV of Domestic Coal as per bill of Coal Company				
19	GCV of Imported Coal as per bill Coal Company				
20	Weighted average GCV of coal/ Lignite as Billed	kCal/ kg			
21	GCV of Domestic Coal as received at Station				
22	GCV of Imported Coal as received at Station				
23	Weighted average GCV of coal/ Lignite as Received	kCal/ kg			
* From COD of 1/4/2016 as the case may be					
Similar details to be furnished for natural gas/liquid fuel for CCGT station and secondary fuel oil for coal/lignite based thermal plants					
Petitioner					

Name of Company:		M POWER GENERATION CORPORATION LIM		
Name of Plant/ Station:		LAKWA THERMAL POWER STATION		
Details of Expenses Capitalised		Form No: F 28		
		(Rs Cr.)		
		2019-20	2020-21	2021-22
		Actual	Estimated	Projected
1	Interest & Finance charges Capitalised	0.00	0.00	0.00
2	Employee expenses	0.00	0.00	0.00
3	A&G Expenses	0.00	0.00	0.00
4	Others, if any	0.00	0.00	0.00
	Grand Total	0.00	0.00	0.00

Name of Company:		POWER GENERATION CORPORATION I		
Name of Plant/ Station:		AKWA THERMAL POWER STATIO		
Income Tax Provisions		Form No: F29		
		(Rs Cr.)		
		2019-20	2020-21	2021-22
		Actual	Estimated	Projected
1	Income Tax on the Retun on Equity			
2	As Per Return Filed For The Year	0.41	0.00	0.00
3	As Assessed For The Year			
4	Credit/Debit Of Assessment Year(s) (Give Details)			
	Total	0.41	0.00	0.00
Note: 'Income Tax Provisions' details which could not be provided by the Generation Company at the time of this filing shall be furnished as and when they become due/ available.				

Name of Company:		POWER GENERATION CORPORATION I		
Name of Plant/ Station:		AKWA THERMAL POWER STATIO		
Non-Tariff Income		Form No: F30		
		(Rs Cr.)		
S. No.	Particulars	2019-20	2020-21	2021-22
		Actual	Estimated	Projected
A	Income from Investment, Fixed & Call Deposits			
	Income from Investments:			
	Interest on securities			
	Interest on fixed deposits	23.51		
	Income on other investments			
	Interest from Banks	0.01		
	Interest on (any other items)			
	Sub-Total	23.51		
B	Other Non-Tariff Income			
	Interest on Loans and Advances to staff			
	Interest on Loans and Advances to Licensee			
	Interest on Loans and Advances to Lessors		9.22	9.22
	Interest on Loans and Advances to Suppliers/ Contractors			
	Income from trading	0.00		
	Gain on sale of Fixed Assets			
	Income/Fees /Collections against staff welfare activities:			
	Miscellaneous Receipts:	0.24		
	Delayed Payment charges from Beneficiaries	1.61		
	Net profit from UI charges			
	Penalty for contractor/ supplier for delay etc			
	Misc Charges			
	Sub-Total	1.86		
	Grand Total	25.37	9.22	9.22

Namrup Thermal Power Station		2019-20 (From Oct'19 onwards)	2020-21	Remarks
A. Gas supplied by OIL, Duliajan (APM)				
1.00	Basic Price (for G.C.V. 10000)/ 1000 SCM	3131.72	3131.72	As per new gas price implemented from Oct'20
2.00	Basic Price after adjustment with CV	2858.40	2858.40	
3.00	Marketing Margin (for NCV 10000) /1000 SCM	200.00	200.00	
4.00	Marketing Margin after adjustment with CV	164.82	164.82	
	Total	3023.22	3023.22	
5.00	Sales Tax @ 14.5% on above	438.37	438.37	
	Total (A)	3461.59	3461.59	
B. T.C. for Transportation of the OIL Gas by AGCL				
1.00	T.C./ 1000 SCM	65.56	67.52	Yearly escalation 3% on TC as per agreement.
3.00	GST @ 12%	7.87	8.10	
	Total (B)	73.42	75.63	
C. Landed price of gas supplied to NTPS (A+B)/ 1000 SCM		3535.02	3537.22	
Lakwa Thermal Power Station		2019-20 (From Oct'19 onwards)	2020-21	Remarks
A. Gas supply by GAIL (APM)				
1.00	Basic Price (for G.C.V. 10000)/ 1000 SCM	3131.72	3131.72	As per new gas price implemented from Oct'20
2.00	10% Royalty /1000 SCM	Included	Included	
	Total	3131.72	3131.72	
3.00	Basic Price after adjustment with CV	2997.98	2997.98	
4.00	Marketing Margin (for NCV 10000) /1000 SCM	200.00	200.00	
5.00	Marketing Margin after adjustment with CV	176.81	176.81	
6.00	Fixed Monthly Service charge(Rs./ 1000 SCM)	23.95	24.67	Yearly escalation 3% on TC as per agreement.
7.00	Sales Tax @ 14.5 % on above	463.82	463.92	
	Landed price of gas supply to LTPS by GAIL / 1000 SCM(A)	3638.61	3638.71	
B. Gas supplied by OIL Duliajan (Non APM)		2019-20	2020-21	
1.00	Basic Price (for G.C.V. 10000)/ 1000 SCM	5219.54	5219.54	As per new gas price implemented from Oct'20
2.00	Basic Price after adjustment with CV	4764.00	4764.00	
3.00	Marketing Margin (for NCV 10000) /1000 SCM	200.00	200.00	
4.00	Marketing Margin after adjustment with CV	164.82	164.82	
	Total	4928.83	4928.83	
5.00	Sales Tax @ 14.5 % on above	714.68	714.68	
	Landed price of gas supply to LTPS by OIL (B)	5643.50	5643.50	
C. T.C for Transportation of OIL gas by AGCL				
1.00	T.C./ 1000 SCM	65.56	67.52	Yearly escalation 3% on TC as per agreement.
2.00	GST @ 12% on TC	7.87	8.10	
	Total T.C. (C)	73.42	75.63	
D. Landed price of gas supply to LTPS by OIL (B+C)/ 1000 SCM		5716.93	5719.13	
	Wtd Avg landed price of LTPS gas	4921.91	4923.31	

REGULATORY FORMATS FOR
ARR & TARIFF FILING BY
GENERATION LICENSEE -
KARBI LANGPI HYDRO
ELECTRIC PROJECT

Name of Company:		ASSAM POWER GENERATION CORPORATION LIMITED				
Name of Plant/ Station:		KARBI LANGPI HYDRO ELECTRIC PROJECT				
Annual Revenue Requirement Summary				Form No:	F1	
				Rs Crore		
		Form		2019-20	2020-21	2021-22
				Actual	Estimated	Projected
A	Generation					
1	Gross Generation (MU)	F4		398.528	341.109	390.000
2	Aux Consumption (%)	F4		0.4%	0.4%	0.5%
3	Net Generation (MU)	F4		396.848	339.853	388.050
B	Capacity Charges (Annual Fixed Charges)					
1	O&M expenses			29.99	30.34	32.25
a	Employee Expenses	F21		22.87	0.00	
b	R & M Expense	F20		3.96	0.00	
c	A&G Expense	F22		3.16	0.00	
2	Depreciation	F23		21.13	20.55	20.44
3	Interest on Loans	F14b		20.68	19.62	18.21
4	Return on Equity	F25		10.64	10.64	10.64
5	Interest on Working Capital	F26		2.26	2.46	2.75
6	Income Tax	F29		0.23	0.00	0.00
7	Prior Period items			0.00	0.00	0.00
8	Special R&M			0.00	0.00	12.00
9	Other income			-16.69	-5.75	-5.75
10	Incentive for generation for FY 2019-20			0.01		
11	Incentive for Secondary Energy generation			0.72		
	Capacity building			0.11	0.10	0.13
	Total			69.08	77.96	90.69
C	Variable Charges (Energy Charges)					
	Energy Charges from Primary Fuel (Rs Cr) ^{C1, C2, C3, C4}	F4				
	Energy Charges from Primary Fuel (Rs/ kWh)	F4				
	C1 - If multifuel is used simultaneously, energy charges to be given in respect of every fuel individually					
	C2 - Energy charge shall be computed for open cycle operation and combined cycle operation separately in case of gas/ liquid fuel fired plants					
	C3 - Energy charge shall be worked out based on ex-bus energy scheduled to be sent out					

Format-F2b

Name of Company: ASSAM POWER GENERATION CORPORATION LIM
Name of Plant/ Station: KARBI LANGPI HYDRO ELECTRIC PROJE

DETAILS OF COD, TYPE OF HYDRO STATIONS, NORMATIVE ANNUAL PLANT, AVAILABILITY FACTOR (NAPAF) & OTHER NORMATIVE PARAMETERS CONSIDERED FOR TARIFF CALCULATION

SL NO	DESCRIPTION	UNIT	2019-20	2020-21	2021-22
1	Installed Capacity	MW	Actual	Estimated	Projected
2	Free Power to Home State	%			
3	Date of Commercial Operation	-			
	Unit – I	-	06-04-2007		
	Unit – II	-	06-04-2007		
	Unit – III				
	...				
4	Type of Station	-			
	Surface/Underground	-	Semi underground		
	Purely ROR/Pondage/Storage	-	ROR with Pondage		
	Peaking/Non Peaking	-	Both (Peaking in lean season)		
	No. of hours Peaking	-	5 hrs		
	Overload Capacity (MW) & period	-	3% continuas		
5	Type of Excitation	-			
	Rotating excitors on Generator	-			
	Static excitation	-			
6	Design Energy (Annual)	Gwh	390.00	390.00	390.00
7	Auxiliary consumption including Transformation losses	%	0.50%	0.50%	0.50%
8	Normative Plant Availability Factor (NAPAF)	%	90%	90%	90%
9.1	Maintenance spares for WC	Rs. Lakh			
9.2	Receivable for WC	Rs. Lakh			
9.3	Base rate on return on equity	%			
9.4	Tax rate	%			
9.5	SBI base rate+350 basis point as on	%			

Name of Company:		ASSAM POWER GENERATION CORPORATION LIMITED			
Name of Plant/ Station:		KARBI LANGPI HYDRO ELECTRIC PROJECT			
Normative Parameters Considered for Tariff Computations-Thermal			Form No:	F3 (a)	
	Particulars	Unit	2019-20	2020-21	2021-22
			Actual	Estimated	Projected
1	Base Rate of Return on Equity	%	15.50	15.50	15.50
2	Target Availability	%			
3	Auxiliary Energy Consumption	%	0.42%	0.37%	0.50%
4	Gross Station Heat Rate	kCal/ kWh			
5	Specific Fuel Oil Consumption ml/kWh	ml/ kWh			
6	Cost of Coal/ Lignite	Rs/ Ton			
7	Cost of Main Secondary Fuel Oil	Rs/ kL			
8	Cost of Gas	Rs/ SCM			
9	Primary Fuel (Coal/ Lignite/ Gas) for Working Capital	in Months			
10	Secondary Fuel for Working Capital	in Months			
11	O&M Expenses	Rs/ MW			
12	Maintenance Spares for Working Capital	% of O&M	30.00	30.00	30.00
13	Receivables for Working Capital	in Months	2 months	2 months	2 months
14	Base Rate of SBI as on 01-04-2018	%	10.00%	10.00%	10.00%

SALIENT FEATURES OF HYDROELECTRIC PROJECT

Name of Company:

Assam Power Generation Corporation Limited

Name of Plant/ Station:

1. Location	
State /Distt.	Karbi Anglong District of Assam
River	Borpani
2. Diversion Tunnel	
Size, Shape	Intake Type Shaft with vertical gate intake structure provided with trash rack Fl. Of invert: 301.5 M
Length	4430 M
3. Dam	
Type	Concrete Gravity dam
Maximum dam height	58.50 M upto Spillway crest
4. Spillway	
Type	Oggee Shape Spillway with trejectory bucket
Crest level of Spillway	EL 300.00 M
5. Reservoir	
Full Reservoir Level (FRL)	316.50 M
Minimum Draw Down Level(MDDL)	308.0 M
Live Storage (MCM)	313.8 M
6. De-silting Arrangement	
Type	
Number and Size	
Particle size to be removed (mm)	
7. Head Race Tunnel	
Size and Type	Horse shoe shaped
Length	4430 M
Design Discharge (Cumecs)	
8. Surge Shaft	
Type	Simple with upper and lower expansion chamber
Diameter	8.00 M
Height	46.0m
9. Penstock/ Pressure Shafts	
Type	Circular, fabricated steel pipes
Diameter & Length	2.60 M, Penstock 1 Length=526.70 M Penstock 2 Length=514.20 M
10. Power House	
Type	Semi- underground Indoor type
Installed Capacity (No of Units x MW)	2X50 MW
Peaking Capacity during lean period (MW)	
Type of Turbine	vertical Shaft SingleRunner Single Flow Francis Turbine
Rated Head (M)	217.0 M
Rated Discharge (Cumecs)	57.00 Cumec
11. Tail Race Tunnel	
Diameter, Shape	
Length	
Minimum tail water level	58 M
12. Switch yard	
Type of Switch gear	Outdoor type
No. Of generator bays	2
No. Of Bus Coupler bays	1
No. Of line Bays	2

