CENTRAL ELECTRICITY REGULATORY COMMISSION NEW DELHI

Petition No. 50/MP/2017

Coram:

Shri Gireesh B. Pradhan, Chairperson Shri A.K. Singhal, Member Shri A.S. Bakshi, Member Dr. M.K. Iyer, Member

Date of Order : 31.07.2017

In the matter of

Petition under of Section 28 (4) of Electricity Act, 2003 read with Regulation 6 and Regulation 29 of Central Electricity Regulatory Commission (Fees and Charges of Regional Load Despatch Centre and other related matters) Regulations, 2015 for approval of Performance Linked Incentive for NLDC for the financial year 2015-16 with reference to NLDC Charges for the control period 1.4.14 to 31.3.2019.

And in the matter of

National Load Despatch Centre
Power System Operation Corporation Ltd. (POSOCO)
B-9, Qutub Institutional Area, 1st Floor,
Katwaria Sarai, New Delhi -110016Petitioner

Vs

- Uttar Pradesh Power Corporation Limited (UPPCL), Shakti Bhawan, 14-Ashok Marg, Lucknow-226001
- Government of J&K, Civil secretariat, Srinagar, J&K.
- Rajasthan Rajya Vidyut Prasaran Nigam Limited, Vidyut Bhawan, Vidyut Marg, Jaipur-302005
- 4. Punjab State Electricity Board,



Order in Petition No. 50/MP/2017

The Mall, Patiala-147 001

- 5. Haryana Vidyut Prasaran Nigam Limited, Shakti Bhawan, Sector-6, Panchkula-134109.
- 6. Delhi Transco Limited, Shakti Sadan, Kotla Road, New Delhi-110 002
- 7. Himachal Pradesh State Electricity Board, Kumar House, Vidyut Bhawan, Shimla-171004
- Power Transmission Corporation of Uttarakhand Limited,
 7-B, Lane No-1, Vasant Vihar Enclave,
 Dehradun-248001
- 9. Electricity Department, UT Chandigarh, Sector 9-D, UT Chandigarh-160019
- North Central Railway, GM Office Building, Allahabad, UP.
- NRTS-I, Power grid Corporation of India Ltd.,
 B-9, Qutab Institutional Area,
 New Delhi-110016

Users under the category of Generating Stations and Sellers

- 12. Singrauli Super Thermal Power Station, Shakti Nagar, UP-231222
- 13. Singrauli Solar PV Power Project, Shakti Nagar, UP-231222
- 14. Rihand Super Thermal Power Station-I, Rihand Nagar, UP-231223
- 15. Rihand Super Thermal Power Station-II, Rihand Nagar, UP-231223
- 16. Rihand Super Thermal Power Station-III,



- NTPC Rihand, Dist-Sonbhadra, UP 231223
- Dadri, National Capital Power Project,
 Dadri Dhaulana Road, Distt. Gautam Buddh Nagar,
 UP-201008
- Dadri Stage II, National Capital Power Project,
 Dadri Dhaulana Road, Distt. GautamBuddh Nagar,
 UP-201008
- 19. Firoz Gandhi Unchahar Thermal Power Project-I, Unchahar, Distt. Raibareilly, UP
- 20. Firoz Gandhi Unchahar Thermal Power Project-II, Unchahar, Distt. Raibareilly, UP
- 21. Firoz Gandhi Unchahar Thermal Power Project-III, Unchahar, Distt. Raibareilly, UP
- 22. Firoz Gandhi Unchahar Solar PV Power Project, Unchahar, Distt. Raibareilly, UP
- Dadri Gas Power Project,
 Dhaulana Road, Distt. Gautam Buddh Nagar,
 UP-201008
- 24. Dadri Solar PV Power Project, Dhaulana Road, Distt. Gautam Buddh Nagar, UP-201008
- Auraiya Gas Power Project (Gas Fired, RLNG Fired, Liquid Fired), Dibiyapur, Distt Etawah, UP-206244
- 26. Anta Gas Power Project (Gas Fired, RLNG Fired, Liquid Fired), Distt. Baran, Rajasthan-325209
- 27. Koldam HPP, NTPC, Post- Barman, Dist- Bilaspur, Himachal Pradesh 174013
- 28. Narora Atomic Power Station, Narora, Distt. Bulandshahar, UP-202389



- 29. Rajasthan Atomic Power Station-B, NPCIL Rawatbhata, PO- Anu Shakti, Kota, Rajasthan-323303
- 30. Rajasthan Atomic Power Station-C, (RAPS-5&6) NPCIL Rawatbhata, PO-Anushakti, Kota, Rajasthan-323303
- 31. Bairasiul Hydro Electric Project, NHPC Ltd., Surangini, Distt. Chamba, HP-176317
- 32. Salal Hydro Electric Project, NHPC Ltd, Jyotipuram, Distt. Udhampur, J&K-182312
- 33. Tanakpur Hydro Electric Project, NHPC Ltd., Banbassa, Distt. Champawa, Uttrakhand-262310
- 34. Chamera-I Hydro Electric Project, NHPC Ltd., Khairi, Distt. Chamba, HP-176310
- 35. Uri Hydro Electric Project, NHPC Ltd., Mohra, Distt. Baramulla, J&K-193122
- 36. Chamera-II Hydro Electric Project, NHPC Ltd., Karian, Distt. Chamba, HP-176310
- 37. Chamera-III Hydro Electric Project, NHPC Ltd., Dharwala, Distt. - Chamba, HP-176311
- 38. Dhauliganga Hydro Electric Project, NHPC Ltd., Tapovan, Dharchula, Pithoragarh, Uttrakhand-262545
- Dulhasti Hydro Electric Project,
 NHPC Ltd., Chenab Nagar, Distt. Kishtwar,
 J&K-182206
- 40. Uri 2 Hydro Electric Project,



NHPC Ltd., Nowpura, Distt. Baramulla, J&K-193123

41. Parbati HE Project Stage-III Behali, P.O- Larji Kullu 175122 Himachal Pradesh

- 42. Sewa-II Power Station, NHPC Ltd. Maska, Dist: Kathua, Jammu and Kasmir -176325
- 43. Satluj Jal Vidyut Nigam Ltd. Power Project, Jhakri, Rampur, Distt. Shimla, HP-172201
- 44. Rampur HEP, Satluj Jal Vidyut Nigam Ltd. Power Project, Jhakri, Rampur, Distt. Shimla, HP-172201
- 45. Tehri Hydro Development Corporation Ltd., Bhagirath Puram, Tehri, Uttrakhand-249001
- 46. Koteshwar HEP, THDCIL, Koteshwerpuram, Post Office- Pokhari Tehri Garwal, Uttarakhand -249002
- 47. ADHPL, Village- Prini, PO -Jagat Sukh, Tehsil - Manali, Distt- Kullu (H.P) India.
- 48. Indra Gandhi Super Tharmal Power Project, PO -Jharli, Tahsil Matanhail, Dist Jhajjar, (Haryana)-124125
- 49. Karcham Wangtoo HEP, Himachal Baspa Power Company Limited, Sholtu Colony, PO- Tapti, Dist-Kinnaur, H.P -172104
- 50. Malana II Everest Power Pvt. Ltd, Hall-A/ First Floor Plot No-143-144, Udyog Vihar, Phase -4, Gurgaon, Haryana 122015
- 51. Shree Cement Thermal Power Project



Bangurnagar, Beawar, District Ajmer, Rajasthan -305901

52. Greenco Budhil HPS Ltd, Plot No. 1367 Road No- 45, Jubilee Hills, Hyderabad- 500033

- 53. Himachal Sorang Power Limited, D-7, Lane-I, Sector-I, New Shimla, Shimla, H.P.-171009.
- 54. Bhakra Power House, BBMB, Tehsil Nangal Township, Distt. Ropar (Punjab)
- 55. Indira Gandhi Super Thermal Power Project,
 Aravali Power company Private Limited, P.O.: Jharli,
 Dist Sorang, Jhajjar

Users under the category of Inter State Transmission Licensees

- 56. NRTS-I, Power Grid Corporation of India Ltd.,B-9, Qutab Institutional Area,New Delhi-110016
- 57. Powerlinks Transmission Ltd., 10th Floor, DLF Tower-A, District Centre, Jasola, New Delhi-110044
- 58. Jaypee Powergrid Ltd.
 JIIT Basement, Sector -128 Noida- U.P
- 59. APL, Business Development, Achalraj, Opp Mayor Bungalow, Law Garden, Ahmedabad 380009.
- NRTS-I, Parbati Koldam Transmission Company LTD.,
 B-9, Qutab Institutional Area,
 New Delhi-110016
- 61. Indira Gandhi Super Thermal Power Project, Aravali Power company Private Limited, P.O.: Jharli, Dist-Jhajjar



Users of WRLDC

Users under the category of Distribution Licensees and Buyers

- 62. MSEDCL, Prakashgadh, 5th Floor, Bandra East, Maharashtra Mumbai 400051.
- 63. GUVNL, Sardar Patel Vidyut Bhavan Race Course Gujarat, Vadodara 390007.
- 64. MP Power Management Co Ltd, 3rd Floor, Block No 11, Shakti Bhavan, Rampur, Madhya Pradesh 482008
- 65. CSPDCL, PO Sunder Nagar Chhattisgarh Raipur, Dangania 492013.
- 66. Electricity Department, UT of Daman & Diu, Sachivalaya, Daman & Diu Moti Daman 396210
- 67. UT of Dadra Nagar & Haveli, Secretariat, Electric Depatment, 66kv Amli Road, Dadra Nagar & Haveli Silvassa 396230
- 68. Essar Steel India Limited 27th KM, Surat Hazira Road, Gujarat Surat 394270
- 69. Goa Electricity Department, Government of Goa, 3rd Floor, Vidyut Bhavan, Panjim, Goa – 403001.
- 70. Bhadravathi HVDC,
 Power Grid Corporation of India Ltd,
 Sumthana Village, Bhadravathi(Tahsil),
 Bhadravathi, Chandrapur(Dist),
 Maharashtra-442 902
- 71. Vindhayachal HVDC,
 Power Grid Corporation of India Ltd, P.O.Vindhyanagar,



P.Box.No.12, Singrauli(Dist), Madhya Pradesh-486 885

72. TRP Nuclear Recycle Board, BARC, Tarapur, Mumbai – 401502, Maharashtra

Users under the category of Generating Stations and Sellers

73. Korba STPS STG (I & II), NTPC Ltd., P.O.: Vikas Bhavan, Jamnipali, Korba(District), Chhattisgarh- 495 450.

74. Korba STPS STG (III), NTPC Ltd, P.O.Vikas Bhavan, Jamnipali, Korba(Dist), Chhattisgarh- 495 450.

75. VSTPS-STAGE-I, Vindhayachal STPS, NTPC Ltd, P.O.: Vindhyanagar, Sidhi(District), Madhya Pradesh – 486 885

76. VSTPS-STAGE-II, Vindhayachal STPS, NTPC Ltd., P.O.: Vindhyanagar, Sidhi(Dist), Madhya Pradesh – 486 885

77. VSTPS-STAGE-III, Vindhayachal STPS, NTPC Ltd, P.O.: Vindhyanagar, Sidhi(Dist), Madhya Pradesh – 486 885

78. VSTPS-STAGE-IV,
Vindhayachal STPS, National Thermal Power Corporation of India Ltd,
P.O Vindhyanagar, Sidhi(Dist),
Madhya Pradesh – 486 885

79. VSTPS-STAGE-V,
Vindhayachal STPS, National Thermal Power Corporation of India Ltd,
P.O Vindhyanagar, Sidhi(Dist),
Madhya Pradesh – 486 885

80. Kawas Gas Power Project, NTPC Ltd , P.O.Aditya Nagar, Surat, Gujarat - 394 516

- 81. Gandhar Gas Power Project, NTPC Ltd, P.O.: NTPC Township, Bharuch(Dist), Gujarat- 392215
- 82. SIPAT TPS Stg-I, NTPC Ltd, SIPAT, Chhattisgarh - 495558.
- 83. SIPAT TPS Stg-II, NTPC Ltd., SIPAT, Chhattisgarh-495558.
- 84. Mouda STPP Stage-I, NTPC Ltd, Mouda Ramtek Road, P.O.Mouda, Nagpur (Dist), Maharashtra
- 85. Mouda STPP Stage-II, NTPC Ltd, Mouda Ramtek Road, P.O.Mouda, Nagpur (Dist), Maharashtra
- 86. 2 X 135 MW Kasaipali Thermal Power Project,ACB (India) Ltd. District KorbaChhattisgarh Chakabura 495445
- 87. Bharat Aluminium Co. Ltd, Captive Power plant-II, BALCO Nagar Chhattisgarh Korba 495684
- 88. Costal Gujarat Power Ltd (CGPL-UMPP), Tunda Vandh Road, Tunda Village, Mundra, Gujarat Kutch 370435
- 89. DB Power, Village Baradarha, Post - Kanwali, Dist - Janjgir, Champa, Chhattisgarh Baradarha 495695
- Jindal Power Ltd. Stg-I,
 OP Jindal STPP, PO-Tamnar, Gjarghoda Tehsil,
 Chhattisgarh District Raigarh, 496107
- 91. Jindal Power Ltd. Stg-II, OP Jindal STPP, PO-Tamnar, Gjarghoda Tehsil, Chhattisgarh District - Raigarh, 496107
- 92. DGEN Mega Power Project,



Plot No Z-9, Dahej SEZ Area (Eastern side), At: Dahej, Taluka-Vagra, Dist-Bharuch, Gujarat 392130

- 93. EMCO Power Ltd, Plot No B-1,
 Mohabala MIDC Growth Center Post Tehsil –
 Warora, Dist Chandrapur,
 Maharashtra 442907
- 94. Essar Power MP Ltd.
 Village Bandhora, Post- Karsualal, Tehsil- Mada,
 Distt. Singrauli, Madhya Pradesh 486886
- 95. GMR Chhatisgarh Energy Ltd Skip House, 25/1, Museum Road, Banglore, Karnataka 560025
- 96. Jaipee Nigrie Super Thermal Power Project, Nigri District, Singrauli, Madhya Pradesh 48668
- 97. Executive Director, DCPP, OP Jindal STPP, PO-Tamnar, Gjarghoda Tehsil, Chhattisgarh District Raigarh, 496107
- 98. Nuclear Power Corporation of India ltd, Kakrapara Atomic Power Station, PO - via Vyara, Dist – Surat, Gujarat - 395651
- 99. Tarapur Atomic Power Station 1&2, Nuclear Power Corporation of India Ltd,P.O.TAPP, Thane(Dist), Maharashtra- 401 504
- 100. Tarapur Atomic Power Station 3&4, Nuclear Power Corporation of India Ltd,P.O.TAPP, Thane(Dist), Maharashtra- 401 504
- 101. Korba West Power Co.Ltd.,
 Village Chhote Bhandar, P.O. Bade Bhnadar,
 Tehsil Pussore, District Raigarh,
 Chhattisgarh Raigarh 496100
- 102. KSK Mahanadhi , 8-2-293/82/A/431/A, Road No 22 Jubilee Hills Andhra Pradesh Hyderabad 500033



- 103. LANCO Power Ltd,
 Plot No 397, phase -III, Udyog Vihar,
 Haryana Gurgaon 122016
- NTPC-SAIL Power Company Private Ltd,
 Puranena Village, Chhattisgarh Dist Durg,
 Bhilai 490021
- Ratnagiri Gas & Power Pvt Ltd,
 2nd Floor, Block-2, IGL Complex, Sector-126,
 Express-way, Noida, Utter Pradesh- 201304
- 106. Sasan Power Ltd, DAKC, I Block, 2nd Floor, North Wing, Thane Belapur Road, Koparkhairana Maharashtra New Mumbai 400710
- 107. Narmada Control Authority, Narmada Sadan, Sector -B, Scheme No 74, Vijaynagar, Indore, Madhya Pradesh-452010 (Mobile: 9978934846)
- 108. Vandana Vidyut Bhavan,M. G. Road Chhattisgarh Raipur 492001
- 109. MB Power (Madhya Pradesh) Ltd., Corporate Office: 239, Okhla Industrial Estate Phase-III, New Delhi- 110020 (Tel: 011-47624100)
- 110. RKM Powergen Pvt. Ltd., Village: Uchpinda, PO: Dhurkot, Dist: Janjgir-Champa, Chhattisgarh -495692
- Jhabua Power Ltd.,
 Village Barrella, Post Attaria, Tahsil –Ghansor,
 Dist Seoni, Madhya Pradesh 480997
- 112. Dhariwal Infrastructure Ltd., CESC House, Chowringhee Square, Kolkata – 700001
- 113. SKS Power Generation Chhattisgarh Ltd., 501B, Elegant Business Park, Andheri Kurla Road, J B Nagar, Andheri (East), Mumbai – 400059 (Mob: 07389939063)



114. NTPC Ltd., Solapur Super Thermal Power Station, PO: Hotgi Station, Taluka: South Solapur, District: Solapur, Maharashtra-413003.