Name of Company:		ASSAM POWER GENERATION CORPORATION LIMITED			
Name of Plant/ Station:		KARBI LANGPI HYDRO ELECTRIC PROJECT			
Generation Details and Variable Cost			Form No:	F4	
	Particulars	Unit	2019-20 Actual	2020-21 Estimated	2021-22 Projected
1	Installed Capacity	MW	100	100	100
2	Plant Load Factor	%	45.41%	36.31%	44.50%
3	Gross Generation	MU	398.53	341.11	390.00
4	Auxiliary Consumption	%	0.42%	0.37%	0.50%
5	Auxiliary Consumption	MU	1.680	1.256	1.950
6	Net Generation	MU	396.848	339.853	388.050
7	Station Heat Rate	kCal/ kWh			
	Primary Fuel Consumption (Coal/ Lignite)				
8	GCV of Coal/ Lignite	kCal/ kg			
9	Quantity of Coal/ Lignite (Fired)	MT			
10	Specific Coal Consumption (Fired)	kg/ kWh			
11	Transit Loss	MT			
12	Transit Loss	%			
13	Gross Quantity of Coal (Purchased)	MT			
14	Rate of Coal/ Lignite	Rs/ Ton			
15	Cost of Coal/ Lignite	Rs Cr.			
	Primary Fuel Consumption (Gas/ LNG/ Liquid)				
16	GCV of Gas/ LNG/ Liquid Fuel	kCal/ SCM			
17	Quantity of Gas/ LNG/ Liquid Fuel	MMSCM			
18	Specific Fuel Consumption	SCM/ kWh			
19	Rate of Gas/ LNG/ Liquid Fuel	Rs/ SCM			
20	Cost of Gas/ LNG/ Liquid Fuel	Rs Cr.			
	Secondary Fuel Oil Consumption				
21	GCV of Secondary Fuel Oil	kCal/ kL			
22	Quantity of Secondary Fuel Oil	kL			
23	Specific Secondary Fuel Oil Consumption	ml/ kWh			
24	Rate of Secondary Fuel Oil	Rs/ kL			
25	Cost of Secondary Fuel Oil	Rs Cr.			
	Primary Fuel Cost (Coal/ Lignite)	Rs Cr.			
	Primary Fuel Cost (Gas/ LNG/ Liquid)	Rs Cr.			
	Secondary Fuel Cost	Rs Cr.			
C	Variable Charges (Energy Charges)				
	Energy Charges from Primary Fuel (Coal/ Lignite)	Rs/ kWh			
	Energy Charges from Primary Fuel (Gas/ LNG/ Liquid)	Rs/ kWh			

Name of Company:
Name of Plant/ Station:

ASSAM POWER GENERATION CORPORATION LIMITED
KARBI LANGPI HYDRO ELECTRIC PROJECT

Abstract of admitted Capital Cost for the existing Project

Form No:

F5

	Particulars	Unit	Details
	Last date of order of Commission for the project		
1	Capital Cost as admitted by AERC	Rs Cr.	514.58
2	Amount of un-discharged liabilities included in above (& forming part of admitted capital cost)	Rs Cr.	NIL
3	Amount of un-discharged liabilities corresponding to above admitted capital cost (but not forming part of admitted capital cost being allowed on cash basis)	Rs Cr.	NIL
4	Gross Normative Debt	Rs Cr.	391.27
5	Cumulative Repayment	Rs Cr.	177.63
6	Net Normative Debt	Rs Cr.	213.64
7	Normative Equity	Rs Cr.	68.65
8	Cumulative Depreciation	Rs Cr.	177.63
9	Freehold land	Rs Cr.	NIL

Name of Company:

ASSAM POWER GENERATION CORPORATION LIM

Name of Plant/ Station:

KARBI LANGPI HYDRO ELECTRIC PROJEC

Statement showing claimed capital cost

Form No:

F5a

	Particulars	Unit	2019-20	2020-21	2021-22
			Actual	Estimated	Projected
1	Opening Capital Cost	Rs Cr.	514.57	527.67	543.58
2	Add: Addition during the year / period	Rs Cr.	13.10	15.92	1.70
3	Less: Decapitalisation during the year / period	Rs Cr.	0	0	0
4	Less: Reversal during the year / period	Rs Cr.	0	0	0
5	Add: Discharges during the year / period	Rs Cr.	0	0	0
6	Closing Capital Cost	Rs Cr.	527.67	543.58	545.28
7	Average Capital Cost	Rs Cr.	521.12	535.63	544.43

Name of Company:
Name of Plant/ Station:

**ASSAM POWER GENERATION CORPORATION LIMITED
KARBI LANGPI HYDRO ELECTRIC PROJECT**

Details of Project Specific Loans

Form No: F13

Rs Cr.

Particulars	KLHEP	KLHEP	Package 3	Package 4	Package 5	Package 6
Source of Loan ¹	I GOA -Loans	PFC Loan				
Currency ²	INR					
Amount of Loan sanctioned (Opeing Balance)	103.29	22.94				
Amount of Gross Loan drawn upto 31.03.2016 COD ^{3,4,5,13,15} (Closing Balance)	120.27	14.60				
Interest Type ⁶	FIXED	Floating				
Fixed Interest Rate, if applicable	9%	10.11%				
Base Rate, if Floating Interest ⁷						
Margin, if Floating Interest ⁸	Yes/No	Yes/No	Yes/No	Yes/No	Yes/No	Yes/No
Are there any Caps/Floor ⁹						
If above is yes,specify caps/floor						
Moratorium Period ¹⁰						
Moratorium effective from						
Repayment Period ¹¹						
Repayment effective from						
Repayment Frequency ¹²						
Repayment Instalment ^{13,14}						
Base Exchange Rate ¹⁶						
Are foreign currency loan hedged?						
If above is yes,specify details ¹⁷						

Note:

¹ Source of loan means the agency from whom the loan has been taken such as WB, ADB, WMB, PNB, SBI, ICICI, IFC, PFC etc.

² Currency refers to currency of loan such as US\$, DM, Yen, Indian Rupee etc.

³ Details are to be submitted as on 31.03.2015 for existing assets and as on COD for the remaining assets.

⁴ Where the loan has been refinanced, details in the Form is to be given for the loan refinanced. However, the details of the original loan is to be given seperately in the same form.

⁵ If the Tariff in the petition is claimed seperately for various units, details in the Form is to be given seperately for all the units in the same form.

⁶ Interest type means whether the interest is fixed or floating.

⁷ Base rate means the base as PLR, LIBOR etc. over which the margin is to be added. Applicable base rate on different dates from the date of drawl may also be enclosed.

⁸ Margin means the points over and above the floating rate.

⁹ At times caps/ floor are put at which the floating rates are frozen. If such a condition exists, specify the limits.

¹⁰ Moratorium period refers to the period during which loan servicing liability is not required.

¹¹ Repayment period means the repayment of loan such as 7 years, 10 years, 25 years etc.

¹² Repayment frequency means the interval at which the debt servicing is to be done such as monthly, quarterly, half yearly, annual, etc.

¹³ Where there is more than one drawl/repayment for a loan, the date & amount of each drawl/repayment may also be given seperately

¹⁴ If the repayment instalment amount and repayment date can not be worked out from the data furnished above, the repayment schedule to be furnished

¹⁵ In case of Foreign loan, date of each drawl & repayment alongwith exchange rate at that date may be given.

¹⁶ Base exchange rate means the exchange rate prevailing as on 31.03.2015 for existing assets and as on COD for the remaining assets.

¹⁷ In case of hedging, specify details like type of hedging, period of hedging, cost of heging, etc.

¹⁸ In case of foreign loans, provide details of exchange rate considered on date of each repayment of principal and date of interest payment.

¹⁹ At the time of truing up rate of interest with relevant reset date (if any) to be furnished seperately.

²⁰ At the time of truing up provide details of refinancing of loans considered earlier. Details such as date on which refinancing done, amount of refinanced loan, terms and conditions of refinanced loan, financing and other charges incurred for refinancing etc.

Petitioner

ASSAM POWER GENERATION CORPORATION LIMITED			
KARBI LANGPI HYDRO ELECTRIC PROJECT			
Calculation of Weighted Average Rate of Interest on Actual Loans		Form No:	F14a
			Rs. Cr
Particulars	2019-20	2020-21	2021-22
	Actual	Estimated	Projected
Loan-1 from PFCL			
Gross loan - Opening			
Cumulative repayments of Loans upto previous year			
Net loan - Opening	387.03	364.92	321.53
Add: Drawal(s) during the Year	21.28	0.00	0.00
Less: Repayment (s) of Loans during the year	43.39	43.39	41.30
Net loan - Closing	364.92	321.53	280.23
Average Net Loan	375.97	343.23	300.88
Rate of Interest on Loan on annual basis	11.54%	11.21%	11.19%
Interest on loan	44.68	40.91	35.97
Loan-2 Govt. of Assam			
Gross loan - Opening			
Cumulative repayments of Loans upto previous year			
Net loan - Opening	239.80	271.48	318.46
Add: Drawal(s) during the Year	9.98	25.29	11.10
Less: Repayment (s) of Loans during the year	-21.69	-21.69	-21.69
Net loan - Closing	271.48	318.46	351.25
Average Net Loan	255.64	294.97	334.85
Rate of Interest on Loan on annual basis	7.61%	8.73%	8.82%
Interest on loan	18.25	23.71	28.09
Total Loan			
Gross loan - Opening			
Cumulative repayments of Loans upto previous year			
Net loan - Opening	626.83	636.40	639.99
Add: Drawal(s) during the Year	31.26	25.29	11.10
Less: Repayment (s) of Loans during the year	21.69	21.69	19.61
Net loan - Closing	636.40	639.99	631.48
Average Net Loan	631.61	638.19	635.74
Interest on loan	62.93	64.62	64.06
Weighted average Rate of Interest on Loans	10.04%	10.15%	10.01%
Note:			
1. In case of Foreign Loans, the calculations in Indian Rupees is to be furnished. However, the calculations in Original currency is also to be furnished separately in the same form.			
2. As per the Regulation 35.5, the weighted average rate of interest has to be calculated on the basis of the actual loan portfolio at the beginning of each year. Hence the weighted average rate of interest has			
3. the above actual loan portfolio is shown as for APGCL as a whole, as the same is to be used for calculation			

Name of Company:		POWER GENERATION CORPORATION LIMITED		
Name of Plant/ Station:		BI LANGPI HYDRO ELECTRIC PROJECT		
Calculation of Interest on Normative Loan		Form No:		F14b
				Rs. Crores
S. No.	Particulars	2019-20	2020-21	2021-22
		Actual	Estimated	Projected
1	Gross Normative loan – Opening			
2	Cumulative repayment of Normative loan upto previous year			
3	Net Normative loan – Opening	216.24	195.24	191.14
4	Add: Increase due to addition during the year / period	0.13	16.45	2.10
5	Less: Decrease due to de-capitalisation during the year / period			
6	Less: Decrease due to reversal during the year / period	21.13	20.55	20.44
7	Add: Increase due to discharges during the year / period			
8	Net Normative loan - Closing	195.24	191.14	172.79
9	Average Normative loan	205.74	193.19	181.96
10	Weighted average rate of interest	10.04%	10.15%	10.01%
11	Interest on Loan	20.65	19.62	18.21
	Bank charges	0.02	0.00	0.00
11	Interest on Loan with Bank charges	20.68	19.62	18.21

Name of Company:
Name of Plant/ Station:

ASSAM POWER GENERATION CORPORATION LIMITED
KARBI LANGPI HYDRO ELECTRIC PROJECT

Details of Allocation of corporate loans to various projects

Form No: F15

Rs Cr.

Particulars	Lungnit SHEP	Survey & Investigation of HEP	Dhansiri HEP	KLHEP	Package 5	Package 6
Source of Loan ¹	I GOA -Loans	I GOA -Loans	I GOA -Loans	I PFC Loans		
Currency ²	INR	INR	INR	INR		
Amount of Loan sanctioned(Opening Balance)	4.00	0.70	1.04	22.94		
Amount of Gross Loan drawn upto 31.03.2016/ COD ^{3,4,5,13,15} (Closing Balance)	4.00	0.70	1.04	14.60		
Interest Type ⁶	Fixed	Fixed	Fixed	Fixed		
Fixed Interest Rate, if applicable	10%	10%	10%	10.11%		
Base Rate, if Floating Interest ⁷						
Margin, if Floating Interest ⁸	Yes/No	Yes/No	Yes/No	Yes/No	Yes/No	Yes/No
Are there any Caps/Floor ⁹						
If above is yes,specify caps/floor						
Moratorium Period ¹⁰						
Moratorium effective from						
Repayment Period ¹¹						
Repayment effective from						
Repayment Frequency ¹²						
Repayment Instalment ^{13,14}						
Base Exchange Rate ¹⁶						
Are foreign currency loan hedged?						
If above is yes,specify details ¹⁷						

Distribution of loan packages to various projects

Name of the Projects						Total
Project 1						
Project 2						
Project 3 and so on						

Note:

¹ Source of loan means the agency from whom the loan has been taken such as WB, ADB, WMB, PNB, SBI, ICICI, IFC, PFC etc.

² Currency refers to currency of loan such as US\$, DM, Yen, Indian Rupee etc.

³ Details are to be submitted as on 31.03.2015 for existing assets and as on COD for the remaining assets.

⁴ Where the loan has been refinanced, details in the Form is to be given for the loan refinanced. However, the details of the original loan is to be given separately in the same form.

⁵ If the Tariff in the petition is claimed separately for various units, details in the Form is to be given separately for all the units in the same form.

⁶ Interest type means whether the interest is fixed or floating.

⁷ Base rate means the base as PLR, LIBOR etc. over which the margin is to be added. Applicable base rate on different dates from the date of drawl may also be enclosed.

⁸ Margin means the points over and above the floating rate.

⁹ At times caps/ floor are put at which the floating rates are frozen. If such a condition exists, specify the limits.

¹⁰ Moratorium period refers to the period during which loan servicing liability is not required.

¹¹ Repayment period means the repayment of loan such as 7 years, 10 years, 25 years etc.

¹² Repayment frequency means the interval at which the debt servicing is to be done such as monthly, quarterly, half yearly, annual, etc.

¹³ Where there is more than one drawal/repayment for a loan, the date & amount of each drawal/repayment may also be given separately

¹⁴ If the repayment instalment amount and repayment date can not be worked out from the data furnished above, the repayment schedule to be furnished

¹⁵ In case of Foreign loan, date of each drawal & repayment alongwith exchange rate at that date may be given.

¹⁶ Base exchange rate means the exchange rate prevailing as on 31.03.2015 for existing assets and as on COD for the remaining assets.

¹⁷ In case of hedging, specify details like type of hedging, period of hedging, cost of hedging, etc.

¹⁸ In case of foreign loans, provide details of exchange rate considered on date of each repayment of principal and date of interest payment.

¹⁹ At the time of truing up rate of interest with relevant reset date (if any) to be furnished separately.

²⁰ At the time of truing up provide details of refinancing of loans considered earlier. Details such as date on which refinancing done, amount of refinanced loan, terms and conditions of refinanced loan, financing and other charges incurred for refinancing etc.

Petitioner

Name of Company:
Name of Plant/ Station:

ASSAM POWER GENERATION CORPOR/
KARBI LANGPI HYDRO ELECTRIC

Statement of Additional Capitalisation after COD

Form No:

F16

Rs Cr.

No	Head of Work/ Equipment				Regulations under which claimed	Justification	Admitted Cost by Commission if any
		2019-20	2020-21	2021-22			
1	Land	-	-	-			
2	Building	-	-	0.40			
3	Hydraulic works	0.04	-	-			
4	Other civil works	-	1.00	0.10			
5	Plant & machinery- Gas	-	-	-			
6	Plant & machinery- Hydel	0.01	4.20	-			
7	Lines & cables	-	10.73	0.70			
8	Vehicle	-	-	-			
9	Furniture	0.07	-	-			
10	Other office equipment	0.01	-	-			
11	Roads on land belonging to others	-	-	-			
12	Capital spares at Generating Stations	-	-	0.50			
		0.13	15.92	1.70			

Note:

- 1 Fill the form in chronological order year wise along with detailed justification clearly bring out the necessity and the benefits accruing to the
- 2 In case initial spares are purchased alongwith any equipment, then the cost of such spares should be indicated separately. e.g. Rotor - 50 Crs.
- 3 Actual/Projected additional capital expenditure claimed for past period shall be governed by Tariff Regulation for the relevant period

Name of Company:
Name of Plant/ Station:

ASSAM POWER GENERATION CORPORATION LIMITED
KARBI LANGPI HYDRO ELECTRIC PROJECT

Details of Assets De-capitalized during the period **Form No: F16a**

Rs Cr.

No	Name of the Asset	Nature of de-capitization (whether claimed under exclusion or as additional capital expenditure)	Original Value of the Asset Capitalised	Year Put to use	Depreciation recovered till date of de-capitalization
1		NIL DURING THE PERIOD			
2					
3					
4					
5					

Note: Year wise detail need to be submitted

Name of Company: **POWER GENERATION CORPORATION I**
Name of Plant/ Station: **KARBI LANGPI HYDRO ELECTRIC**
Date of Commercial Operation:

Financing of Additional Capitalisation

Financial Year (Starting from COD)			
	2019-20	2020-21	2021-22
Amount capitalised in Work/ Equipment			
Financing Details			
GOA Loan	0.13	16.45	2.10
Loan-2			
Total Loan²	0.13	16.45	2.10
Grant	0.00	4.77	3.59
Equity	0.00	4.07	0.00
Internal Resources			
Others			
Total	0.13	25.29	5.69

¹ Year 1 refers to Financial Year of COD and Year 2, Year 3 etc. are the subsequent financial years respectively.

² Loan details for meeting the additional capitalisation requirement should be given as per Form 14 and Form 15 whichever is relevant.

Name of Company:		M POWER GENERATION CORPORATION LIMITED		
Name of Plant/ Station:		RBI LANGPI HYDRO ELECTRIC PROJECT		
R&M Expenses		Form No:		F20
				Rs Cr.
	Particulars	2019-20	2020-21	2021-22
		Actual	Estimated	Projected
1	Plant and Machinery	1.71	Break-up for whole year not available yet	Consolidated O&M approved for the year
2	Building	0.99		
3	Civil Works	0.35		
4	Hydraulic Works	0.81		
5	Lines, Cables Net Works etc.	0.02		
6	Vehicles	0.02		
7	Furniture and Fixtures	0.01		
8	Office Equipments	0.05		
9	Station Supplies	-		
10	Lubricants & Consumable stores	-		
11	Oil/Turbine Oil consumed in internal co	-		
12	Any other items (Capitalisation)	-		
	Total	3.96		

Name of Company:		M POWER GENERATION CORPORATION LIMITED		
Name of Plant/ Station:		RBI LANGPI HYDRO ELECTRIC PROJECT		
Employee Expenses		Form No:	F21	
				Rs Cr.
	Particulars	2019-20	2020-21	2021-22
		Actual	Estimated	Projected
1	Salaries	13.98	Break-up for whole year not available yet	Consolidated O&M Projected for the year
2	Additional Pay	-		
3	Dearness Allowance (DA)	1.56		
4	Other Allowances & Relief	2.50		
5	Addl. Pay & C.Off Encashment	-		
6	Interim Relief / Wage Revision	-		
7	Overtime	0.00		
8	Bonus To Employees	0.03		
9	Medical Expenses Reimbursement	0.01		
10	Travelling Allowance(Conveyance Allowance)	-		
11	Leave Travel Assistance	0.00		
12	Earned Leave Encashment	0.29		
13	Payment Under Workman's Compensation And Gratuity	-		
14	Subsidised Electricity To Employees	-		
15	Any Other Item	-		
16	Staff Welfare Expenses	0.06		
17	Capacity Building Expenses	-		
18	Apprentice And Other Training Expenses	-		
19	Contribution To Terminal Benefits	4.43		
20	Provident Fund Contribution	-		
21	Provision for PF Fund	-		
22	Any Other Items (Revision of pay@% of salary)	0.00		
	Total Employee Costs	23		
23	Less: Employee expenses capitalised	0.00		
	Net Employee expenses (D)-(E)	22.87		

Name of Company:		M POWER GENERATION CORPORATION LIM		
Name of Plant/ Station:		RBI LANGPI HYDRO ELECTRIC PROJ		
Administration & General Expenses		Form No:	F22	
		Rs Cr.		
	Particulars	2019-20	2020-21	2021-22
		Actual	Estimated	Projected
1	Lease/ Rent	0.01		
2	Insurance	1.09		
3	Revenue Stamp Expenses Account	-		
4	Telephone, Postage, Telegram & Telex Charges	0.01		
5	Incentive & Award To Employees/Outsiders	-		
6	Consultancy Charges	0.33		
7	Technical Fees	-		
8	Other Professional Charges	0.02		
9	Conveyance And Travelling	0.11		
10	License and Registration Fees	-		
11	Vehicle Expenses	0.96		
12	Security / Service Charges Paid To Outside Agencies	-		
13	Fee And Subscriptions Books And Periodicals	0.03		
14	Fees Paid to AERC	0.18		
15	Printing And Stationery	0.03		
16	Advertisement Expenses	0.09		
17	Contributions/Donations To Outside Institutes / Associations	0.11		
18	Electricity Charges To Offices	0.00		
19	Water Charges	0.00		
20	Entertainment Charges	0.03		
21	Miscellaneous Expenses	0.09		
22	Legal Charges	0.03		
23	Auditor's Fee	0.02		
24	Freight On Capital Equipments	-		
25	Purchase Related Advertisement Expenses	-		
26	Vehicle Running Expenses Truck / Delivery Van	-		
27	Vehicle Hiring Expenses Truck / Delivery Van	-		
28	Other Freight	-		
29	Transit Insurance	-		
30	Octroi	-		
31	Incidental Stores Expenses	-		
32	Fabrication Charges	-		
33	CSR	0.04		
	Total A&G Expenses	3.16		
	Less: A&G Expenses Capitalised	0.00		
	Total A&G Expenses	3.16		

Break-up for
whole year
not available
yet

Consolidated
O&M
approved for
the year

CONSOLIDATED STATEMENT OF
APGCL ASSETS

ASSAM POWER GENERATION CORPORATION LIMITED

KARBI LANGPI HYDRO ELECTRIC PROJECT

Form No: 23

		FY2019-20										
Group of Asset	Rate of Depreciation AERC 2015 REG	Balance depreciable asset	Opening balance		Adjustment as on 01/04/2017		Addition during the year		Deletion during the year		Closing balance	
			Asset	Depr	Asset	Depr	Asset	Depr	Asset	Depr	Asset	Depr
KLHEP		-	-	-	-	-	-	-	-	-	-	-
		-	-	-	-	-	-	-	-	-	-	-
Group of Asset	Rate of Depreciation AERC 2015 REG	Balance depreciable asset	Opening balance	-	Adjustment as on 01/04/2016	-	Addition during the year	-	Deletion during the year	-	Closing balance	-
		-	Asset	Depr	Asset	Depr	Asset	Depr	Asset	Depr	Asset	Depr
Land	0.00%	4.40	4.40	-	-	-	-	-	-	-	4.40	-
Building	3.34%	13.84	17.36	1.78	-	-	-	0.58	-	-	17.36	2.36
Hydraulic works	5.28%	83.59	162.42	62.59	-	-	0.04	8.58	-	-	162.46	71.17
Other civil works	3.34%	67.04	102.75	25.43	-	-	-	3.43	-	-	102.75	28.86
Plant & machinery- Gas	5.28%	-	-	-	-	-	-	-	-	-	-	-
Plant & machinery- Hydel	5.28%	93.09	175.59	64.94	-	-	0.01	9.27	-	-	175.61	74.21
Lines & cables	5.28%	15.66	32.57	13.65	-	-	-	0.75	-	-	32.57	14.40
Vehicle	9.50%	(0.00)	0.29	0.26	-	-	-	-	-	-	0.29	0.26
Furniture	6.33%	0.04	0.05	0.00	-	-	0.07	0.01	-	-	0.12	0.01
Other office equipment	6.33%	0.07	0.10	0.02	-	-	0.01	0.01	-	-	0.12	0.03
Roads on land belonging to others	3.34%	0.20	0.28	0.05	-	-	-	0.03	-	-	0.28	0.08
Capital spares at Generating Stations	5.28%	0.00	18.76	16.88	-	-	-	0.99	-	-	18.76	17.87
		277.95	514.57	185.60	-	-	0.13	23.65	-	-	514.70	209.24
Less: Depreciation on Grant												
Total Grant in Capital Asset								54.66				
Rate of Depreciation								0.05				
Depreciation on 90% of the Assets funded by Grants/subsidies								2.51				
Net Depreciation								21.13				

CONSOLIDATED STATEMENT OF
APGCL ASSETS

ASSAM POWER GENERATION CORPORATION LIMITED

KARBI LANGPI HYDRO ELECTRIC PROJECT

Form No: 23

		FY2020-21										
Group of Asset	Rate of Depreciation AERC 2015 REG	Balance depreciable asset	Opening balance		Adjustment as on 01/04/2018		Addition during the year		Deletion during the year		Closing balance	
			Asset	Depr	Asset	Depr	Asset	Depr	Asset	Depr	Asset	Depr
KLHEP												
Land	0.00%	4.40	4.40	-	-	-	-	-	-	-	4.40	-
Building	3.34%	13.26	17.36	2.36	-	-	-	0.58	-	-	17.36	2.94
Hydraulic works	5.28%	75.05	162.46	71.17	-	-	-	8.58	-	-	162.46	79.74
Other civil works	3.34%	63.61	102.75	28.86	-	-	1.00	3.45	-	-	103.74	32.31
Plant & machinery- Gas	5.28%	-	-	-	-	-	-	-	-	-	-	-
Plant & machinery- Hydel	5.28%	83.83	175.61	74.21	-	-	4.20	9.38	-	-	179.80	83.60
Lines & cables	5.28%	14.91	32.57	14.40	-	-	10.73	1.03	-	-	43.30	15.43
Vehicle	9.50%	(0.00)	0.29	0.26	-	-	-	-	-	-	0.29	0.26
Furniture	6.33%	0.10	0.12	0.01	-	-	-	0.01	-	-	0.12	0.01
Other office equipment	6.33%	0.07	0.12	0.03	-	-	-	0.01	-	-	0.12	0.04
Roads on land belonging to others	3.34%	0.18	0.28	0.08	-	-	-	0.03	-	-	0.28	0.10
Capital spares at Generating Stations	5.28%	-	18.76	17.87	-	-	-	-	-	-	18.76	17.87
		255.42	514.70	209.24	-	-	15.92	23.07	-	-	530.62	232.31
Less: Depreciation on Grant												
Total Grant in Capital Asset												
								59.43				
Rate of Depreciation												
Depreciation on 90% of the Assets funded by Grants/subsidies												
								2.52				
Net Depreciation												
								20.55				

CONSOLIDATED STATEMENT OF
APGCL ASSETS

ASSAM POWER GENERATION CORPORATION LIMITED

KARBI LANGPI HYDRO ELECTRIC PROJECT

Form No: 23

		FY2021-22										
Group of Asset	Rate of Depreciation AERC 2015 REG	Balance depreciable asset	Opening balance		Adjustment as on 01/04/2018		Addition during the year		Deletion during the year		Closing balance	
			Asset	Depr	Asset	Depr	Asset	Depr	Asset	Depr	Asset	Depr
KLHEP												
Land	0.00%	4.40	4.40	-	-	-	-	-	-	-	4.40	-
Building	3.34%	12.68	17.36	2.94	-	-	0.40	0.59	-	-	17.76	3.52
Hydraulic works	5.28%	66.47	162.46	79.74	-	-	-	8.58	-	-	162.46	88.32
Other civil works	3.34%	61.06	103.74	32.31	-	-	0.10	3.45	-	-	103.84	35.76
Plant & machinery- Gas	5.28%	-	-	-	-	-	-	-	-	-	-	-
Plant & machinery- Hydel	5.28%	78.23	179.80	83.60	-	-	-	9.38	-	-	179.80	92.98
Lines & cables	5.28%	23.53	43.30	15.43	-	-	0.70	1.05	-	-	44.00	16.48
Vehicle	9.50%	(0.00)	0.29	0.26	-	-	-	-	-	-	0.29	0.26
Furniture	6.33%	0.09	0.12	0.01	-	-	-	0.01	-	-	0.12	0.02
Other office equipment	6.33%	0.06	0.12	0.04	-	-	-	0.01	-	-	0.12	0.06
Roads on land belonging to others	3.34%	0.15	0.28	0.10	-	-	-	0.03	-	-	0.28	0.13
Capital spares at Generating Stations	5.28%	-	18.76	17.87	-	-	0.50	0.01	-	-	19.26	17.88
		246.68	530.62	232.31	-	-	1.70	23.11	-	-	532.32	255.42
Less: Depreciation on Grant												
Total Grant in Capital Asset								63.02				
Rate of Depreciation								0.04				
Depreciation on 90% of the Assets funded by Grants/subsidies								2.66				
Net Depreciation								20.44				