- 115. M/s. TRN Energy Pvt. Ltd.,18, Vasant Enclave, Rao Tula ram Marg,New Delhi-110057
- 116. NTPC, LARA- Vill-Chhappora Po+Ps- Pussora, Raigarh, Chattisgarh-496001

Users under the category of Inter State Transmission Licensees

- 117. Power Grid Corporation of India Ltd.Western Region I Headquarters, PO Uppalwadi,Sampritinagar, Nagpur, Maharashtra 440026
- 118. ESSAR Power Transmission Co Ltd, A-5, Sector -3, Gautam Buddha Nagar, Uttar Pradesh, Noida 201301
- 119. Jindal Power Ltd., OP Jindal STPP,OP Jindal STPS, PO- Tamnar, ChhattisgarhDistrict Raigarh, 496107
- 120. Torrent Power Grid Ltd, Torrent House, Off Ashram Road, Gujarat Ahmedabad 380009
- 121. Western Region Transmission (Gujarat) Pvt. Ltd.,12th Floor, Building No 10-B, DLF, Cyber City,Haryana Gurgaon 122002
- 122. Western Region Transmission (Maharashtra) Pvt. Ltd.,12th Floor, Building No 10-B, DLF, Cyber City,Haryana Gurgaon 122002
- 123. Adani Power Ltd.
 Achalraj, Opp Mayor Bungalow, Law Garden,
 Ahmedabad, Gujarat 380006
- 124. Bhopal Dhule Transmission Company Ltd.,C-2, Mitra Corporate Suite, Iswar Nagar,



- Mathura Road, New Delhi -110065
- Raichur Solapur Power Transmission Company Ltd,
 Patel Estate, SV Road,
 Jogeshwari West, Mumbai 400102
- Jabalpur Transmission Company Ltd,
 Tower-B, 1st Floor, Logix Techno Park, Sector-127,
 Noida, Uttar Pradesh- 201301
- 127. RAPP Transmission Company, Mira Corporate Suites 1&2, Ishwar Nagar, Okhla Crossing, Mathura Road, New Delhi -110065

Users of ERLDC:

Users under the Category of Distribution Licensees & Buyers

- 128. Bihar State Holding Co. Ltd., Vidyut Bhavan, Bailey Road, Patna, Bihar 800021
- Jharkhand Urja Vikash Nigam Limited,
 Dhurwa Road, Ranchi, Jharkhand 834002
- 130. Damodar Valley Corporation, DVC Tower, VIP Road, Kolkata, WB 700054
- 131. Grid Corporation of India Ltd, Janpath, Bhubaneswar, Odisha 751022
- 132. Power Deptt., Govt. of Sikkim, Kaji Road Sikkim Gangtok 731101
- West Bengal State Electricity Distribution Corporation Limited, Bidyut Bhavan, Saltlake, Kolkata WB 700091
- 134. ER-I, Power Grid Corporation (I) Ltd., Boring Road, Patna 800001
- 135. NTPC Vidyut Vyapar Nigam Limited, Lodhi Road New Delhi 110003.



Users under the Category of Generating Stations & Sellers

- 136. Farakka Super Thermal Power Plant-I&II, NTPC Ltd., Farakka, WB 742236
- 137. Kahalgaon Super Thermal Power Plant-I NTPC Ltd, Bhagalpur Bihar 813214
- 138. Kahalgaon Super Thermal Power Plant-II NTPC Ltd, Bhagalpur Bihar 813214
- Talcher Super Thermal Power Stn-I NTPC Ltd, Nayapalli, Odisha 751012
- 140. Teesta V HEP, NHPC, Singtam, East Sikkim 737134
- 141. Rangit Hydro Electric Project NHPC,P.O. Rangit Nagar South Sikkim 737111
- 142. Damodar Valley Corporation DVC Tower, VIP Road West Bengal Kolkata 700054
- 143. Farakka Super Thermal Power Plant-III, NTPC Ltd., Farakka, WB 742236
- 144. Sterlite Energy Limited 1st. Floor,City Mart Complex, Baramunda, Odisha 751023
- 145. Maithon Power Limited MA-5 Gogna Colony, P.O: Maithon, Dhanbad, Jharkhand 828027
- 146. National Thermal Power Corporation Limited, BARH Thermal Power Station, Patna, Bihar 803213
- 147. GATI Infrastructure Pvt.Ltd, 268, Udyog Vihar, Phase-IV, Gurgaon, Haryana 122001
- 148. Adhunik Power & Natural Resource Limited Village: Padampur, PS: Kandra Tata-Seraikela Road, Jharkhand 832105



- 149. Talcher Solar PV, ER-II Headquaters,NTPC Limited, 3rd Floor, OLIC Builiding, Plot No.: N-17/2, Nayapalli, Odissa Bhubaneswar 751012
- 150. GMR Kamalanga Energy Ltd, Plot No.-29, Satyanagar, Bhubaneswar, Odissa-751007
- Jindal India Thermal Power Ltd.,
 Plot No.12,Local Shopping Complex,Sector-B1,
 Vasant Kunj, New Delhi- 110070
- 152. WBSEDCL, Power Trading & Regulatory Cell, Bidyut Bhavan, Block - A, Sector-II, Saltlake, Kokata, West Bengal- 700091
- 153. Ind-Barath Energy Utkal Ltd , Sahajbahal, PO CgarpaliBarpali, Dist - Jharsuguda, Odisha , Pin – 768211
- 154. Tata Power Trading Co. Ltd., C-43,Sec-62, UP Noida 201307.
- 155. Grid Corporation of India Ltd., Janpath, Orissa, Bhubaneswar 751022
- 156. DANS ENERGY PVT. LTD. 5th Floor, DLF Building No. 8, Tower C, DLF Cyber City, Phase – II, Gurgaon- 122002, Haryana.
- 157. Bharatiya Rail Bijlee Company Ltd. Nabinagar,Khera Police Station Dist.-Aurangabad, Bihar-824303

Users under the Category of Inter-State Transmission Licensees

- 158. East North Interconnection Company Ltd., C-2, Mathura Road, New Delhi 110065
- 159. ER-I, Power Grid Corporation (I) Ltd Boring Road, Patna 800001.



 Powerlinks Transmission Limited Vidyut Nagar, Siliguri WB 734015.

SRLDC

Users under the category of Distribution licensees and Buyers

- 161. Andhra Pradesh Power Co-ordination Committee, 4th Floor, Room No: 451, Vidyut Soudha, Khairatabad, Hyderabad-500 082. Telangana State.
- 162. Power Company of Karnataka Ltd., KPTCL Building, Kaveri Bhavan, Bangalore - 560 009, Karnataka State
- 163. Kerala State Electricity Board, Vydyuthi Bhavanam, Pattom, Thiruvananthapuram 695 004, Kerala State.
- 164. 7th Floor, Eastern Wing, NPKRR Maaligai, TANGEDCO, TNEB Ltd., 144, Anna Salai, Chennai 600 002, Tamil Nadu State.
- 165. I Floor, Main Building, Electricity Department, Govt of Puducherry, PIN: 605001, Puducherry
- 166. Electricity Department,
 Division No: III, Curti, Ponda,
 Goa, Pin: 403 401
- 167. POWERGRID HVDC, POWERGRID,
 Southern Regional Transmission System II,
 Near.RTO Driving Test Track, Singanayakanhalli,
 Yelahanka, Bangalore 560 064, Karnataka
- 168. Telangana Power Co-ordination Committee, 4th Floor, Vidyut Soudha, Khairatabad, Hyderabad-500 082, Telangana State.

Users under the category of Generating Stations and Sellers

169. Ramaguntam STG I & II NTPC, RSTPS, Jyothi Nagar, Dist. Karim Nagar,



Telangana - 505 215

170. Ramaguntam STG III NTPC, RSTPS, Jyothi Nagar, Dist. Karim Nagar, Telangana - 505 215

171. Simadri STG II

NTPC, Southern Region Head Quarters, II & V Floors, MCH Complex, R.P. Road Secunderabad, Telangana – 500003

172. NTPC, Talcher STG II Angul, Orissa – 7591011

173. Kudgi STPP NTPC,

Southern Region Head Quarters, II & V Floors, MCH Complex, R.P. Road Secunderabad, Telangana – 500003

174. NLC TPS II STG I

Neyveli Lignite Corpn. Ltd, Thermal Power Station II, Neyveli 607 801, Tamil Nadu

175. NLC TPS II STG II

Neyveli Lignite Corpn. Ltd , Thermal Power Station II, Neyveli 607 801, Tamil Nadu

176. NLC TPS I EXPANSION

Neyvei Lignite Corpn. Ltd., Thermal Power Station I (Exp.), Neyveli 607 801, Tamil Nadu

177. NLC TPS II EXPANSION

Neyveli Lignite Corpn. Ltd., Thermal Power Station II (Expn.), Neyveli 607 801, Tamil Nadu

MAPS, Nuclear Power Corpn. Of India Ltd, Madras Atomic Power Station, Kalpakkam – 603 102, Tamil Nadu

- 179. KGS UNITS 1&2, Nuclear Power Corpn. Of India Ltd, Kaiga Generating Station, Kaiga – 581 400, Karwar, Karnataka
- 180. KGS UNIT 3&4 Nuclear Power Corpn. Of India Ltd,



Kaiga Generating Station, Kaiga – 581 400, Karwar, Karnataka

181. Kudankulam Nuclear Power Project Unit-1, Nuclear Power Corporation of India ltd., Kudankulam Post, Radhapuram Taluk – 627106, Tamil Nadu

182. KNPP Unit-2 Kudankulam Nuclear Power Project, Nuclear Power Corporation of India Itd., Kudankulam Post, Radhapuram Taluk – 627 106, Tamil Nadu

- 183. NTPC Tamilnadu Energy Company Ltd., Vallur Thermal Power Project, Vellivoyalchavadi Post, Poneri Taluck, Tiruvallur Dist, Chennai – 600 013, Tamil Nadu
- 184. NLC Tamilnadu Power Limited, 2 * 500MW JV Thermal Power Project, Harbour Estate, Tuticorin 628 004, Tamilnadu
- 185. LANCO, Kodapalli St II LANCO Kodapalli Power Pvt. Ltd, Kondapalli, Ibrahimpatnam Mandal, PIN 521 228 (Telangana)
- 186. LANCO Kodapalli St III LANCO Kodapalli Power Pvt. Ltd, Kondapalli, Ibrahimpatnam Mandal, PIN 521 228, Telangana
- 187. Meenakshi Energy Pvt Ltd., NSL ICON, Plot No. 1, 2, 3, 4, H-No-8-2-684/2/A, 2nd Floor, Road No. 12, Banjara Hills, Hyderabad 500034, Talangana
- 188. Simhapuri Energy Ltd.,
 Madhucon Green lands, 6 3 866 / 2, 3rd Floor,
 Begumpet, Hyderabad 560016,
 Telengana
- 189. Coastel Energen Pvt Limited, 7th Floor, Buhari Towers, No.4 Moores Road, Chennai – 600006, Tamil Nadu



- 190. Thermal Powertech Corporation India Ltd.,6-3-1090, A-Block, 5th Floor, T.S.R Towers,Raj Bhavan Road, Somajiguda,Hyderabad 500082, Telangana
- IL&FS Tamil Nadu Power Company Ltd,
 C. Pudhupettai (Post), Parangipettai (Via), Chidambaram (TK),
 Cuddalore 608502, Tamil Nadu
- 192. SEMBCORP Gayatri Power Limited, TP Gudur Mandal, Nellore - 524344, Andhra Pradesh

Users under the category of Inter State Transmission Licensees

- 193. Powergid ISTS,
 Southern Regional Transmission System II,
 Near RTO Driving Test Track, Singanayakanhalli,
 Yelahanka, Bangalore 560 064,
 Karnataka.
- Raichur Sholapur Transmission Company Limited,
 Patel Estates, S.V.Road, Jogeshwari (West),
 Mumbai 400102, Maharashra.
- 195. Kudgi Transmission Ltd., Building No 3, Second Floor, Sudeep Plaza, MLU Sector - 11, Pocket - 4, Dwarka, NEW DELHI – 110 075, Delhi
- 196. Powergrid Vizag Transmission Ltd., CM (TLC), Vizag 400kV SS, Sector 10, Ukkanaguram, Vishakapatnam 530032, Andhra Pradesh

Users of NERLDC:

Users under the category of Distribution licensees and Buyers

197. APDCL, Bijuli Bhavan, Paltan Bazar, Guwahati- 781001



- 198. MePDCL, Meter Factory Area, Short Round Road, Integrated Office Complex, Shillong- 793001
- 199. TSECL, Bidyut Bhavan, North Banamalipur, Agartala- 799001.
- 200. Department of Power, Govt. of Ar. Pradesh, Bidyut Bhavan, Itanagar- 791111
- 201. P & E Department, Govt. of Mizoram, Khatla, Aizawl- 796001.
- 202. Department of Power, Government of Nagaland, Kohima- 797001.
- 203. MSPDCL, 3rd Floor,
 New Directorate Building, Near 2nd MR Gate,
 Imphal Dimapur Road,
 Imphal- 795001, Manipur

Users under the category of Generating Stations and Sellers

- 204. Doyang HEP, NEEPCO, Wokha, Nagaland
- 205. Ranganadi HEP, NEEPCO, P.O. Ranganadi Proj. Dist. Subansiri, Ar. Pradesh-791121
- 206. AGBPP, NEEPCO, Kathalguri, Tinsukia, Assam
- 207. AGTPP, NEEPCO, Ramchandranagar, Agartala, Tripura
- 208. KHANDONG HEP, NEEPCO, Umrangsoo, N.C.Hills, Assam



- 209. KOPILI HEP, NEEPCO, Umrangsoo, N.C.Hills, Assam
- 210. KOPILI-2 HEP, NEEPCO, Umrangsoo, N.C.Hills, Assam
- 211. AGTP CC Extn.
 NEEPCO, Ramchandranagar,
 Agartala, Tripura
- 212. NHPC Loktak HEP, Leimatak-795124, Manipur
- 213. ONGC Tripura Power Company Ltd, 6th Floor, A Wing, IFCI Tower-61, Nehru Place, New Delhi-110019
- 214. NTPC Ltd., BgTPP, Salakati (P), Dist: Kokrajhar (BTAD), Assam-783369

Users under the category of Inter State Transmission Licensees

- 215. NERTS,
 Power Grid Corporation of India Ltd.,
 Lapalang, Shillong-793006,
 Meghalaya.
- 216. North Eastern Transmission Company Ltd, 1st Floor, Ambience Corporate Tower, Ambience Mall, Gurgaon, 122001, Haryana
- 217. ENICL,C-2 Mira Corporate Suite, Ishwar Nagar,Mathura Road, New Delhi- 110065

For Petitioner : Shri Rakesh. Kumar, POSOCO Shri U.K. Verma, POSOCO Shri G. Chakraborty, POSOCORespondents

For Respondents : None

<u>ORDER</u>

The petitioner, National Load Despatch Centre, has filed the present petition

under of Section 28 (4) of Electricity Act, 2003 read with Regulations 6 and 29 of

Central Electricity Regulatory Commission (Fees and Charges of Regional Load

Despatch Centre and other related matters) Regulations, 2015 (hereinafter referred to

as "Fees and Charges Regulations") for approval of Performance Linked Incentive for

National Load Despatch Centre for the Financial year 2015-16 during the control period

1.4.2014 to 31.3.2019.

2. Brief facts of the case leading to the filing of the petition and subsequent

developments after the filing of the petition are capitulated as under:

(a) National Load Despatch Centre setup under Section 26 of the Electricity

Act, 2003 performs functions specified in National Load Despatch Centre Rules,

2004. NLDC and RLDCs are operated by Power System Operation Corporation

Limited (POSOCO) w.e.f. 1.10.2010.

(b) As per Regulation 29 (1) to 29 (3) of the Fees and Charges Regulations,

the recovery of Performance Linked Incentive (PLI) by NLDC and RLDCs shall be

based on the achievement of Key Performance Indicators (KPI) as specified in

.A.

Appendix V of Fees and Charges Regulations or such other parameters as specified by the Commission.

- (c) As per Regulation 29 (6) of the Fees and Charges Regulations, RLDCs or NLDC are required to compute the KPIs on annual basis for the previous year ending 31st March and to submit to the Commission for approval as per Appendix V and VI of the Fees and Charges Regulations.
- (d) As per the methodology specified in Appendix V of the Fees and Charges Regulations, KPI score for NLDC for the year 2015-16 has been computed as under:

S. No.	Key Performance Indicators	Weightage	2015-16
1	Reporting of Interconnection meter error	10	10.00
2	Reporting of Grid Incidents and Grid Disturbance	10	10.00
3	Average processing time of shut down request	10	10.00
4	Availability of SCADA System	10	10.00
5	Voltage Deviation Index (VDI)	10	10.00
6	Frequency Deviation Index (FDI)	10	10.00
7	Reporting of System Reliability	10	7.78
8	Availability of Website	10	9.96
9	Availability of Standby Supply	5	5.00
10	Variance of Capital expenditure	5	4.24
11	Variance of Non Capital expenditure	5	4.58
12	Percentage of Certified Employee	5	4.92
	Total	100	96.48

- (e) As per the methodology provided in Regulation 29 (5) of Fees and Charges Regulations, the petitioner is entitled to recover 7% of annual charges at the aggregate performance level of 85% for three years commencing from 1.4.2014 and the incentive shall increase by 1% of annual charges for every 5% increase of performance level above 90%. Accordingly, recovery of Performance Linked Incentive for the year 2015-16 works out as 8.296 % of the annual charges {7% for 85% performance level + 1% for performance level from 90 to 95% + 0.296% for performance level from 95% to 96.48%}.
- 3. Against the above background, the petitioner has filed the present petition with the following prayers:
 - "(a) Approve the proposed performance linked incentive based on the KPIs computed by NLDC for year ending 31.3.2016 given at para 5, the KPI score given at para 6 and PRP percentage of Annual Charges for the year 2015-16 as per para 7 above.
 - (a) Allow the applicant to recover incentive from the users for the year 2015-16 as approved by the Commission.
 - (b) Pass such other order as the Commission deems fit and appropriate in this case and in the interest of justice."
- 4. The petition was heard on 25.5.2017. The representative of the petitioner submitted that the present petitions have been filed for approval of the proposed performance linked incentive based on the KPIs computed by NLDC, WRLDC, NRLDC, ERLDC, SRLDC and NERLDC for the year 2015-16. The representatives of the petitioners further submitted that all requisite information has already been filed along with the petitions.

- 5. The matter was heard and notices were issued to the respondents to file their replies. No reply has been filed by the respondent despite notice.
- 6. The present petition has been filed under Regulations 6 and 29 of the Fees and Charges Regulations for approval of Performance Linked Incentive for the financial year 2015-16. Regulations 6 and 29 are extracted as under:
 - "6. Application for determination of fees and charges:
 - (1) The RLDCs and NLDC shall make application in the formats annexed as Appendix I to these regulations within 180 days from the date of notification of these Regulations, for determination of fees and charges for the control period, based on capital expenditure incurred and duly certified by the auditor as on 1.4.2014 and projected to be incurred during the control period based on the CAPEX and the REPEX.
 - (2) The application shall contain particulars such as source of funds, equipments proposed to be replaced, details of assets written off, and details of assets to be capitalized etc.
 - (3) Before making the application, the concerned RLDC or NLDC, as the case may be, shall serve a copy of the application on the users and submit proof of service along with the application. The concerned RLDC or NLDC shall also keep the complete application posted on its website till the disposal of its petition.
 - (4) The concerned RLDC or NLDC, as the case may be, shall within 7 days after making the application, publish a notice of the application in at least two daily newspapers, one in English language and one in Indian modern language, having circulation in each of the States or Union Territories where the users are situated, in the same language as of the daily newspaper in which the notice of the application is published, in the formats given in Appendix II to these regulations.
 - (5) The concerned RLDC or NLDC, as the case may be, shall be allowed the fees and charges by the Commission based on the capital expenditure incurred as on 1.4.2014 and projected to be incurred during control period on the basis of CAPEX and REPEX duly certified by the auditor in accordance with these Regulations:

Provided that the application shall contain details of underlying assumptions and justification for the capital expenditure incurred and the expenditure proposed to be incurred in accordance with the CAPEX and REPEX.