**ASSAM POWER GENERATION CORPORATION LIMITED
KARBI LANGPI HYDRO ELECTRIC PROJECT**

Form No: 24

Loan Details	Loan Tenure (yrs)	2018-19						
		Actual						
		Rate of Interest	Opening Balance	Amount received	Principal repayment	Interest Due	Closing Balance	
A	Secured Loans	0	10.1%	2294	0	-834	190	1460
	I PFC Loans	0	0.0%	0	0	0	0	0
	KLHEP	15	12.0%	5765	0	-1335	611	4430
	NTPS(R&M)	13	12.0%	30643	2128	-2169	3667	30602
	LTPS(R&M)	20	11.9%	38703	2128	-4339	4468	36492
	NRPP	15	0.0%	0	0	0	0	0
	Sub-total		0.0%	0	0	0	0	0
			0.0%	0	0	0	0	0
			0.0%	0	0	0	0	0
B	Unsecured Loans	0	10.0%	10	0	0	1	10
	I GOA -Loans	0	10.0%	1473	264	0	147	1737
	Rural electrification	10	10.0%	886	0	0	89	886
	NRPP Ph-I	10	10.0%	1975	0	0	198	1975
	LWHRP	10	10.0%	4109	166	0	411	4275
	Lower Kopili HEP	10	10.0%	2992	1129	0	300	4121
	R&M NTPS	10	10.0%	153	0	0	15	153
	R&M LTPS	10	0.0%	0	0	0	0	0
	LRPP	10	10.0%	400	0	0	40	400
	0	0	10.0%	1165	0	0	117	1165
	Lungnit SHEP	10	10.0%	1805	0	0	181	1805
	Myntriang SHEP	10	10.0%	100	0	0	10	100
	LTPS, Ph-II	10	10.0%	70	0	0	7	70
	Development of SHEP	10	10.0%	40	0	0	4	40
	Survey & Investigation of HEP	10	10.0%	9601	1698	0	972	11299
	Non-Conventional source of ener	10	10.0%	215	0	0	22	215
	KLHEP	10	10.0%	250	0	0	25	250
	KLHEP (upper)	10	0.0%	0	0	0	0	0
	KLHEP (intermediate)	10	10.0%	104	0	0	10	104
	0	0	10.0%	15	0	0	2	15
	Dhansiri HEP	10	10.0%	425	0	0	43	425
	Setting up of a 200MW (CCGT)	10	10.0%	74	0	0	7	74
	Borgolai	10	10.0%	50	0	0	5	50
	Revival of TPS	10	10.0%	37	0	0	4	37
	Development of Amguri	10	10.0%	37	0	0	4	37
	EAP consulting service	10	10.0%	54	0	0	5	54
	Golaghat	10	10.0%	31325	0	0	3133	31325
	Boundary wall of Jagiroad	10	0.0%	0	0	0	0	0
	Station heat Rate	10	10.0%	404	0	0	40	404
	0	0	0.0%	0	0	0	0	0
	Solar NTPS	10	10.0%	0	2	0	0	2
	0	0	0.0%	57770	3260	0	5789	61029
	Disaster	0	0.0%	0	0	0	0	0
	Sub-total	0	0.0%	0	0	0	0	0
	0	0	10.0%	2317	126	0	242	2444
C	II GOA -Loans (Source_ADB)	0	10.0%	39	7	0	4	46
	LRPP	0	10.0%	82	58	0	12	140
	ADB Consultancy	0	0.0%	2439	191	0	258	2630
	Lower Kopili HEP	0	0.0%	0	0	0	0	0
	Sub-total	0	0.0%	0	0	0	7	0
D	Other Interest & Finance Charge	0	0.0%	0	0	0	0	0
	Cost of raising Finance / Bank Char	0	0.0%	0	0	0	0	0
	Interest on Security Deposit	0	0.0%	0	0	0	0	0
	Penal Interest Charges	0	0.0%	0	0	0	7	0
	Lease Rentals	0	0.0%	0	0	0	0	0
	Sub-total	0	0.0%	98911	5578	-4339	10522	100151
E	Of Interest & Finance Charges (A	0	0.0%	98911	5578	-4339	6329	100151
F	Interest & Finance Charges Cap	0	0.0%	0	0	0	0	0
G	Of Interest & Finance Charge	0	0.0%	0	0	0	0	0

**ASSAM POWER GENERATION CORPORATION LIMITED
KARBI LANGPI HYDRO ELECTRIC PROJECT**

Form No: 24

Loan Details	Loan Tenure (yrs)	2019-20						
		Actual						
		Rate of Interest	Opening Balance	Amount received	Principal repayment	Interest Due	Closing Balance	
A	Secured Loans	0	10.1%	1460	0	-834	105	626
	I PFC Loans	0	0.0%	0	0	0	0	0
	KLHEP	15	12.0%	4430	0	-1335	451	3095
	NTPS(R&M)	13	12.0%	30602	0	-2169	3534	28433
	LTPS(R&M)	20	0.0%	36492	0	-4339	4091	32153
	NRPP	15	0.0%	0	0	0	0	0
	Sub-total		0.0%	0	0	0	0	0
			0.0%	0	0	0	0	0
			0.0%	0	0	0	0	0
B	Unsecured Loans	0	10.0%	10	0	0	1	10
	I GOA -Loans	0	10.0%	1737	0	0	174	1737
	Rural electrification	10	10.0%	886	0	0	89	886
	NRPP Ph-I	10	10.0%	1975	0	0	198	1975
	LWHRP	10	10.0%	4275	147	0	435	4423
	Lower Kopili HEP	10	10.0%	4121	737	0	449	4858
	R&M NTPS	10	10.0%	153	0	0	15	153
	R&M LTPS	10	0.0%	0	0	0	0	0
	LRPP	10	10.0%	400	0	0	40	400
	0	0	10.0%	1165	0	0	117	1165
	Lungnit SHEP	10	10.0%	1805	0	0	181	1805
	Myntriang SHEP	10	10.0%	100	0	0	10	100
	LTPS, Ph-II	10	10.0%	70	0	0	7	70
	Development of SHEP	10	10.0%	40	0	0	4	40
	Survey & Investigation of HEP	10	10.0%	11299	1645	0	1212	12944
	Non-Conventional source of ener	10	10.0%	215	0	0	22	215
	KLHEP	10	10.0%	250	0	0	25	250
	KLHEP (upper)	10	0.0%	0	0	0	0	0
	KLHEP (intermediate)	10	10.0%	104	0	0	10	104
	0	0	10.0%	15	0	0	2	15
	Dhansiri HEP	10	10.0%	425	0	0	43	425
	Setting up of a 200MW (CCGT)	10	10.0%	74	0	0	7	74
	Borgolai	10	10.0%	50	0	0	5	50
	Revival of TPS	10	10.0%	37	0	0	4	37
	Development of Amguri	10	10.0%	37	0	0	4	37
	EAP consulting service	10	10.0%	54	0	0	5	54
	Golaghat	10	10.0%	31325	0	0	3133	31325
	Boundary wall of Jagiroad	10	0.0%	0	0	0	0	0
	Station heat Rate	10	10.0%	404	0	0	40	404
	0	0	0.0%	0	0	0	0	0
	Solar NTPS	10	10.0%	2	0	0	0	2
	0	0	0.0%	61029	2529	0	6229	63558
	Disaster	0	0.0%	0	0	0	0	0
	Sub-total	0	0.0%	0	0	0	0	0
	0	0	10.0%	2444	0	0	244	2444
C	II GOA -Loans (Source_ADB)	0	10.0%	46	0	0	5	46
	LRPP	0	10.0%	140	0	0	14	140
	ADB Consultancy	0	0.0%	2630	0	0	263	2630
	Lower Kopili HEP	0	0.0%	0	0	0	0	0
	Sub-total	0	0.0%	0	0	0	0	0
D	Other Interest & Finance Charge	0	0.0%	0	0	0	0	0
	Cost of raising Finance / Bank Char	0	0.0%	0	0	0	0	0
	Interest on Security Deposit	0	0.0%	0	0	0	0	0
	Penal Interest Charges	0	0.0%	0	0	0	0	0
	Lease Rentals	0	0.0%	0	0	0	0	0
	Sub-total	0	0.0%	100151	2529	-4339	10583	98341
E	Of Interest & Finance Charges (A	0	0	100151	2529	-4339	10583	98341
F	Interest & Finance Charges Cap	0	0	0	0	0	0	0
G	Of Interest & Finance Charge	0	0	0	0	0	0	0

**ASSAM POWER GENERATION CORPORATION LIMITED
KARBI LANGPI HYDRO ELECTRIC PROJECT**

Form No: 24

Loan Details	Loan Tenure (yrs)	2020-21						
		Actual						
		Rate of Interest	Opening Balance	Amount received	Principal repayment	Interest Due	Closing Balance	
A	Secured Loans	0	10.1%	626	0	-626	32	0
	I PFC Loans	0	0.0%	0	0	0	0	0
	KLHEP	15	12.0%	3095	0	-1335	291	1760
	NTPS(R&M)	13	12.0%	28433	0	-2169	3274	26263
	LTPS(R&M)	20	0.0%	32153	0	-4130	3597	28023
	NRPP	15	0.0%	0	0	0	0	0
	Sub-total		0.0%	0	0	0	0	0
			0.0%	0	0	0	0	0
			0.0%	0	0	0	0	0
B	Unsecured Loans	0	10.0%	10	0	0	1	10
	I GOA -Loans	0	10.0%	1737	0	0	174	1737
	Rural electrification	10	10.0%	886	0	0	89	886
	NRPP Ph-I	10	10.0%	1975	0	0	198	1975
	LWHRP	10	10.0%	4423	190	0	452	4612
	Lower Kopili HEP	10	10.0%	4858	710	0	521	5568
	R&M NTPS	10	10.0%	153	0	0	15	153
	R&M LTPS	10	0.0%	0	0	0	0	0
	LRPP	10	10.0%	400	0	0	40	400
	0	0	10.0%	1165	0	0	117	1165
	Lungnit SHEP	10	10.0%	1805	0	0	181	1805
	Myntriang SHEP	10	10.0%	100	0	0	10	100
	LTPS, Ph-II	10	10.0%	70	0	0	7	70
	Development of SHEP	10	10.0%	40	0	0	4	40
	Survey & Investigation of HEP	10	10.0%	12944	210	0	1305	13154
	Non-Conventional source of ener	10	10.0%	215	0	0	22	215
	KLHEP	10	10.0%	250	0	0	25	250
	KLHEP (upper)	10	0.0%	0	0	0	0	0
	KLHEP (intermediate)	10	10.0%	104	0	0	10	104
	0	0	10.0%	15	0	0	2	15
	Dhansiri HEP	10	10.0%	425	0	0	43	425
	Setting up of a 200MW (CCGT)	10	10.0%	74	0	0	7	74
	Borgolai	10	10.0%	50	0	0	5	50
	Revival of TPS	10	10.0%	37	0	0	4	37
	Development of Amguri	10	10.0%	37	0	0	4	37
	EAP consulting service	10	10.0%	54	0	0	5	54
	Golaghat	10	10.0%	31325	0	0	3133	31325
	Boundary wall of Jagiroad	10	0.0%	0	0	0	0	0
	Station heat Rate	10	10.0%	404	0	0	40	404
	0	0	0.0%	0	0	0	0	0
	Solar NTPS	10	10.0%	2	0	0	0	2
	0	0	0.0%	63558	1110	0	6411	64668
	Disaster	0	0.0%	0	0	0	0	0
	Sub-total	0	0.0%	0	0	0	0	0
	0	0	10.0%	2444	0	0	244	2444
C	II GOA -Loans (Source_ADB)	0	10.0%	46	0	0	5	46
	LRPP	0	10.0%	140	0	0	14	140
	ADB Consultancy	0	0.0%	2630	0	0	263	2630
	Lower Kopili HEP	0	0.0%	0	0	0	0	0
	Sub-total	0	0.0%	0	0	0	0	0
D	Other Interest & Finance Charge	0	0.0%	0	0	0	0	0
	Cost of raising Finance / Bank Char	0	0.0%	0	0	0	0	0
	Interest on Security Deposit	0	0.0%	0	0	0	0	0
	Penal Interest Charges	0	0.0%	0	0	0	0	0
	Lease Rentals	0	0.0%	0	0	0	0	0
	Sub-total	0	0.0%	98341	1110	-4130	10272	95321
E	Of Interest & Finance Charges (A	0	0	98341	1110	-4130	10272	95321
F	Interest & Finance Charges Cap	0	0	0	0	0	0	0
G	Of Interest & Finance Charge	0	0	0	0	0	0	0

	Loan Details	Loan Tenure (yrs)
A	Secured Loans	0
	I PFC Loans	0
	KLHEP	15
	NTPS(R&M)	13
	LTPS(R&M)	20
	NRPP	15
	Sub-total	
B	Unsecured Loans	0
	I GOA -Loans	0
	Rural electrification	10
	NRPP Ph-I	10
	LWHRP	10
	Lower Kopili HEP	10
	R&M NTPS	10
	R&M LTPS	10
	LRPP	10
	0	0
	Lungnit SHEP	10
	Myntriang SHEP	10
	LTPS, Ph-II	10
	Development of SHEP	10
	Survey & Investigation of HEP	10
	Non-Conventional source of ener	10
	KLHEP	10
	KLHEP (upper)	10
	KLHEP (intermediate)	10
	0	0
	Dhansiri HEP	10
	Setting up of a 200MW (CCGT)	10
	Borgolai	10
	Revival of TPS	10
	Development of Amguri	10
	EAP consulting service	10
	Golaghat	10
	Boundary wall of Jagiroad	10
	Station heat Rate	10
	0	0
	Solar NTPS	10
	0	0
	Disaster	0
	Sub-total	0
	0	0
C	II GOA -Loans (Source_ADB)	0
	LRPP	0
	ADB Consultancy	0
	Lower Kopili HEP	0
	Sub-total	0
D	Other Interest & Finance Charge	0
	Cost of raising Finance / Bank Char	0
	Interest on Security Deposit	0
	Penal Interest Charges	0
	Lease Rentals	0
	Sub-total	0
E	Of Interest & Finance Charges (A	0
F	Interest & Finance Charges Cap	0
G	Of Interest & Finance Charge	0

	Loan Details	Loan Tenure (yrs)
A	Secured Loans	0
	I PFC Loans	0
	KLHEP	15
	NTPS(R&M)	13
	LTPS(R&M)	20
	NRPP	15
	Sub-total	
B	Unsecured Loans	0
	I GOA -Loans	0
	Rural electrification	10
	NRPP Ph-I	10
	LWHRP	10
	Lower Kopili HEP	10
	R&M NTPS	10
	R&M LTPS	10
	LRPP	10
	0	0
	Lungnit SHEP	10
	Myntriang SHEP	10
	LTPS, Ph-II	10
	Development of SHEP	10
	Survey & Investigation of HEP	10
	Non-Conventional source of ener	10
	KLHEP	10
	KLHEP (upper)	10
	KLHEP (intermediate)	10
	0	0
	Dhansiri HEP	10
	Setting up of a 200MW (CCGT)	10
	Borgolai	10
	Revival of TPS	10
	Development of Amguri	10
	EAP consulting service	10
	Golaghat	10
	Boundary wall of Jagiroad	10
	Station heat Rate	10
	0	0
	Solar NTPS	10
	0	0
	Disaster	0
	Sub-total	0
	0	0
C	II GOA -Loans (Source_ADB)	0
	LRPP	0
	ADB Consultancy	0
	Lower Kopili HEP	0
	Sub-total	0
D	Other Interest & Finance Charge	0
	Cost of raising Finance / Bank Char	0
	Interest on Security Deposit	0
	Penal Interest Charges	0
	Lease Rentals	0
	Sub-total	0
E	Of Interest & Finance Charges (A	0
F	Interest & Finance Charges Cap	0
G	al Of Interest & Finance Charge	0

Name of Company:		ASSAM POWER GENERATION CORPORATION LIMITED			
Name of Plant/ Station:		KARBI LANGPI HYDRO ELECTRIC PROJECT			
		Return on Equity		Form No:	F25
	Loan Details	Unit	2019-20	2020-21	2021-22
			Actual	Estimated	Projected
1	Equity (Opening Balance)	Rs Cr.	68.65	68.65	68.65
2	Add: Increase due to discharges during the year / period	Rs Cr.	0	0.00	0.00
3	Less: Decrease due to de-capitalisation during the year / period	Rs Cr.	0	0	0
4	Less: Decrease due to reversal during the year / period	Rs Cr.	0	0	0
5	Equity (Closing Balance)	Rs Cr.	68.65	68.65	68.65
6	Average Equity	Rs Cr.	68.65	68.65	68.65
7	Rate of Return on Equity	%	15.50%	15.50%	15.50%
8	Return on Equity	Rs Cr.	10.64	10.64	10.64

Name of Company:		ASSAM POWER GENERATION CORPORATION LIMITED			
Name of Plant/ Station:		KARBI LANGPI HYDRO ELECTRIC PROJECT			
Working Capital Requirements			Form No:	F26	
	Particulars	Unit	2019-20	2020-21	2021-22
			Actual	Estimated	Projected
For Coal Based Generating Stations					
1	Cost of Coal for 1.5 months for pithead & 2 months for non-pit head generating station*	Rs Cr.			
2	Cost of Secondary Fuel Oil for 2 months*	Rs Cr.			
3	Maintenance Spares @ 20% of O&M	Rs Cr.			
4	O&M expenses for 1 month	Rs Cr.			
5	Receivables equivalent to 2 months of capacity and energy charge^	Rs Cr.			
Total Working Capital Requirement		Rs Cr.			
Rate of Interest #		%			
Interest on Normative Working Capital Requirement		Rs Cr.			
For Open-cycle Gas Turbine/ Combined Cycle thermal generating stations					
1	Fuel expenses for 1 month *	Rs Cr.			
2	Liquid fuel stock for 15 days*	Rs Cr.			
3	Maintenance spares @ 30% of O&M	Rs Cr.			
4	O&M expenses for 1 month	Rs Cr.			
5	Receivables equivalent to 2 months of capacity and energy charge^	Rs Cr.			
Total Working Capital Requirement		Rs Cr.			
Rate of Interest #		%			
Interest on Normative Working Capital Requirement		Rs Cr.			
For Hydro Generating stations					
1	O&M expenses for 1 month	Rs Cr.	2.40	2.53	2.69
2	Maintenance spares @ 15% of O&M	Rs Cr.	8.64	9.10	9.68
3	Receivables equivalent to 2 months of annual fixed charge	Rs Cr.	11.51	12.99	15.11
Total Working Capital Requirement		Rs Cr.	22.55	24.62	27.48
Rate of Interest #		%	10.00%	10%	10%
Interest on Normative Working Capital Requirement		Rs Cr.	2.26	2.46	2.75
* corresponding to target availability					
^ calculated on target availability					
# shall be equal to the interest rate equivalent to State Bank of India base rate as on 1st April of the respective					

Name of Company:		ASSAM POWER GENERATION CORPORATION LIMITED				
Name of Plant/ Station:		KARBI LANGPI HYDRO ELECTRIC PROJECT				
Details of Expenses Capitalised		Form No: F 28				
		(Rs Cr.)				
		2019-20	2020-21	2021-22	2020-21	2021-22
		Actual	Estimated	Projected	Projected	Projected
1	Interest & Finance charges Capitalised					
2	Employee expenses					
3	A&G Expenses					
4	Others, if any					
	Grand Total	0.00	0.00	0.00	0.00	0.00

Name of Company:		POWER GENERATION CORPORATION L		
Name of Plant/ Station:		BI LANGPI HYDRO ELECTRIC PRO		
Income Tax Provisions		Form No: F29		
		(Rs Cr.)		
		2019-20	2020-21	2021-22
		Actual	Estimated	Projected
1	Income Tax on the Retun on Equity			
2	As Per Return Filed For The Year	0.23	0.00	0.00
3	As Assessed For The Year			
4	Credit/Debit Of Assessment Year(s) (Give Details)			
	Total	0.23	0.00	0.00
Note: 'Income Tax Provisions' details which could not be provided by the Generation Company at the time of this filing shall be furnished as and when they become due/ available.				

Name of Company:		POWER GENERATION CORPORATION LI		
Name of Plant/ Station:		BI LANGPI HYDRO ELECTRIC PRO		
Non-Tariff Income				
				(Rs Cr.)
S. No.	Particulars	2019-20	2020-21	2021-22
		Actual	Estimated	Projected
A	Income from Investment, Fixed & Call Deposits			
	Income from Investments:			
	Interest on securities			
	Interest on fixed deposits	14.08		
	Income on other investments			
	Interest from Banks	0.00		
	Interest on (any other items)			
	Sub-Total	14.08		
B	Other Non-Tariff Income			
	Interest on Loans and Advances to staff			
	Interest on Loans and Advances to Licensee			
	Interest on Loans and Advances to Lessors			
	Interest on Loans and Advances to Suppliers/ Contractors		5.75	5.75
	Income from trading	0.00		
	Gain on sale of Fixed Assets			
	Income/Fees /Collections against staff welfare activities:			
	Miscellaneous Receipts:	1.64		
	Delayed Payment charges from Beneficiaries	0.9666362		
	Net profit from UI charges			
	Penalty for contractor/ supplier for delay etc			
	Misc Charges			
	Sub-Total	2.61		
	Grand Total	16.69	5.75	5.75

REGULATORY FORMATS FOR
ARR & TARIFF FILING BY
GENERATION LICENSEE -
LAKWA REPLACEMENT POWER
PLANT

Name of Company:		ASSAM POWER GENERATION CORPORATION LIMITED			
Name of Plant/ Station:		LAKWA REPLACEMENT POWER PROJECT			
Annual Revenue Requirement Summary					Form No:
					Rs Cr.
		Form	2019-20	2020-21	2021-22
			Actual	Estimated	Projected
A	Generation				
1	Gross Generation (MU)	F4	504.20	519.40	519.40
2	Aux Consumption (%)	F4	2.92%	2.92%	3.50%
3	Net Generation (MU)	F4	489.48	504.22	501.22
B	Capacity Charges (Annual Fixed Charges)				
1	O&M expenses		20.98	21.30	22.64
a	Employee Expenses	F21	13.30		
b	R & M Expense	F20	6.64		
c	A&G Expense	F22	1.04		
	Increase in AERC Tariff Filing Fees			0.10	0.10
2	Depreciation	F23	2.60	2.63	2.63
3	Interest on Loans	F14B	3.66	3.54	3.23
4	Return on Equity	F25	2.37	2.44	2.44
5	Interest on Working Capital	F26	3.72	3.05	2.89
6	Income Tax	F29	0.32	-	-
7	Prior Period items				
8	Special allowance in lieu of R&M or separate compensation allowance				
9	Other income				
	Capacity Building				
	Total		33.65	33.07	33.94
C	Variable Charges (Energy Charges)				
	Energy Charges from Primary Fuel (Rs Cr) ^{C1, C2, C3, C4}	F4	95.13	67.40	58.37
	Energy Charges from Primary Fuel (Rs/ kWh)	F4	1.94	1.34	1.16
	C1 - If multifuel is used simultaneously, energy charges to be given in respect of every fuel individually				
	C2 - Energy charge shall be computed for open cycle operation and combined cycle operation separately in case of gas/ liquid fuel fired plants				
	C3 - Energy charge shall be worked out based on ex-bus energy scheduled to be sent out				

Name of Company:		ASSAM POWER GENERATION CORPORATION LIMITED						
Name of Plant/ Station:		LAKWA REPLACEMENT POWER PROJECT						
Plant Characteristics-Thermal							Form No:	F2a
	Unit(s)/ Block(s) Parameters	Unit I	Unit II	Unit III	Unit IV	Unit V	Unit VI	Unit VII
	Installed Capacity (MW)	9.97	9.97	9.97	9.97	9.97	9.97	9.97
	Schedule COD as per Investment Approval							
	Actual COD /Date of Taken Over (as applicable)	26-04-2018						
	Pit Head or Non Pit Head	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	Name of the Boiler Manufacture	WARTSILA, FINLAND OY						
	Name of Turbine Generator Manufacture	ABB						
	Main Steams Pressure at Turbine inlet (kg/Cm2) abs ¹ .	N/A						
	Main Steam Temperature at Turbine inlet (oC) ¹	N/A						
	Reheat Steam Pressure at Turbine inlet (kg/Cm2) ¹	N/A						
	Reheat Steam Temperature at Turbine inlet (oC) ¹	N/A						
	Main Steam flow at Turbine inlet under MCR condition (tons /hr) ²	N/A						
	Main Steam flow at Turbine inlet under VWO condition (tons /hr) ²	N/A						
	Unit Gross electrical output under MCR /Rated condition (MW) ²	9.97	9.97	9.97	9.97	9.97	9.97	9.97
	Unit Gross electrical output under VWO condition (MW) ²	9.97	9.97	9.97	9.97	9.97	9.97	9.97
	Guaranteed Design Gross Engine Heat Rate on NCV (kCal/kWh) ³	1873	1873	1873	1873	1873	1873	1873
	Conditions on which design turbine cycle heat rate guaranteed	NCV	NCV	NCV	NCV	NCV	NCV	NCV
	% MCR							
	% Makeup Water Consumption	N/A						
	Design Capacity of Make up Water System							
	Design Capacity of Inlet Cooling System							
	Design Cooling Water Temperature (0C)							
	Back Pressure							
	Steam flow at super heater outlet under BMCR condition (tons/hr)							
	Steam Pressure at super heater outlet under BMCR condition) (kg/Cm2)							
	Steam Temperature at super heater outlet under BMCR condition (0C)	N/A						
	Steam Temperature at Reheater outlet at BMCR condition (0C)							
	Design / Guaranteed Boiler Efficiency (%) ⁴							
	Design Fuel with and without Blending of domestic/imported coal							
	Type of Cooling Tower							
	Type of cooling system ⁵							
	Type of Boiler Feed Pump ⁶							
	Fuel Details ⁷							
	-Primary Fuel	Natural gas						
	-Secondary Fuel	N/A						
	-Alternate Fuels	N/A						
	Special Features/ Site Specific Features ⁸	MAKEUP WATER SYSTEM						
	Special Technological Features ⁹	N/A						
	Environmental Regulation related features ¹⁰							
	Any other special features							

Name of Company:		ASSAM POWER GENERATION CORPORATION LIMITED			
Name of Plant/ Station:		LAKWA REPLACEMENT POWER PROJECT			
Normative Parameters Considered for Tariff Computations-Thermal					Form No:
	Particulars	Unit	2019-20	2020-21	2021-22
			Actual	Estimated	Projected
1	Base Rate of Return on Equity	%	15.50	15.50	15.50
2	Target Availability	%	85.00%	85.00%	85.00%
3	Auxiliary Energy Consumption	%	3.50%	3.50%	3.50%
4	Gross Station Heat Rate	kCal/ kWh	2150	2150	2150
5	Specific Fuel Oil Consumption ml/kWh	ml/ kWh			
6	Cost of Coal/ Lignite	Rs/ Ton			
7	Cost of Main Secondary Fuel Oil	Rs/ kL			
8	Cost of Gas	Rs/ SCM	8.26	5.78	4.92
9	Primary Fuel (Coal/ Lignite/ Gas) for Working Capital	in Months			
10	Secondary Fuel for Working Capital	in Months			
11	O&M Expenses	Rs/ MW			
12	Maintenance Spares for Working Capital	% of O&M	30	30	30
13	Receivables for Working Capital	in Months	2 months	2 months	2 months
14	Base Rate of SBI as on 01-04-2018	%	10.00%	10.00%	10.00%