(6) If the application is inadequate in any respect as required under Appendix-I of these regulations, the application shall be returned to the concerned RLDC or NLDC

for resubmission of the petition within one month after rectifying the deficiencies as may be pointed out by the staff of the Commission.

- (7) If the information furnished in the petition is in accordance with the regulations and is adequate for carrying out prudence check of the claims made the Commission shall consider the suggestions and objections, if any, received from the respondents and any other person including the consumers or consumer associations. The Commission shall issue order determining the fees and charges order after hearing the petitioner, the respondents and any other person permitted by the Commission.
- (8) During pendency of the application, the applicant shall continue to bill the users on the basis of fees and charges approved by the Commission during previous control period and applicable as on 31.3.2014, for the period starting from 1.4.2014 till approval of the Fees and Charges by the Commission, in accordance with these Regulations.
- (9) After expiry of the control period, the applicant shall continue to bill the users on the basis of fees and charges approved by the Commission and applicable as on 31.3.2019 for the period starting from 1.4.2019 till approval of fees and charges under the applicable regulations"
- 29. Performance linked incentive to RLDCs and NLDC:
 - (1) Recovery of incentive by the Regional Load Despatch Centre shall be based on the achievement of the Key Performance Indicators as specified in Appendix V or such other parameters as may be prescribed by the Commission.
 - (2) Each Regional Load Despatch Centre shall submit its actual performance against each of the key performance indicators to the Commission on annual basis as per the format specified in Appendix V.
 - (3) NLDC shall submit the details in regards to each Key Performance Indicator in the format specified in Appendix V along with the methodology for approval of the Commission.
 - (4) The Commission shall evaluate the overall performance of the RLDCs or NLDC, as the case may be, on the basis of weightage specified in Appendix V. The Commission, if required, may seek advice of the Central Electricity Authority for evaluation of the performance of system operator.
 - (5) The RLDCs or NLDC, as the case may be, shall be allowed to recover incentive of 7% of annual charges for aggregate performance level of 85% for three years commencing from 1.4.2014 and for aggregate performance level of 90% from 1.4.2017. The incentive shall increase by 1% of annual charges for every 5% increase of performance level above 90%: Provided that incentive shall be reduced by 1% of annual charges on prorata basis for the every 3% decrease in performance level below 85%.

(6) The RLDCs or NLDC, as the case may be, shall compute the Key Performance Indicators on annual basis for the previous year ending on 31st March and submit to the Commission along with petitions for approval of the Commission as per Appendix V and Appendix VI of these Regulations:

Provided that the key performance indicators of previous year ending on 31st March shall be considered to recover incentive on each year and shall be trued up at the end of the control period."

- 7. The Key Performance Indicators (KPIs) has been specified in Appendix V of the RLDC Fees and Charges Regulations. The Commission may also specify such other parameters.
- 8. In the light of the above provisions, we have considered the petitioner's claim for PLI. The petitioner has submitted KPI-wise details as under:
 - (a) KPI-1: Reporting of Inter-connection metering error:- The meter readings are processed on weekly basis and an error could only be detected after processing the same and after going through the validation process. RLDCs are reporting the meter errors on weekly basis which are made available on the concerned web-sites as per the provisions of the Regulations. Therefore, in a year, the possible nos. of reports are 52 which have been converted to percentage based on the actual reporting. Percentage performance has been proportionately converted to marks scored.
 - (b) KPI-2 Reporting of Grid Incidents and Grid Disturbance:- The grid incidents and grid disturbances are reported by the RLDCs to NLDC on a monthly basis and the same are then compiled and independently verified by NLDC for further reporting to the Commission on consolidated basis. As the reporting on grid incidences and grid disturbances is generated on monthly basis, twelve target

reports to be generated have been considered. Percentage performance has been measured based on the actual number of reports generated, which has been proportionately converted to marks scored.

(c) KPI-3: Average processing time of shut down request (RLDC/NLDC):- The shutdown process uniform across all the RLDCs has been discussed and approved at RPCs level. Time allowed to NLDC for approval of the shut-down requests is 26 Hours and to RLDC is 50 Hours (including NLDC Time) respectively. This methodology has been devised considering primarily the planned outages approved in the monthly OCC meetings of RPCs which are processed by RLDCs on D-3 basis (3-day ahead of actual day of outage) based on confirmation from the shutdown requesting agency and the then prevailing grid conditions. RLDCs after processing the shut down requests at regional level, forward the list to NLDC for impact assessment at national level. After clearance from NLDC, the final lists of cleared shutdown requests are sent by respective RLDCs to the requesting agencies on D-1 (i.e. one day ahead of the proposed date of outage). As per the formula used for calculating KPI score for this parameter, performance would be considered as 100%, if the time taken for processing shut down requests is less than the prescribed time i.e. 26 hours for NLDC and 50 Hours RLDCs. If the time taken is more than the prescribed time, then the performance would come down in the same proportion i.e. if the time taken in processing the request is more than 5% of the prescribed time, then the percentage performance would be 95%. Percentage performance has been proportionately converted to marks scored.

- (d) KPI-4: Availability of SCADA; KPI-8: Availability of website; KPI 9-Availability of Standby Power Supply: Month-wise percentage availability has been calculated and percentage average availability of twelve (12) months has been proportionately converted to marks scored.
- (e) KPI-5: Voltage Deviation Index (VDI); KPI-6: Frequency Deviation Index (FDI); KPI 7- Reporting of System Reliability:- The deviation indices are being reported on daily basis for the critical nodes along with weekly and monthly as per the provisions of the Regulation. The possible number of reports which could be generated (365 daily, 52 weekly and 12 monthly) have been converted to KPI scores based on the actual reporting.
- (f) KPI 10: Variance of Capital expenditure; KPI 11: Variance of Non-Capital expenditure:- The petitioner has submitted that the figures (capital and non-capital) mentioned in the petitions for the control period 2014-19 have been considered as targets and the figures as per the balance sheet have been taken as actual performance. Limit of up to 10% variation has been considered for claiming 100% performance and for any additional 3% variation beyond initial 10%, performance shall decrease by 1% in line with the methodology of the incentive calculation prescribed in Regulation 29 (5) of the Fees and Charges Regulations. Percentage performance has been proportionately converted to marks scored.
- (g) **KPI 12:** Percentage of certified employees:- The target percentage of the certification is 85% of the eligible candidates, has been assumed for calculating the

KPI score. The actual achievement has been calculated against the target and the same has been converted to the KPI score.

9. The parameter-wise submissions made by the petitioner have been examined and dealt with in the succeeding paragraphs.

A. Inter-connection meter error (Parameter 1)

10. The total weightage given for this parameter is 10. The petitioner has submitted the details as under:-

Performance during FY 2015-16 (In	100			
Percentage) A*				
Marks scored (In proportion of the	10			
Percentage performance above)				
*Formula for performance calculation (No. of weekly reports is				
·	/52)*100			

⁵² represents the total no. of weeks in a year

- 11. The petitioner has contended that since reporting of inter-connection metering error is not applicable for NLDC, performance of NLDC has been considered as average performance of RLDCs against this parameter.
- 12. Regulation 2.3.2 of the Central Electricity Regulatory Commission (Indian Electricity Grid Code) Regulations, 2010 (Grid Code) provides as under:
 - "2.3.2 The following are contemplated as exclusive functions of RLDCs
 - (a) System operation and control including inter-state transfer of power, covering contingency analysis and operational planning on real time basis;
 - (b) Scheduling / re-scheduling of generation;
 - (c) System restoration following grid disturbances;
 - (d) Metering and data collection;

- (e) Compiling and furnishing data pertaining to system operation;
- (f) Operation of regional UI pool account, regional reactive energy account and congestion Charge Account, provided that such functions will be undertaken by any entity(ies)other than RLDCs if the Commission so directs.
- (g) Operation of ancillary services."

As per the above provisions, RLDCs are responsible for metering and data collection and compiling and furnishing data pertaining to system operation. Accordingly, problems related to meters including those installed at inter-regional/international tie points are reported by RLDCs concerned to the utilities for corrective action. The petitioner has submitted that as per Regulation 6.4.22 of the Grid Code, computations on metering data are to be made available to the regional entities for checking/verifications for a period of 15 days. Accordingly, the data on inter-connection made available in Public is Domain meter error on regular basis for checking/verifications of regional entities. The petitioner has submitted that information regarding inter-connection meter error is published on the websites of the respective RLDCs on a weekly basis.