Name of Company:		ASSAM POWER GENERATION CORPORATION LIMITED			
Name of Plant/ Station:		LAKWA REPLACEMENT POWER PROJECT			
Generation Details and Variable Cost					Form No:
	Particulars	Unit	2019-20 Actual	2020-21 Estimated	2021-22 Projected
1	Installed Capacity	MW	69.76	69.76	69.76
2	Plant Load Factor	%	82.78%	82.73%	90.00%
3	Gross Generation	MU	504.20	519.40	519.40
4	Auxiliary Consumption	%	2.92%	2.92%	3.50%
5	Auxiliary Consumption	MU	14.72	15.18	18.18
6	Net Generation	MU	489.48	504.224	501.221
7	Station Heat Rate	kCal/ kWh	2144	2153	2150
	Primary Fuel Consumption (Coal/ Lignite)				
8	GCV of Coal/ Lignite	kCal/ kg			
9	Quantity of Coal/ Lignite (Fired)	MT			
10	Specific Coal Consumption (Fired)	kg/ kWh			
11	Transit Loss	MT			
12	Transit Loss	%			
13	Gross Quantity of Coal (Purchased)	MT			
14	Rate of Coal/ Lignite	Rs/ Ton			
15	Cost of Coal/ Lignite	Rs Cr.			
	Primary Fuel Consumption (Gas/ LNG/ Liquid)				
16	GCV of Gas/ LNG/ Liquid Fuel	kCal/ SCM	9388.83	9419.27	9419.27
17	Quantity of Gas/ LNG/ Liquid Fuel	MMSCM	115.46	118.72	118.56
18	Specific Fuel Consumption	SCM/ kWh	0.23	0.23	0.23
19	Rate of Gas/ LNG/ Liquid Fuel	Rs/ SCM	8.26	5.78	4.92
20	Cost of Gas/ LNG/ Liquid Fuel	Rs Cr.	95.13	67.40	58.37
	Secondary Fuel Oil Consumption				
21	GCV of Secondary Fuel Oil	kCal/ kL			
22	Quantity of Secondary Fuel Oil	kL			
23	Specific Secondary Fuel Oil Consumption	ml/ kWh			
24	Rate of Secondary Fuel Oil	Rs/ kL			
25	Cost of Secondary Fuel Oil	Rs Cr.			
	Primary Fuel Cost (Coal/ Lignite)	Rs Cr.			
	Primary Fuel Cost (Gas/ LNG/ Liquid)	Rs Cr.	95.13	67.40	58.37
	Secondary Fuel Cost	Rs Cr.			
C	Variable Charges (Energy Charges)				
	Energy Charges from Primary Fuel (Coal/ Lignite)	Rs/ kWh			
	Energy Charges from Primary Fuel (Gas/ LNG/ Liquid)	Rs/ kWh	1.94	1.34	1.16

Name of Company:
Name of Plant/ Station:

ASSAM POWER GENERATION CORPORATION LIM
LAKWA REPLACEMENT POWER PROJECT

Abstract of admitted Capital Cost for the existing Project

Form No: F5

	Particulars	Unit	Details
	Last date of order of Commission for the project as per Order dated 01.03.2020		
1	Capital Cost as admitted by AERC	Rs Cr.	255.33
2	Amount of un-discharged liabilities included in above (& forming part of admitted capital cost)	Rs Cr.	NIL
3	Amount of un-discharged liabilities corresponding to above admitted capital cost (but not forming part of admitted capital cost being allowed on cash basis)	Rs Cr.	NIL
4	Gross Normative Debt	Rs Cr.	34.323
5	Cumulative Repayment	Rs Cr.	NIL
6	Net Normative Debt	Rs Cr.	34.32
7	Normative Equity	Rs Cr.	14.707
8	Cumulative Depreciation	Rs Cr.	NIL
9	Freehold land	Rs Cr.	NIL

Name of Company:
Name of Plant/ Station:

ASSAM POWER GENERATION CORPORATION LIMITED
LAKWA REPLACEMENT POWER PROJECT

Statement showing claimed capital cost

Form No:

	Particulars	Unit	2019-20	2020-21	2021-22
1	Opening Capital Cost	Rs Cr.	257.68	268.41	268.41
2	Add: Addition during the year / period	Rs Cr.	10.73	0.00	0.00
3	Less: Decapitalisation during the year / period	Rs Cr.			
4	Less: Reversal during the year / period	Rs Cr.	0	0	0
5	Add: Discharges during the year / period	Rs Cr.	0	0	0
6	Closing Capital Cost	Rs Cr.	268.41	268.41	268.41
7	Average Capital Cost	Rs Cr.	263.04	268.41	268.41

Name of Company:
Name of Plant/ Station:

ASSAM POWER GENERATION CORPORATION LIMITED
LAKWA REPLACEMENT POWER PROJECT

Details of Project Specific Loans Form No: F13

Particulars	Rs Cr.					
	Package 1	Package 2	Package 3	Package 4	Package 5	Package 6
Source of Loan ¹	GOA Loan					
Currency ²	INR					
Amount of Loan sanctioned	270.8					
Amount of Gross Loan drawn upto 31.03.2016 COD ^{3,4,5,13,15}	268.7					
Interest Type ⁶	FIXED					
Fixed Interest Rate, if applicable	10%					
Base Rate, if Floating Interest ⁷						
Margin, if Floating Interest ⁸	Yes/No	Yes/No	Yes/No	Yes/No	Yes/No	Yes/No
Are there any Caps/Floor ⁹						
If above is yes,specify caps/floor						
Moratorium Period ¹⁰						
Moratorium effective from						
Repayment Period ¹¹						
Repayment effective from						
Repayment Frequency ¹²						
Repayment Instalment ^{13,14}						
Base Exchange Rate ¹⁶						
Are foreign currency loan hedged?						
If above is yes,specify details ¹⁷						

Note:

- ¹ Source of loan means the agency from whom the loan has been taken such as WB, ADB, WMB, PNB, SBI, ICICI, IFC, PFC etc.
- ² Currency refers to currency of loan such as US\$, DM, Yen, Indian Rupee etc.
- ³ Details are to be submitted as on 31.03.2015 for existing assets and as on COD for the remaining assets.
- ⁴ Where the loan has been refinanced, details in the Form is to be given for the loan refinanced. However, the details of the original loan is to be given separately in the same form.
- ⁵ If the Tariff in the petition is claimed separately for various units, details in the Form is to be given separately for all the units in the same form.
- ⁶ Interest type means whether the interest is fixed or floating.
- ⁷ Base rate means the base as PLR, LIBOR etc. over which the margin is to be added. Applicable base rate on different dates from the date of drawl may also be enclosed.
- ⁸ Margin means the points over and above the floating rate.
- ⁹ At times caps/ floor are put at which the floating rates are frozen. If such a condition exists, specify the limits.
- ¹⁰ Moratorium period refers to the period during which loan servicing liability is not required.
- ¹¹ Repayment period means the repayment of loan such as 7 years, 10 years, 25 years etc.
- ¹² Repayment frequency means the interval at which the debt servicing is to be done such as monthly, quarterly, half yearly, annual, etc.
- ¹³ Where there is more than one drawal/repayment for a loan, the date & amount of each drawal/repayment may also be given separately
- ¹⁴ If the repayment instalment amount and repayment date can not be worked out from the data furnished above, the repayment schedule to be
- ¹⁵ In case of Foreign loan, date of each drawal & repayment alongwith exchange rate at that date may be given.
- ¹⁶ Base exchange rate means the exchange rate prevailing as on 31.03.2015 for existing assets and as on COD for the remaining assets.
- ¹⁷ In case of hedging, specify details like type of hedging, period of hedging, cost of hedging, etc.
- ¹⁸ In case of foreign loans, provide details of exchange rate considered on date of each repayment of principal and date of interest payment.
- ¹⁹ At the time of truing up rate of interest with relevant reset date (if any) to be furnished separately.
- ²⁰ At the time of truing up provide details of refinancing of loans considered earlier. Details such as date on which refinancing done, amount of refinanced loan, terms and conditions of refinanced loan, financing and other charges incurred for refinancing etc.

Petitioner

Name of Company:		SSAM POWER GENERATION CORPORATION LIMITED		
Name of Plant/ Station:		LAKWA REPLACEMENT POWER PROJECT		
		Form No:		
Particulars	2019-20	2020-21	2021-22	
	Actual	Estimated	Projected	
Loan-1 from PFCL				
Gross loan - Opening				
Cumulative repayments of Loans upto previous year				
Net loan - Opening	387.03	364.92	321.53	
Add: Drawal(s) during the Year	21.28	0.00	0.00	
Less: Repayment (s) of Loans during the year	43.39	43.39	41.30	
Net loan - Closing	364.92	321.53	280.23	
Average Net Loan	375.97	343.23	300.88	
Rate of Interest on Loan on annual basis	11.54%	11.21%	11.19%	
Interest on loan	44.68	40.91	35.97	
Loan- Loan from Govt. of Assam				
Gross loan - Opening				
Cumulative repayments of Loans upto previous year				
Net loan - Opening	239.80	271.48	318.46	
Add: Drawal(s) during the Year	9.98	25.29	11.10	
Less: Repayment (s) of Loans during the year	-21.69	-21.69	-21.69	
Net loan - Closing	271.48	318.46	351.25	
Average Net Loan	255.64	294.97	334.85	
Rate of Interest on Loan on annual basis	7.61%	8.73%	8.82%	
Interest on loan	18.25	23.71	28.09	
Total Loan				
Gross loan - Opening				
Cumulative repayments of Loans upto previous year				
Net loan - Opening	626.83	636.40	639.99	
Add: Drawal(s) during the Year	31.26	25.29	11.10	
Less: Repayment (s) of Loans during the year	21.69	21.69	19.61	
Net loan - Closing	636.40	639.99	631.48	
Average Net Loan	631.61	638.19	635.74	
Interest on loan	62.93	64.62	64.06	
Weighted average Rate of Interest on Loans	10.04%	10.15%	10.01%	
Note:				
1. In case of Foreign Loans, the calculations in Indian Rupees is to be furnished. However, the calculations in Original currency is also to be furnished separately in the same form.				

Name of Company:		ASSAM POWER GENERATION CORPORATION LIMITED		
Name of Plant/ Station:		LAKWA REPLACEMENT POWER PROJECT		
Calculation of Interest on Normative Loan				Form No:
				Rs Cr.
S. No.	Particulars	2019-20	2020-21	2021-22
		Actual	Estimated	Projected
1	Gross Normative loan – Opening			
2	Cumulative repayment of Normative loan upto previous year			
3	Net Normative loan – Opening	36.71	36.21	33.57
4	Add: Increase due to addition during the year / period	2.10	0.00	0.00
5	Less: Decrease due to de-capitalisation during the year / period			
6	Less: Decrease due to reversal/repayment during the year / period	2.60	2.63	2.63
7	Add: Increase due to discharges during the year / period			
8	Net Normative loan - Closing	36.21	33.57	30.94
9	Average Normative loan	36.46	34.89	32.26
10	Weighted average rate of interest	10.04%	10.15%	10.01%
11	Interest on Loan	3.66	3.54	3.23
12	Bank charges	0.00	0.00	0.00
13	Interest on Loan plus bank charges	3.66	3.54	3.23

Name of Company:

ASSAM POWER GENERATION CORPORATION LIMITED

Name of Plant/ Station:

LAKWA REPLACEMENT POWER PROJECT

Details of Allocation of corporate loans to various projects Form No: F15

Particulars	Package 1	Package 2	Package 3	Package 4	Package 5	Package 6
Source of Loan ¹						
Currency ²						
Amount of Loan sanctioned						
Amount of Gross Loan drawn upto 31.03.2016/ COD ^{3,4,5,13,15}						
Interest Type ⁶						
Fixed Interest Rate, if applicable						
Base Rate, if Floating Interest ⁷						
Margin, if Floating Interest ⁸	Yes/No	Yes/No	Yes/No	Yes/No	Yes/No	Yes/No
Are there any Caps/Floor ⁹						
If above is yes,specify caps/floor						
Moratorium Period ¹⁰						
Moratorium effective from						
Repayment Period ¹¹						
Repayment effective from						
Repayment Frequency ¹²						
Repayment Instalment ^{13,14}						
Base Exchange Rate ¹⁶						
Are foreign currency loan hedged?						
If above is yes,specify details ¹⁷						

Distribution of loan packages to various projects						
Name of the Projects	Package 1	Package 2	Package 3	Package 4	Package 5	Total
Project 1						
Project 2						
Project 3 and so on						

Note:

¹ Source of loan means the agency from whom the loan has been taken such as WB, ADB, WMB, PNB, SBI, ICICI, IFC, PFC etc.

² Currency refers to currency of loan such as US\$, DM, Yen, Indian Rupee etc.

³ Details are to be submitted as on 31.03.2015 for existing assets and as on COD for the remaining assets.

⁴ Where the loan has been refinanced, details in the Form is to be given for the loan refinanced. However, the details of the original loan is to be given separately in the same form.

⁵ If the Tariff in the petition is claimed separately for various units, details in the Form is to be given separately for all the units in the

⁶ Interest type means whether the interest is fixed or floating.

⁷ Base rate means the base as PLR, LIBOR etc. over which the margin is to be added. Applicable base rate on different dates from the date of drawl may also be enclosed.

⁸ Margin means the points over and above the floating rate.

⁹ At times caps/ floor are put at which the floating rates are frozen. If such a condition exists, specify the limits.

¹⁰ Moratorium period refers to the period during which loan servicing liability is not required.

¹¹ Repayment period means the repayment of loan such as 7 years, 10 years, 25 years etc.

¹² Repayment frequency means the interval at which the debt servicing is to be done such as monthly, quarterly, half yearly, annual,

¹³ Where there is more than one drawal/repayment for a loan, the date & amount of each drawal/repayment may also be given

¹⁴ If the repayment instalment amount and repayment date can not be worked out from the data furnished above, the repayment

¹⁵ In case of Foreign loan, date of each drawal & repayment alongwith exchange rate at that date may be given.

¹⁶ Base exchange rate means the exchange rate prevailing as on 31.03.2015 for existing assets and as on COD for the remaining

¹⁷ In case of hedging, specify details like type of hedging, period of hedging, cost of heging, etc.

¹⁸ In case of foreign loans, provide details of exchange rate considered on date of each repayment of principal and date of interest payment.

¹⁹ At the time of truing up rate of interest with relevant reset date (if any) to be furnished separately.

²⁰ At the time of truing up provide details of refinancing of loans considered earlier. Details such as date on which refinancing done, amount of refinanced loan, terms and conditions of refinanced loan, financing and other charges incurred for refinancing etc.

Petitioner

Name of Company:

ASSAM POWER GENERATION CORPORATION LIMITED

Name of Plant/ Station:

LAKWA REPLACEMENT POWER PROJECT

Statement of Additional Capitalisation after COD

Form No:

F16

Rs Cr.