13. The petitioner has submitted that the discrepancy reports are discussed in detail in the different fora at RPC level. Since the petitioner has complied with the provisions of the Regulation 6.4.22 of the Grid Code, the claims of the petitioner for weightage factor for reporting of interconnection meter error are allowed for the purpose of incentive.

B. Reporting of grid incidents and grid disturbances (Parameter 2)

14. The petitioner has submitted that as against the total weightage of 10 for the parameter of reporting of grid incidents and grid disturbance, actual incidents of such events during the financial year 2015-16 are as under:-

Grid Incidents and Grid Disturbance for FY 2015-16 (TOTAL)					
Category	Count(Nos.)	Recovery period (HH:MM)	Loss of Energy(MUs)		
GI-1	62	47:44	1.56		
GI-2	271	148:37	3.30		
GD-1	533	128:58	82.05		
GD-2	6	01:56	1.15		
GD-3	1	00:33	0.30		
GD-4	1	00:08	0.06		
GD-5	1	00:00	0.00		
All	874	327.58	88.42		

15. The petitioner has submitted performance-wise details as under:

Performance	during	FY	2015-16	(In	100
Percentage) *					
Marks scored	In propor	tion of	the Percen	tage	10
performance a	oove)				
*Formula for p	erformar	псе са	Iculation :		(No. of monthly reports issued /12)*100

¹² represents the total no. of months in a year

16. The petitioner has submitted that the incidences of grid disturbance are being reported by the Regional Load Despatch Centres to National Load Despatch Centre on a monthly basis which are thereafter compiled and are independently verified by National Load Despatch Centre and reported to the Commission on monthly basis as a part of the monthly operational report in accordance with the provisions of the Grid Code. The petitioner has submitted the details of the report for the Financial Year 2015-16 as under:-

Month	Date of Reporting
April 2015	22 nd May 2015
May 2015	24 th June 2015
June 2015	23 rd July 2015
July 2015	21 st August 2015
August 2015	23 rd September 2015
September 2015	21 st October 2015
October 2015	23 rd November 2015
November 2015	23 rd December 2015
December 2015	23 rd January 2016
January 2016	26 th February 2016
February 2016	23 rd March 2016
March 2016	22 nd April 2016

17. We have considered the submissions of the petitioner. Perusal of the above reveals that the petitioner is reporting incident of grid disturbance each month to the Commission. As per our direction, the petitioner has placed on record the details of reporting to the Commission. Accordingly, the weightage for reporting of grid incidents and grid disturbance is considered as 10 out of 10.

C. Average processing time of shut down request (Parameter 3)

18. The total weightage for the parameter "average processing time of shut down request" is 10. The petitioner has submitted average processing time of shut down request during the financial year 2015-16 as under:

Month	Total No of shutdown request in a month (B)	Total time (hrs) taken to approve the shutdown in a month	to approve the	
	. ,	(A)	(C=A/B)	
April 2015	45.00	516.00	11	
May 2015	44.00	279.00	6	
June 2015	29.00	356.00	12	
July 2015	60.00	682.00	11	
August 2015	81.00	421.00	5	
September 2015	58.00	475.00	8	

October 2015	70.00	609.00	9
November 2015	85.00	793.00	9
December 2015	81.00	839.00	10
January 2016	76.00	610.00	8
February 2016	92.00	677.00	7
March 2016	65.00	623.00	10
Total	786.00	6880.00	9

19. The petitioner has further submitted that the total time allowed to NLDC and RLDCs (including NLDC Time) for approval of the shutdown requests are 26 hours and 50 Hours respectively.

For NLDC

Performance during FY 2015-16 (In	100
Percentage)	
Marks scored (In proportion of the	10
Percentage performance above)	
* Formula for performance calculation	IF((A-B*26)>0,(1-(A-B*26)/(B*26))*100,100)

- 20. The petitioner has submitted that the procedure to streamline the process of transmission outage coordination between SLDCs, RLDCs, NLDC, RPCs and Indenting Agencies was developed by NLDC in 2015 and approved in OCC fora. As per the approved process, RLDC approves the shutdown requests of inter-State transmission lines and NLDC approves the shut down requests for inter-regional and all 765 KV transmission lines. Therefore, RLDCs consult NLDC for approval of outage requests. Relevant extracts of NRPC approved procedure is as under:
 - "7.1. Request for outages which are approved by OCC must be sent by the indenting agency of the transmission asset at least 3 days in advance to respective RLDC by 1000 hours as per Format II.(For example, if an outage is to be availed on say 10th of the month, the indenting agency would forward such requests to the concerned RLDC on 7th of the month by 1000 hours.)
 - 7.3. Approval of Outage where Approving Authority is NLDC:
 - 7.3.1. NRLDC shall forward the request for shutdown along with their consent and observation as per Format-III to NLDC/other concerned RLDCs with clear observations regarding possible constraints / contingency plan and consent including study results by

- 1000 hours of D-2 day. Other concerned RLDCs would forward their observations/consent/reservations by 1600 hours of D-2.
- 7.3.2. NLDC shall approve the outage along with the clear precautions/measures to be observed during the shutdown and inform all concerned RLDCs.
- 7.3.3. The proposed outages shall be reviewed on day ahead basis depending upon the system conditions and the outages shall be approved/refused latest by 1200 Hrs of D-1 day. A suggested format for approval/refusal of outage is enclosed as Format IV."
- 21. The petitioner has submitted that as per the above procedure, total time allowed for approval of the shutdown requests to RLDCs including NLDC is 50 hours (1000 hrs of D-3 to 1200 hrs of D-1). Out of these 50 hours, time allowed to NLDC is 26 hours (1000 hrs of D-2 to 1200 hrs of D-1).
- 22. We have considered the submission of the petitioner. Accordingly, weightage for average processing time of shut down request has been considered as 10 out of 10.

D. Availability of SCADA (Parameter 4)

23. The total weightage for this parameter is 10. The petitioner has submitted average processing time of shut down requests during the financial year 2015-16 as under:-

Month	% Availability
April 2015	100
May 2015	99.99
June 2015	100
July 2015	100
August 2015	99.94
September 2015	100
October 2015	100
November 2015	100
December 2015	100
January 2016	99.88
February 2016	100
March 2016	100
Average of 12 months	99.98

Performance during FY 2015-16*	99.98
Marks scored (In proportion of the	9.99
percentage performance above)	

^{*} Average of 12 months

24. We have considered the submissions of the petitioner. We have worked out the average of 12 months as (100 + 99.99 + 100 + 100 + 99.94 + 100 + 100 + 100 + 100 + 100 + 100)/12 = 99.98. Accordingly, the marks for availability of SCADA have been allowed as 9.99 out of 10.

E. Voltage Deviation Index (Parameter 5)

25. The total weightage for the parameter Voltage Deviation Index (VDI) is 10. The petitioner has submitted voltage deviation index (VDI) as under:-

Name of the Region: NLDC					
S. No.	Name of the 400/765 kV substation	Intimation to utilities through Daily reports for corrective action or not	Intimation to utilities through weekly reports for corrective action or not	Intimation to utilities through monthly reports for corrective action or not	
Α	В	С	D	Е	
1	FARRAKKA			Yes	
2	KAHALGAON			Yes	
3	TALCHER			Yes	
4	PURNEA			Yes	
5	MUZAFFARPUR	Yes	Yes	Yes	
6	JAMSHEDPUR	Yes	Yes	Yes	
7	RENGALI			Yes	
8	JAYPORE	Yes	Yes	Yes	
9	NALLAGARH	Yes		Yes	
10	BHIWADI	Yes		Yes	
11	BALLABGARH	Yes	Yes	Yes	
12	ALLAHABAD			Yes	
13	HISSAR	Yes		Yes	
14	BAWANA	Yes		Yes	
15	KANPUR	Yes	Yes	Yes	
16	BASSI	Yes	Yes	Yes	
17	LUCKNOW PG 765	Yes		Yes	

	KV			
18	MOGA	Yes	Yes	Yes
19	RATANGARH			Yes
20	ASOJ	Yes	Yes	Yes
21	ITARSI	Yes	Yes	Yes
22	JETPUR	Yes	Yes	Yes
23	KASOR	Yes	Yes	Yes
24	KOLHAPUR			Yes
25	BINA			Yes
26	GWALIOR	Yes	Yes	Yes
27	RAIPUR	Yes	Yes	Yes
28	JABALPUR			Yes
29	DHULE	Yes	Yes	Yes
30	SRIPERUMPUDUR	Yes	Yes	Yes
31	NEYVELI	Yes	Yes	Yes
32	SALAM	Yes	Yes	Yes
33	BANGALORE	Yes	Yes	Yes
34	HOSUR	Yes	Yes	Yes
35	RAMAGUNDAM	Yes	Yes	Yes
36	VIJAYAWADA	Yes	Yes	Yes
37	TRIVANDRUM	Yes	Yes	Yes
38	HYDERABAD	Yes	Yes	Yes
39	MISA	Yes	Yes	Yes
40	BALIPARA	Yes	Yes	Yes
41	BONGAIGAON	Yes	Yes	Yes

26. According to the petitioner, VDIs of important sub-stations are being calculated and reported on daily basis and are also being hosted on websites by RLDCs which is thereafter compiled at NLDC and circulated internally. Similarly, RLDCs are also calculating and reporting VDIs on their websites as part of their weekly reports. The petitioner has further submitted that NLDC also independently calculates and reports VDIs of important sub-stations on a monthly basis which is available on website as part of monthly report. The petitioner has submitted that persistent problems of low/high voltage are identified in the quarterly operational feedback submitted to CTU and CEA.

Performance during FY 2015-16	100
Marks scored (In proportion of the %age performance above)	10
<u> </u>	
* Formula for performance calculation	[((No.of daily reports issued (to be derived
	from column C)/366(Total no.of days in
	FY 2015-16))*100]+[No.of weekly reports
	issued(to be derived from column D)/52
	(Total no. of weeks in FY 2015-
	16))*100)+(No. of monthly reports issued
	(to be derived from column E)/12)*100)]/3

- 27. The petitioner has submitted that Clause 2.2.4.6 of the NLDC Operating Procedure, 2015 provides the corrective actions to be taken in the event of voltage going high and low. The relevant extract of the Clause 2.2.4.6 of the NLDC Operating Procedure, 2015 is extracted as under:-
 - "2.2.4.6. The following corrective measures shall be taken in the event of voltage going high / low:
 - i) In the event of high voltage (when the bus voltage going above 410 kV), following specific steps would be taken by the respective grid substation/generating station at their own, unless specifically mentioned by NLDC/RLDC/SLDCs.
 - a. The bus reactor is switched in
 - b. The manually switchable capacitor banks is taken out
 - c. The switchable line/tertiary reactor or convertible line reactor (if the line kept open for High voltage) wherever possible are taken in. Optimize the filter banks at HVDC terminal
 - e. All the generating units on bar shall absorb reactive power within the capability curve
 - f. Operate synchronous condensers wherever available for VAR absorption
 - g. Operate hydro generator/gas turbine as synchronous condenser for VAR absorption wherever such facilities are available
 - h. Bring down power flow on HVDC terminals so that loading on parallel EHVAC network goes up, resulting in drop in voltage.
 - i. Open lightly loaded lines in consultation with RLDC/SLDC for ensuring security of the balanced network. To the extent possible, it must be ensured that no loop of transmission lines is broken due to opening of lines to control the high voltage.

- ii) In the event of low voltage (when the bus voltage going down below 390kV), following specific steps would be taken by the respective grid substation/generating station at their own, unless specifically mentioned by NLDC/RLDC/SLDCs.
 - a. Close the lines which were opened to control high voltage in consultation with RLDC/SLDC.
 - b. The bus reactor is switched out
 - c. The manually switchable capacitor banks are switched in.
 - d. The switchable line/tertiary reactor are taken out
 - e. Optimize the filter banks at HVDC terminal
 - f. All the generating units on bar shall generate reactive power within capability curve.
 - g. Operate synchronous condenser for VAR generation
 - h. Operate hydro generator/gas turbine as synchronous condenser for VAR generation wherever such facilities are available
 - i. Increase power flow on HVDC terminals so that loading on parallel Extra High Voltage (EHV) network goes down resulting in rise in voltage."
- 28. The petitioner has submitted that corrective actions are being taken in Real Time Grid Conditions by NLDC at 765 kV and Inter-regional level by opening /closing shunt reactors, transmission lines, etc. and by RLDCs for other Inter-State systems. The petitioner has submitted that for voltage deviations taking place in/resulting from intra-State system, RLDCs write regularly to the constituents and also discuss in the OCC meetings. The petitioner has placed on record the extracts from OCC meetings of RPCs, sample letters from RLDCs stating sustained voltage deviation and suggested corrective actions. The petitioner has submitted that apart from these, persistent high voltage and low voltage are being reported in the NLDC operational feedback every quarter. Link for NLDC operational feedback for the quarter quarter July 2015 to September 2015 quarter is http://posoco.in/download/nldc-operational-

<u>Feedback_october_2015_q2/?wpdmdl=7214.</u> According to the petitioner, nodes experiencing low/high voltage are listed on page Nos. 29-30 of operational feedback and this information was discussed in Standing Committees on Power System Planning of different regions with all the stakeholders. The petitioner has submitted that corrective actions are also discussed in Standing Committee Meetings and OCC Meetings.

29. We have considered the submission of the petitioner. As per Regulation 29 (6) of the Fees and Charges Regulations, RLDCs or NLDC are required to compute the Key Performance Indicators on annual basis for the previous year ending on 31st March and are required to submit the same to the Commission for approval. Accordingly, the petitioner has claimed to have computed the Key Performance Indicators on annual basis. However, from the "Format for KPI-5: Voltage Deviation Index" submitted by the petitioner, it appears that there are certain information gaps in respect of Daily Reports and Weekly Reports because of which it is not possible to translate the VDI into marks scored. Accordingly, for the time being, Commission is not inclined to consider this KPI for working out the total weightage. Petitioner is directed to furnish the complete information corresponding to the parameter-5 i.e. Voltage Deviation Index at the time of filing petition for true up.

F. Frequency Deviation Index (Parameter 6)

30. The total weightage for the parameter Frequency Deviation Index (FDI) is 10. The petitioner has submitted FDI during 2015-16 as under:-

S. No.	Month	Intimation to utilities through Daily reports for corrective action or not	utilities through weekly reports	Intimation to utilities through monthly reports for corrective action or not
Α	В	С	D	Е
1	April 2015	Yes	Yes	Yes
2	May 2015	Yes	Yes	Yes
3	June 2015	Yes	Yes	Yes
4	July 2015	Yes	Yes	Yes
5	August 2015	Yes	Yes	Yes
6	September 2015	Yes	Yes	Yes
7	October 2015	Yes	Yes	Yes
8	November 2015	Yes	Yes	Yes
9	December 2015	Yes	Yes	Yes
10	January 2016	Yes	Yes	Yes
11	February 2016	Yes	Yes	Yes
12	March 2016	Yes	Yes	Yes

Performance during FY 2015-16*	100
Marks scored (In proportion of the	10
percentage performance above)	
* Formula for performance calculation	(((No.of daily reports issued (to be derived from column C)/366 (Total no.of days in FY 2015-16))*100)+(No.of weekly reports issued(to be derived from column D)/52 (Total no. of weeks in FY 2015-16))*100)+(No. of monthly reports issued (to be derived from column E)/12)*100))/3

31. We have considered the submission of the petitioner. FDIs submitted by the petitioner are found to be in order. Accordingly, weightage for FDI has been allowed as 10 out of 10.

G. Reporting of System Reliability (Parameter 7)

- 32. The total weightage for this parameter Reporting of System Reliability (RSR) is
- 10. The petitioner has submitted the following report of system reliability:
 - (a) Reporting of (N-1) violations (to be reported to the Commission)

S. No.	Month	Intimation to utilities through Daily reports for corrective action or not		_
Α	В	С	D	E
1	April 2015	Yes#	Yes	Yes
2	May 2015	Yes#	Yes	Yes
3	June 2015	Yes#	Yes	Yes
4	July 2015	Yes#	Yes	Yes
5	August 2015	Yes#	Yes	Yes
6	September 2015	Yes#	Yes	Yes
7	October 2015	Yes#	Yes	Yes
8	November 2015	Yes#	Yes	Yes
9	December 2015	Yes#	Yes	Yes
10	January 2016	Yes#	Yes	Yes
11	February 2016	Yes#	Yes	Yes
12	March 2016	Yes#	Yes	Yes

[#] Event based action

100
(((No.of daily reports issued (to be derived from column C)/366 (Total no.of days in FY 2015-16))*100) + (No.of weekly reports issued(to be derived from column D)/52 (Total no. of weeks in FY 2015-16))*100)+(No. of monthly reports issued (to be derived from column E)/12)*100))/3
_

(b) Reporting of ATC violations (to be reported to the Commission)

S.No.	Month	utilities through Daily reports for	Intimation to utilities through weekly reports for corrective action or not	monthly reports
Α	В	С	D	E
1	April 2015	Yes#	Yes	Yes

2	May 2015	Yes#	Yes	Yes
3	June 2015	Yes#	Yes	Yes
4	July 2015	Yes#	Yes	Yes
5	August 2015	Yes#	Yes	Yes
6	September 2015	Yes#	Yes	Yes
7	October 2015	Yes#	Yes	Yes
8	November 2015	Yes#	Yes	Yes
9	December 2015	Yes#	Yes	Yes
10	January 2016	Yes#	Yes	Yes
11	February 2016	Yes#	Yes	Yes
12	March 2016	Yes#	Yes	Yes

[#] Event based action is taken on violation of TTC/ATC.