No	Head of Work/ Equipment				Regulations under which claimed	Justification	Admitted Cost by Commission if any
		2019-20	2020-21	2021-22			
1	Land	0	0	0			
2	Building	0	0	0			
3	Hydraulic works	0	0	0			
4	Other civil works	0	0	0			
5	Plant & machinery- Gas	11	0	0			
6	Plant & machinery- Hydel	0	0	0			
7	Lines & cables	0	0	0			
8	Vehicle	0	0	0			
9	Furniture	0	0	0			
10	Other office equipment	0	0	0			
11	Roads on land belonging to others	0	0	0			
12	Capital spares at Generating Stations	0	0	0			
	Total	11	0	0			

Note:

- 1 Fill the form in chronological order year wise along with detailed justification clearly bring out the necessity and the benefits
- 2 In case initial spares are purchased alongwith any equipment, then the cost of such spares should be indicated separately. e.g.
- 3 Actual/Projected additional capital expenditure claimed for past period shall be governed by Tariff Regulation for the relevant

Petitioner

Name of Company:		ASSAM POWER GENERATION CORPORATION LIMITED		
Name of Plant/ Station:		LAKWA REPLACEMENT POWER PROJECT		
R&M Expenses				Form No:
		Rs Cr.		
	Particulars	2019-20	2020-21	2021-22
		Actual	Estimated	Projected
1	Plant and Machinery	6.64	Consolidated O&M approved for the year	Consolidated O&M approved for the year
2	Building	-		
3	Civil Works	-		
4	Hydraulic Works	-		
5	Lines, Cables Net Works etc.	-		
6	Vehicles	-		
7	Furniture and Fixtures	-		
8	Office Equipments	-		
9	Station Supplies	-		
10	Lubricants & Consumable stores	-		
11	Oil/Turbine Oil consumed in internal combustion	-		
12	Any other items (Spl R&M)	-		
	Total	6.64		

Name of Company:		ASSAM POWER GENERATION CORPORATION LIMITED		
Name of Plant/ Station:		LAKWA REPLACEMENT POWER PROJECT		
Employee Expenses				Form No:
		Rs Cr.		
	Particulars	2019-20	2020-21	2021-22
		Actual	Estimated	Projected
1	Salaries	8.57	Consolidated O&M approved for the year	Consolidated O&M approved for the year
2	Additional Pay	-		
3	Dearness Allowance (DA)	1.48		
4	Other Allowances & Relief	1.39		
5	Addl. Pay & C.Off Encashment	-		
6	Interim Relief / Wage Revision	-		
7	Overtime	0.40		
8	Bonus To Employees	0.01		
9	Medical Expenses Reimbursement	0.02		
10	Travelling Allowance(Conveyance Allowance)	-		
11	Leave Travel Assistance	0.00		
12	Earned Leave Encashment	-		
13	Payment Under Workman's Compensation And Gratuity	-		
14	Subsidised Electricity To Employees	-		
15	Any Other Item	-		
16	Staff Welfare Expenses	-		
17	Capacity Building Expenses	-		
18	Apprentice And Other Training Expenses	-		
19	Contribution To Terminal Benefits	1.44		
20	Provident Fund Contribution	-		
21	Provision for PF Fund	-		
22	Any Other Items(Revision of Pay @ 24% of Salary)	0.00		
	Total Employee Costs	13.30		
23	Less: Employee expenses capitalised	0.00		
	Net Employee expenses (D)-(E)	13.30	13.88	0.00

Name of Company:		AM POWER GENERATION CORPORATION LIM		
Name of Plant/ Station:		AKWA REPLACEMENT POWER PROJE		
Administration & General Expenses				Form No:
				Rs Cr.
	Particulars	2019-20	2020-21	2021-22
		Actual	Estimated	Projected
1	Lease/ Rent	-	Consolidated O&M approved for the year	Consolidated O&M approved for the year
2	Insurance	0.10		
3	Revenue Stamp Expenses Account	-		
4	Telephone, Postage, Telegram & Telex Charges	0.03		
5	Incentive & Award To Employees/Outsiders	-		
6	Consultancy Charges	-		
7	Technical Fees	-		
8	Other Professional Charges	-		
9	Conveyance And Travelling	0.10		
10	License and Registration Fees	-		
11	Vehicle Expenses	0.19		
12	Security / Service Charges Paid To Outside Agencies	-		
13	Fee And Subscriptions Books And Periodicals	-		
14	Fees Paid to AERC	0.32		
15	Printing And Stationery	0.03		
16	Advertisement Expenses	0.06		
17	Contributions/Donations To Outside Institutes / Associations	0.04		
18	Electricity Charges To Offices	-		
19	Water Charges	0.00		
20	Entertainment Charges	0.03		
21	Miscellaneous Expenses	0.07		
22	Legal Charges	-		
23	Auditor's Fee	0.04		
24	Freight On Capital Equipments	-		
25	Purchase Related Advertisement Expenses	-		
26	Vehicle Running Expenses Truck / Delivery Van	-		
27	Vehicle Hiring Expenses Truck / Delivery Van	-		
28	Other Freight	-		
29	Transit Insurance	-		
30	Octroi	-		
31	Incidental Stores Expenses	0.00		
32	Fabrication Charge	-		
33	CSR	0.03		
	Total A&G Expenses	1.04		
32	Less: A&G Expenses Capitalised	0.00		
	Total A&G Expenses	1.04		

CONSOLIDATED STATEMENT OF
APGCL ASSETS

ASSAM POWER GENERATION CORPORATION LIMITED

LAKWA REPLACEMENT POWER PROJECT

Form No: 23

		FY 2019-20										
Group of Asset	Rate of Depreciation AERC 2015 REG	Balance depreciable asset	Opening balance		Adjustment as on 01/04/2018		Addition during the year		Deletion during the year		Closing balance	
			Asset	Depr	Asset	Depr	Asset	Depr	Asset	Depr	Asset	Depr
Land	0.00%	-	-	-	-	-	-	-	-	-	-	-
Building	3.34%	-	-	-	-	-	-	-	-	-	-	-
Hydraulic works	5.28%	-	-	-	-	-	-	-	-	-	-	-
Other civil works	3.34%	21.76	24.36	###	-	-	-	0.81	-	-	24.36	0.98
Plant & machinery- Gas	5.28%	207.38	233.31	###	-	-	10.73	12.66	-	-	244.05	15.26
Plant & machinery- Hydel	5.28%	-	-	-	-	-	-	-	-	-	-	-
Lines & cables	5.28%	-	-	-	-	-	-	-	-	-	-	-
Vehicle	9.50%	-	-	-	-	-	-	-	-	-	-	-
Furniture	6.33%	-	-	-	-	-	-	-	-	-	-	-
Other office equipment	6.33%	-	-	-	-	-	-	-	-	-	-	-
Roads on land belonging to others	3.34%	-	-	-	-	-	-	-	-	-	-	-
Capital spares at Generating Stations	5.28%	-	-	-	-	-	-	-	-	-	-	-
			257.68	###	-	-	10.73	13.47	-	-	268.41	16.24
Less: Depreciation on Grant												
Total Grant in Capital Asset							215.96					
i. Depreciation on 90% of the Assets funded by Grants/subsidies							0.05					
ii. Depreciation of CTPS & Myntriang							10.87					
Net Depreciation							2.60					

CONSOLIDATED STATEMENT OF
APGCL ASSETS

ASSAM POWER GENERATION CORPORATION LIMITED

LAKWA REPLACEMENT POWER PROJECT

Form No: 23

		FY 2020-21										
Group of Asset	Rate of Depreciation AERC 2015 REG	Balance depreciable asset	Opening balance		Adjustment as on 01/04/2018		Addition during the year		Deletion during the year		Closing balance	
			Asset	Depr	Asset	Depr	Asset	Depr	Asset	Depr	Asset	Depr
Land	0.00%	-	-	-	-	-	-	-	-	-	-	-
Building	3.34%	-	-	-	-	-	-	-	-	-	-	-
Hydraulic works	5.28%	-	-	-	-	-	-	-	-	-	-	-
Other civil works	3.34%	20.94	24.36	0.98	-	-	-	0.81	-	-	24.36	1.80
Plant & machinery- Gas	5.28%	204.38	244.05	15.26	-	-	-	12.66	-	-	244.05	27.92
Plant & machinery- Hydel	5.28%	-	-	-	-	-	-	-	-	-	-	-
Lines & cables	5.28%	-	-	-	-	-	-	-	-	-	-	-
Vehicle	9.50%	-	-	-	-	-	-	-	-	-	-	-
Furniture	6.33%	-	-	-	-	-	-	-	-	-	-	-
Other office equipment	6.33%	-	-	-	-	-	-	-	-	-	-	-
Roads on land belonging to others	3.34%	-	-	-	-	-	-	-	-	-	-	-
Capital spares at Generating Stations	5.28%	-	-	-	-	-	-	-	-	-	-	-
		225.33	268.41	16.24	-	-	-	13.47	-	-	268.41	29.72
Less: Depreciation on Grant												
Total Grant in Capital Asset								215.96				
i. Depreciation on 90% of the Assets funded by Grants/subsidies								0.05				
ii. Depreciation of CTPS & Myntriang								10.84				
Net Depreciation								2.63				

CONSOLIDATED STATEMENT OF
APGCL ASSETS

ASSAM POWER GENERATION CORPORATION LIMITED

LAKWA REPLACEMENT POWER PROJECT

Form No: 23

		FY 2021-22										
Group of Asset	Rate of Depreciation AERC 2015 REG	Balance depreciable asset	Opening balance		Adjustment as on 01/04/2018		Addition during the year		Deletion during the year		Closing balance	
			Asset	Depr	Asset	Depr	Asset	Depr	Asset	Depr	Asset	Depr
Land	0.00%	-	-	-	-	-	-	-	-	-	-	-
Building	3.34%	-	-	-	-	-	-	-	-	-	-	-
Hydraulic works	5.28%	-	-	-	-	-	-	-	-	-	-	-
Other civil works	3.34%	20.13	24.36	1.80	-	-	-	0.81	-	-	24.36	2.61
Plant & machinery- Gas	5.28%	191.72	244.05	27.92	-	-	-	12.66	-	-	244.05	40.58
Plant & machinery- Hydel	5.28%	-	-	-	-	-	-	-	-	-	-	-
Lines & cables	5.28%	-	-	-	-	-	-	-	-	-	-	-
Vehicle	9.50%	-	-	-	-	-	-	-	-	-	-	-
Furniture	6.33%	-	-	-	-	-	-	-	-	-	-	-
Other office equipment	6.33%	-	-	-	-	-	-	-	-	-	-	-
Roads on land belonging to others	3.34%	-	-	-	-	-	-	-	-	-	-	-
Capital spares at Generating Stations	5.28%	-	-	-	-	-	-	-	-	-	-	-
			268.41	29.72	-	-	-	13.47	-	-	268.41	43.19
Less: Depreciation on Grant												
Total Grant in Capital Asset								215.96				
i. Depreciation on 90% of the Assets funded by Grants/subsidies								0.05				
ii. Depreciation of CTPS & Myntriang								10.84				
Net Depreciation								2.63				

ASSAM POWER GENERATION CORPORATION LIMITED
LAKWA REPLACEMENT POWER PROJECT

Form No:

Loan Details	Loan Tenure (yrs)	2019-20					
		Actual					
		Rate of Interest	Opening Balance	Amount received	Principal repayment	Interest Due	
A	Secured Loans	0	10.1%	2294	0	-834	190
	IPFC Loans	0	0.0%	0	0	0	0
	KLHEP	15	12.0%	5765	0	-1335	611
	NTPS(R&M)	13	12.0%	30643	2128	-2169	3667
	LTPS(R&M)	20	11.9%	38703	2128	-4339	4468
	NRPP	15	0.0%	0	0	0	0
	Sub-total		0.0%	0	0	0	0
			0.0%	0	0	0	0
B	Unsecured Loans	0	10.0%	10	0	0	1
	I GOA -Loans	0	10.0%	1473	264	0	147
	Rural electrification	10	10.0%	886	0	0	89
	NRPP Ph-I	10	10.0%	1975	0	0	198
	LWHRP	10	10.0%	4109	166	0	411
	Lower Kopili HEP	10	10.0%	2992	1129	0	300
	R&M NTPS	10	10.0%	153	0	0	15
	R&M LTPS	10	0.0%	0	0	0	0
	LRPP	10	10.0%	400	0	0	40
	0	0	10.0%	1165	0	0	117
	Lungnit SHEP	10	10.0%	1805	0	0	181
	Myntriang SHEP	10	10.0%	100	0	0	10
	LTPS, Ph-II	10	10.0%	70	0	0	7
	Development of SHEP	10	10.0%	40	0	0	4
	Survey & Investigation of HEP	10	10.0%	9601	1698	0	972
	Non-Conventional source of energy	10	10.0%	215	0	0	22
	KLHEP	10	10.0%	250	0	0	25
	KLHEP (upper)	10	0.0%	0	0	0	0
	KLHEP (intermediate)	10	10.0%	104	0	0	10
	0	0	10.0%	15	0	0	2
	Dhansiri HEP	10	10.0%	425	0	0	43
	Setting up of a 200MW (CCGT)	10	10.0%	74	0	0	7
	Borgolai	10	10.0%	50	0	0	5
	Revival of TPS	10	10.0%	37	0	0	4
	Development of Amguri	10	10.0%	37	0	0	4
	EAP consulting service	10	10.0%	54	0	0	5
	Golaghat	10	10.0%	31325	0	0	3133
	Boundary wall of Jagiroad	10	0.0%	0	0	0	0
	Station heat Rate	10	10.0%	404	0	0	40
	0	0	0.0%	0	0	0	0
	Solar NTPS	10	10.0%	0	2	0	0
	0	0	0.0%	57770	3260	0	5789
	Disaster	0	0.0%	0	0	0	0
	Sub-total	0	0.0%	0	0	0	0
	0	0	10.0%	2317	126	0	242
C	II GOA -Loans (Source ADB)	0	10.0%	39	7	0	4
	LRPP	0	10.0%	82	58	0	12
	ADB Consultancy	0	0.0%	2439	191	0	258
	Lower Kopili HEP	0	0.0%	0	0	0	0
	Sub-total	0	0.0%	0	0	0	7
D	Other Interest & Finance Charges	0	0.0%	0	0	0	0
	Cost of raising Finance / Bank Charges	0	0.0%	0	0	0	0
	Interest on Security Deposit	0	0.0%	0	0	0	0
	Penal Interest Charges	0	0.0%	0	0	0	7
	Lease Rentals	0	0.0%	0	0	0	0
	Sub-total	0	0.0%	98911	5578	-4339	10522
E	Total Of Interest & Finance Charges (A + B)	0	0.0%	98911	5578	-4339	6329
F	Less: Interest & Finance Charges Capitalise	0	0.0%	0	0	0	0
G	Net Total Of Interest & Finance Charges (E -	0	0.0%	0	0	0	0