Y*	100
*Formula	(((No.of daily reports issued (to be derived from column C)/366 (Total no.of days in FY 2015-16))*100)+(No.of weekly reports issued(to be derived from column D)/52 (Total no. of weeks in FY 2015-16))*100)+(No. of monthly reports issued (to be derived from column E)/12)*100))/3

(c) Reporting of Angle difference between important buses(to be reported to the Commission)

S. No.	Month	Intimation to utilities through Daily reports for corrective action or not	utilities through	utilities through monthly reports for
Α	В	С	D	E
1	April 2015	Yes	No	No
2	May 2015	Yes	No	No
3	June 2015	Yes	No	No
4	July 2015	Yes	No	No
5	August 2015	Yes	No	No
6	September 2015	Yes	No	No
7	October 2015	Yes	No	No
8	November 2015	Yes	No	No
9	December 2015	Yes	No	No
10	January 2016	Yes	No	No
11	February 2016	Yes	No	No
12	March 2016	Yes	No	No

Z*	33.33
*Formula	(((No.of daily reports issued (to be derived
	from column C)/366(Total no.of days in FY
	2015-16))*100)+(No.of weekly reports
	issued(to be derived from column D)/52
	(Total no. of weeks in FY 2015-16))*100)+(
	No. of monthly reports issued (to be
	derived from column E)/12)*100))/3
Performance during FY 2015-16*	77.78
Marks scored (In proportion of the	7.78
Percentage performance above)	1.10
*Formula	(X+Y+Z)/3

- 33. The petitioner has submitted that the score for KPI No-7 (Reporting of System Reliability) has come out to be 7.78 out of 10.
- 34. We have considered the submission of the petitioner. Accordingly, weightage claimed for reporting system reliability is allowed as 7.78 out of 10.

H. Availability of website (Parameter 8)

35. The total weightage for the parameter "availability of website" is 10. The petitioner has submitted the percentage of availability of website as under:-

Month	Percentage	
	Availability	
April 2015	99.81	
May 2015	99.69	
June 2015	99.99	
July 2015	99.62	
August 2015	99.99	
September 2015	99.98	
October 2015	99.76	
November 2015	96.47	
December 2015	100	
January 2016	100	
February 2016	100	
March 2016	100	

Performance during FY 2015-16*	99.61
Marks scored (In proportion of the	9.96
percentage performance above)	

^{*} Average of 12 months

36. We have considered the submission of the petitioner. It is observed that the petitioner is reporting availability of website on monthly basis, however the availability, in percent, was a little below 100 for eight months out of twelve. Accordingly, the weightage for availability of website is allowed as 9.96 out of 10.

I. Availability of Standby power supply (Parameter 9)

- 37. The total weightage for the parameter "availability of standby power" is 5. The petitioner has submitted availability of standby power supply as 100% during all the twelve months of the year.
- 38. The petitioner has further submitted that availability of backup power supply depends on the sub systems, namely, (i) availability of UPS/Battery backup, and (ii) availability of DG set. According to the petitioner, in case main power supply fails and the system does not get any power supply, the duration shall be considered as back supply failure.

Performance during FY 2015-16*	100
Marks scored (In proportion of the	5
percentage performance above)	

^{*} Average of 12 months

39. We have considered the submission of the petitioner. The petitioner has claimed that there has been no failure in availability of standby power supply. Accordingly, weightage claimed for availability of Standby power supply is considered as 5 out of 5.

J. Variance of Capital expenditure (Parameter 10)

40. The total weightage for the parameter "Variance of capital expenditure" is 5. The petitioner has submitted the details of Variance of Capital Expenditure as under:-

(₹ in lakh)

by CERC	Actual Expenditure incurred (B)	Percentage Variation C= ((A-B)/A)*100	
(A) 659.00	292.84	55.56	

41. The petitioner has submitted that the amount considered in the column A above is as per the Fees and Charges Regulations for the control period 2014-19. The petitioner has submitted that in Column B, value as per balance sheet for the year 2015-16 has been considered.

Performance during FY 2014-15*	84.81		
Formula	IF(C>10,100-(C-10)/3,100)#		
Marks Scored (in proportion of the	4.24		
percentage performance above)			
*Average of 12 months			
# Up to 10% variation performance	is proposed to be considered		

Up to 10% variation, performance is proposed to be considered 100% and for any additional 3% variation beyond initial 10%, performance shall be decrease by 1% in line with the methodology of the incentive calculation prescribed in the Regulation 29(5) of the Fees and Charges Regulations.

42. The petitioner has submitted that limit of up to 10% variation has been considered for claiming 100% performance and for any additional 3% variation beyond initial 10%, performance shall decrease by 1% in line with the methodology of the incentive calculation prescribed in the Regulation 29(5) of the Fees and Charges Regulations. The petitioner has submitted that the intent of the formula is that 10% variation limit for claiming 100% performance is on both sides i.e. positive and negative.

Similarly, for variation of more than 10%, performance would vary in the same manner whether the variation in CAPEX utilization is positive or negative. Therefore, value of variation should be absolute value only. Accordingly, formula for percentage variation can be read as "Percentage Variation C=ABS ((A-B)/A)*100".

43. We have considered the submission of the petitioner. We find that the actual expenditure incurred as per the POSOCO (NLDC) Balance Sheet for 2015-16 is Rs 275.01 lakh and that as per the Corporate Center Balance Sheet as Rs 17.82 lakh. Thus the performance during the year translates into 84.81 % resulting into KPI-10 score of 4.24. The weightage claimed for variance of Capital expenditure is provisionally considered as 4.24 out of 5.

K. <u>Variance of Non-Capital expenditure (Parameter 11)</u>

44. The total weightage for the parameter "variance of non-capital expenditure" is 5.

The petitioner has submitted the details of variance of non-capital expenditure as under:

Expenditure allowed by Actual Expenditure incurred Percentage Variation
CERC

(A) (B) C= ((A-B)/A)*100

In the Non-Capital Expenditure, HR Expenses, O&M Expenses and Depreciation have been considered. In column A, figures as per the RLDCs fees and Charges for the control period 2014-19 have been considered. In column B, value as per Balance sheet for the year 2015-16 has been considered.

3025.00

Performance during FY 2015-16 *	91.51
*Formula	IF(C>10,100-(C-10)/3,100)#
Marks Scored (in proportion of the	4.58
percentage performance above)	
*Average of 12 months	

[#] Up to 10% variation, performance is proposed to be considered 100% and for any additional 3% variation beyond initial 10%, performance shall be decrease by 1% in line with the methodology of

2233.00

35.48

the incentive calculation prescribed in the Regulation 29(5) of the Fees and Charges Regulations.

45. We have considered the submission of the petitioner. We find that the actual expenditure incurred against KPI-11 as per the POSOCO (NLDC) Balance Sheet for 2015-16 is ₹1682.90 lakh and that as per the Corporate Center Balance Sheet as Rs 1342.28 lakh Thus the performance during the year translates into 91.51% resulting into KPI-11 score of 4.58. The weightage claimed for variance of non-capital expenditure is allowed as 4.58 out of 5.

L. Percentage of certified employees (Parameter 12)

46. The total weightage for the parameter "variance of percentage of certified employees" is 5. The petitioner has submitted the details of variance of percentage of certified employees as under:-

	Actual No. of Employees certified as on 31.3.2016	Percentage of Employees Certified as on 31.3.2016
(A)	(B)	(C=B/A*100)
51	41	80.39

Performance during FY 2015-16 *	98.46	
*Formula	IF(C<85, (100-(85-C)/3,100)#	
Marks Scored (in proportion of the	4.92	
Percentage performance above)		
*Average of 12 months		
# Up to 950/ partification parformance is proposed to be considered 1000/		

[#] Up to 85% certification, performance is proposed to be considered 100% and for certification below 85%, performance shall decrease by 1% for every 3% decrease in the certification in line with the methodology of the incentive calculation prescribed in Regulation 29(5) of the Fees and Charges Regulations.

47. We have considered the submission of the petitioner. As per methodology of the incentive specified in Regulation 29(5) of the Fees and Charges Regulations, for

certification upto 85%, performance would be considered 100% and for certification below 85%, performance would be decreased by 1% for every 3% decrease in the certification. Accordingly, the weightage for percentage of certified employees is considered as 4.92 out of 5.

48. We have considered the submissions of the petitioner with regard to KPI. The Key Performance Indicators allowed as per the Assessment Table depicted in Appendix-V of the Fees and Charges Regulations as under:-

S. No	Key Performance Indicators	Weight age	Claimed for FY2015-16	Allowed
1	Reporting of Interconnection meter error	10	10	10
2	Reporting of Grid Incidents and Grid Disturbance	10	10	10
3	Average processing time of shut down request	10	10	10
4	Availability of SCADA System	10	10	10
5	Voltage Deviation Index (VDI)	10	10	10
6	Frequency Deviation Index (FDI)	10	10	0
7	Reporting of System Reliability	10	7.78	7.78
8	Availability of Website	10	9.96	9.96
9	Availability of Standby Supply	5	5	5
10	Variance of Capital expenditure	5	4.24	4.24
11	Variance of Non Capital expenditure	5	4.58	4.58
12	Percentage of Certified Employee	5	4.92	4.92
	Total	100	96.48	86.48

49. For reasons cited in paragraphs 29 and as per the above table, the petitioner has achieved 86.48% Key Performance Indicators out of 100%. Accordingly, the petitioner is allowed to recover incentive of 7.00% of annual charges for the financial year 2015-16.

50. Petition No. 50/MP/2017 is disposed of with the above.

sd/sd/sd/sd/-(Dr. M.K lyer) Member (A.S.Bakshi) Member (A.K.Singhal) Member (Gireesh B. Pradhan) Chairperson