Loan Details	Loan Tenure (yrs)	2020-21 Estimated						
		Closing Balance	Rate of Interest	Opening Balance	Amount received	Principal repayment	Interest Due	Closing Balance
A								
Secured Loans	0	1460	10.1%	1460	0	-834	105	626
I PFC Loans	0	0	0.0%	0	0	0	0	0
KLHEP	15	4430	12.0%	4430	0	-1335	451	3095
NTPS(R&M)	13	30602	12.0%	30602	0	-2169	3534	28433
LTPS(R&M)	20	36492	0.0%	36492	0	-4339	4091	32153
NRPP	15	0	0.0%	0	0	0	0	0
Sub-total		0	0.0%	0	0	0	0	0
		0	0.0%	0	0	0	0	0
B								
Unsecured Loans	0	10	10.0%	10	0	0	1	10
I GOA -Loans	0	1737	10.0%	1737	0	0	174	1737
Rural electrification	10	886	10.0%	886	0	0	89	886
NRPP Ph-I	10	1975	10.0%	1975	0	0	198	1975
LWHRP	10	4275	10.0%	4275	147	0	435	4423
Lower Kopili HEP	10	4121	10.0%	4121	737	0	449	4858
R&M NTPS	10	153	10.0%	153	0	0	15	153
R&M LTPS	10	0	0.0%	0	0	0	0	0
LRPP	10	400	10.0%	400	0	0	40	400
0	0	1165	10.0%	1165	0	0	117	1165
Lungnit SHEP	10	1805	10.0%	1805	0	0	181	1805
Myntriang SHEP	10	100	10.0%	100	0	0	10	100
LTPS, Ph-II	10	70	10.0%	70	0	0	7	70
Development of SHEP	10	40	10.0%	40	0	0	4	40
Survey & Investigation of HEP	10	11299	10.0%	11299	1645	0	1212	12944
Non-Conventional source of energy	10	215	10.0%	215	0	0	22	215
KLHEP	10	250	10.0%	250	0	0	25	250
KLHEP (upper)	10	0	0.0%	0	0	0	0	0
KLHEP (intermediate)	10	104	10.0%	104	0	0	10	104
0	0	15	10.0%	15	0	0	2	15
Dhansiri HEP	10	425	10.0%	425	0	0	43	425
Setting up of a 200MW (CCGT)	10	74	10.0%	74	0	0	7	74
Borgolai	10	50	10.0%	50	0	0	5	50
Revival of TPS	10	37	10.0%	37	0	0	4	37
Development of Amguri	10	37	10.0%	37	0	0	4	37
EAP consulting service	10	54	10.0%	54	0	0	5	54
Golaghat	10	31325	10.0%	31325	0	0	3133	31325
Boundary wall of Jagiroad	10	0	0.0%	0	0	0	0	0
Station heat Rate	10	404	10.0%	404	0	0	40	404
0	0	0	0.0%	0	0	0	0	0
Solar NTPS	10	2	10.0%	2	0	0	0	2
0	0	61029	0.0%	61029	2529	0	6229	63558
Disaster	0	0	0.0%	0	0	0	0	0
Sub-total	0	0	0.0%	0	0	0	0	0
0	0	2444	10.0%	2444	0	0	244	2444
C								
II GOA -Loans (Source ADB)	0	46	10.0%	46	0	0	5	46
LRPP	0	140	10.0%	140	0	0	14	140
ADB Consultancy	0	2630	0.0%	2630	0	0	263	2630
Lower Kopili HEP	0	0	0.0%	0	0	0	0	0
Sub-total	0	0	0.0%	0	0	0	0	0
D								
Other Interest & Finance Charges	0	0	0.0%	0	0	0	0	0
Cost of raising Finance / Bank Charges	0	0	0.0%	0	0	0	0	0
Interest on Security Deposit	0	0	0.0%	0	0	0	0	0
Penal Interest Charges	0	0	0.0%	0	0	0	0	0
Lease Rentals	0	0	0.0%	0	0	0	0	0
Sub-total	0	100151	0.0%	100151	2529	-4339	10583	98341
E Total Of Interest & Finance Charges (A + B)	0	100151	0	100151	2529	-4339	10583	98341
F Less: Interest & Finance Charges Capitalise	0	0	0	0	0	0	0	0
G Get Total Of Interest & Finance Charges (E -	0	0	0	0	0	0	0	0

**ASSAM POWER GENERATION CORPORATION LIMITED
LAKWA REPLACEMENT POWER PROJECT**

Form No: 24

Loan Details	Loan Tenure (yrs)	2021-22 Projected					
		Rate of Interest	Opening Balance	Amount received	Principal repayment	Interest Due	Closing Balance
A							
Secured Loans	0	10.1%	626	0	-626	32	0
I PFC Loans	0	0.0%	0	0	0	0	0
KLHEP	15	12.0%	3095	0	-1335	291	1760
NTPS(R&M)	13	12.0%	28433	0	-2169	3274	26263
LTPS(R&M)	20	0.0%	32153	0	-4130	3597	28023
NRPP	15	0.0%	0	0	0	0	0
Sub-total		0.0%	0	0	0	0	0
		0.0%	0	0	0	0	0
B							
Unsecured Loans	0	10.0%	10	0	0	1	10
I GOA -Loans	0	10.0%	1737	0	0	174	1737
Rural electrification	10	10.0%	886	0	0	89	886
NRPP Ph-I	10	10.0%	1975	0	0	198	1975
LWHRP	10	10.0%	4423	190	0	452	4612
Lower Kopili HEP	10	10.0%	4858	710	0	521	5568
R&M NTPS	10	10.0%	153	0	0	15	153
R&M LTPS	10	0.0%	0	0	0	0	0
LRPP	10	10.0%	400	0	0	40	400
0	0	10.0%	1165	0	0	117	1165
Lungnit SHEP	10	10.0%	1805	0	0	181	1805
Myntriang SHEP	10	10.0%	100	0	0	10	100
LTPS, Ph-II	10	10.0%	70	0	0	7	70
Development of SHEP	10	10.0%	40	0	0	4	40
Survey & Investigation of HEP	10	10.0%	12944	210	0	1305	13154
Non-Conventional source of energy	10	10.0%	215	0	0	22	215
KLHEP	10	10.0%	250	0	0	25	250
KLHEP (upper)	10	0.0%	0	0	0	0	0
KLHEP (intermediate)	10	10.0%	104	0	0	10	104
0	0	10.0%	15	0	0	2	15
Dhansiri HEP	10	10.0%	425	0	0	43	425
Setting up of a 200MW (CCGT)	10	10.0%	74	0	0	7	74
Borgolai	10	10.0%	50	0	0	5	50
Revival of TPS	10	10.0%	37	0	0	4	37
Development of Amguri	10	10.0%	37	0	0	4	37
EAP consulting service	10	10.0%	54	0	0	5	54
Golaghat	10	10.0%	31325	0	0	3133	31325
Boundary wall of Jagiroad	10	0.0%	0	0	0	0	0
Station heat Rate	10	10.0%	404	0	0	40	404
0	0	0.0%	0	0	0	0	0
Solar NTPS	10	10.0%	2	0	0	0	2
0	0	0.0%	63558	1110	0	6411	64668
Disaster	0	0.0%	0	0	0	0	0
Sub-total	0	0.0%	0	0	0	0	0
0	0	10.0%	2444	0	0	244	2444
C							
II GOA -Loans (Source ADB)	0	10.0%	46	0	0	5	46
LRPP	0	10.0%	140	0	0	14	140
ADB Consultancy	0	0.0%	2630	0	0	263	2630
Lower Kopili HEP	0	0.0%	0	0	0	0	0
Sub-total	0	0.0%	0	0	0	0	0
D							
Other Interest & Finance Charges	0	0.0%	0	0	0	0	0
Cost of raising Finance / Bank Charges	0	0.0%	0	0	0	0	0
Interest on Security Deposit	0	0.0%	0	0	0	0	0
Penal Interest Charges	0	0.0%	0	0	0	0	0
Lease Rentals	0	0.0%	0	0	0	0	0
Sub-total	0	0.0%	98341	1110	-4130	10272	95321
E Total Of Interest & Finance Charges (A + B)	0	0	98341	1110	-4130	10272	95321
F Less: Interest & Finance Charges Capitalise	0	0	0	0	0	0	0
G Net Total Of Interest & Finance Charges (E -	0	0	0	0	0	0	0

Name of Company:		SAM POWER GENERATION CORPORATION LIMIT			
Name of Plant/ Station:		LAKWA REPLACEMENT POWER PROJECT			
Return on Equity					Form No:
	Loan Details	Unit	2019-20	2020-21	2021-22
			Actual	Estimated	Projected
1	Equity (Opening Balance)	Rs Cr.	14.84	15.73	15.73
2	Add: Increase due to discharges during the year / period	Rs Cr.	0.90	0.00	
3	Less: Decrease due to de-capitalisation during the year / period	Rs Cr.			
4	Less: Decrease due to reversal during the year / period	Rs Cr.			
5	Equity (Closing Balance)	Rs Cr.	15.73	15.73	15.73
6	Average Equity	Rs Cr.	15.29	15.73	15.73
7	Rate of Return on Equity	%	15.5%	15.5%	15.5%
8	Return on Equity	Rs Cr.	2.37	2.44	2.44

Name of Company:		ASSAM POWER GENERATION CORPORATION LIMITED			
Name of Plant/ Station:		LAKWA REPLACEMENT POWER PROJECT			
Working Capital Requirements					Form No:
	Particulars	Unit	2019-20	2020-21	2021-22
			Actual	Estimated	Projected
For Coal Based Generating Stations					
1	Cost of Coal for 1.5 months for pithead & 2 months for non-pit head generating station*	Rs Cr.			
2	Cost of Secondary Fuel Oil for 2 months*	Rs Cr.			
3	Maintenance Spares @ 20% of O&M	Rs Cr.			
4	O&M expenses for 1 month	Rs Cr.			
5	Receivables equivalent to 2 months of capacity and energy charge^	Rs Cr.			
	Total Working Capital Requirement	Rs Cr.			
	Rate of Interest #	%			
	Interest on Normative Working Capital Requirement	Rs Cr.			
For Open-cycle Gas Turbine/ Combined Cycle thermal generating stations					
1	Fuel expenses for 1 month *	Rs Cr.	7.93	5.62	4.86
2	Liquid fuel stock for 15 days*	Rs Cr.			
3	Maintenance spares @ 30% of O&M	Rs Cr.	6.14	6.39	6.79
4	O&M expenses for 1 month	Rs Cr.	1.71	1.78	1.89
5	Receivables equivalent to 2 months of capacity and energy charge^	Rs Cr.	21.46	16.75	15.38
	Total Working Capital Requirement	Rs Cr.	37.24	30.53	28.93
	Rate of Interest #	%	10.00%	10.00%	10.00%
	Interest on Normative Working Capital Requirement	Rs Cr.	3.72	3.05	2.89
For Hydro Generating stations					
1	O&M expenses for 1 month	Rs Cr.			
2	Maintenance spares @ 15% of O&M	Rs Cr.			
3	Receivables equivalent to 2 months of annual fixed charge	Rs Cr.			
	Total Working Capital Requirement	Rs Cr.			
	Rate of Interest #	%			
	Interest on Normative Working Capital Requirement	Rs Cr.			
	* corresponding to target availability				
	^ calculated on target availability				
	# shall be equal to the interest rate equivalent to State Bank of India base rate as on 1st April of the respective				

Name of Company:		SAM POWER GENERATION CORPORATION LIMIT		
Name of Plant/ Station:		LAKWA REPLACEMENT POWER PROJECT		
Details of Expenses Capitalised				Form No:
(Rs Cr.)				
		2019-20	2020-21	2021-22
		Actual	Estimated	Projected
1	Interest & Finance charges Capitalised	0.00	0.00	0.00
2	Employee expenses	0.00	0.00	0.00
3	A&G Expenses	0.00	0.00	0.00
4	Others, if any	0.00	0.00	0.00
	Grand Total	0.00	0.00	0.00

Name of Company:		ASSAM POWER GENERATION CORPORATION LIMITED		
Name of Plant/ Station:		LAKWA REPLACEMENT POWER PROJECT		
Income Tax Provisions				
		2019-20	2020-21	2021-22
		Actual	Estimated	Projected
1	Income Tax on the Return on Equity			
2	As Per Return Filed For The Year	0.32	0.00	0.00
3	As Assessed For The Year			
4	Credit/Debit Of Assessment Year(s) (Give Details)			
	Total	0.32	0.00	0.00
Note: 'Income Tax Provisions' details which could not be provided by the Generation Company at the time of this filing shall be furnished as and when they become due/ available.				

Name of Company:		SAM POWER GENERATION CORPORATION LIMITED		
Name of Plant/ Station:		LAKWA REPLACEMENT POWER PROJECT		
Non-Tariff Income				
(Rs Cr.)				
S. No.	Particulars	2019-20	2020-21	2021-22
		Actual	Estimated	Projected
A	Income from Investment, Fixed & Call Deposits			
	Income from Investments:			
	Interest on securities			
	Interest on fixed deposits	0.00		
	Income on other investments			
	Interest from Banks	0.00		
	Interest on (any other items)			
	Sub-Total	0.00		
B	Other Non-Tariff Income			
	Interest on Loans and Advances to staff	0.00		
	Interest on Loans and Advances to Licensee			
	Interest on Loans and Advances to Lessors			
	Interest on Loans and Advances to Suppliers/ Contractors			
	Income from trading	0.00		
	Gain on sale of Fixed Assets			
	Income/Fees /Collections against staff welfare activities:			
	Miscellaneous Receipts:	0.00		
	Delayed Payment charges from Beneficiaries			
	Net profit from UI charges			
	Penalty for contractor/ supplier for delay etc			
	Misc Charges			
	Sub-Total	0.00		
	Grand Total	0.00	0.00	0.00