Objections, suggestions, comments of WBSEDCL on the Draft CERC (Terms and Conditions of Tariff) Regulations 2019 For Tariff Period 1.4.2019 TO 31.3.2024

It has been mentioned in the Explanatory Memorandum that the draft CERC (Terms and Conditions of Tariff) Regulations 2019 has been prepared based on the Consultation Paper which was circulated earlier to different stakeholders for submission of views. It has observed that the draft regulation has not taken into consideration many issues and new thoughts mentioned in the Consultation Paper (like Three part tariff for Thermal Generating Stations, Annual revision of Annual Contracted Capacity of GENCO, extension of useful life, modified debt-equity ratio for new projects, differential ROE rates based on project risks, normative cost of debt, etc.) on which views has been taken from discom including WBSEDCL. The present draft CERC regulation has accommodated very few changes proposed in consultation paper (like, peak-off-peak variation of capacity charge). On the other side, the draft regulation is unable to address the issues raised by Discom in the consultation paper against incentivization of generation and transmission sector through higher return and several tariff incentives, normative expenditures in cost plus tariff mechanism observed over the years which is affecting end consumers. Norms & cost has been modifed without recording sufficient justification in Explanatory Memorendum and not considering the views submitted by Discom. Development of roads & other feedbacks of generators & transmission companies are taken into consideration. More new costs will be added in the future due to environmental norms which will further increase generation tariff & in turn will fall on those end consumers of Discom. Development of roads & other infracture & effect of modernisation & energy conservation activities have not been reflected in reduction of norms (i.e. cost) and extension of useful life of generation plant and transmission project, where end consumers can be benefited due to lower tariff.

Further some sub judice matter has been incorporated in the draft Regulation like (i) disputes raised by multiple discoms in the matter of "GCV as received", (ii) Objections raised by WBSEDCL against huge cost over run of TLDP III & IV, & (iii) shortfall of generation of TLDP III & IV.

Considering cost reduction of the end consumers as a priority matter, our observations in respect of the draft CERC Tariff Regulation for 2019-24 are as follows:

Draft Regulation	Proposed Options for Regulatory Framework	Rational/Comments of WBSEDCL
Draft Regulation 1.Page - 10; Regulation 3; Definition: 31 'GCV as received' means the GCV of coal or lignite as measured at the unloading point of the thermal generating station through collection, preparation and testing of samples from the loaded wagons, trucks, ropeways, Merry- Go-Round (MGR), belt conveyor and ship in accordance with the IS 436 (Part-1/ Section 1)- 1964: Provided that the measurement of coal or lignite shall be carried out through Third party sampling to be appointed by the generating companies in accordance with the guidelines, if any, issued by Central Government; Provided further that samples of coal or lignite shall be collected either manually or through hydraulic augur or through any other method considered suitable keeping in view the safety of personnel and equipment: Provided also that the generating companies may adopt	Proposed Options for Regulatory Framework 'GCV as received' means the GCV of coal or lignite as measured at the <u>loading</u> <u>point of the mines end</u> through collection, preparation and testing of samples from the loaded wagons, trucks, ropeways, Merry-Go-Round (MGR), belt conveyor and ship in accordance with the IS 436 (Part-1/ Section 1)- 1964: Provided that the measurement of coal or lignite shall be carried out through Third party sampling to be appointed by the <u>generating companies or Mines or jointly</u> in accordance with the guidelines, if any, issued by Central Government; Provided further that samples of coal or lignite shall be collected either manually or through hydraulic augur or through any other method considered suitable keeping in view the safety of personnel and equipment: Provided also that the generating companies may adopt any advance technology for collection, preparation and testing of samples for measurement of GCV in a fair and transparent manner.	Rational/Comments of WBSEDCL Petition has already been filed in the matter by WBSEDCL before CERC and the matter is sub judice (Petition no: 220/MP/2016) It has been observed that there is huge grade slippage of coal from mines end to thermal power plant end. As the ownership of coal as per FSA gets transferred to the Generation Companies from coal supplier, therefore it is the responsibility of the Generation Companies to prevent drop of GCV which is around 800-1000 Kcal/Kg. For matters related to payment of coal, the price of coal is taken at mines end. In this draft Regulations also, the definitions for "Input Price" and "Landed Fuel cost" have adopted the same philosophy. Discom's view is that, when price of coal is taken at mines end, measurement of coal GCV should also be undertaken at mines end on "As billed " basis for procurement of both Domestic and International coal. Otherwise GCV of coal measured at thermal plant end has been found much lower than that of mines end and consumers of Discom are burdened for lose of GCV in transit. In Para 22.5.3 of the Explanatory Memorandum, CERC has already acknowledged the fact and recorded that there is a lack of transparency in GCV measurement of coal at loading and unloading point. Hence, the consumers should not face additional financial burden resulting out of such
Provided also that the generating companies may adopt any advance technology for collection, preparation and testing of samples for measurement of GCV in a fair and transparent manner.		GCV measurement of coal at loading and unloading point. Hence, the consumers should not face additional financial burden resulting out of such lack of transparency and inefficient coal handling. In addition, passing down the cost of third party sampling to the end users due to such lack of transparency is not acceptable.
2. Page - 52; Regulation -47 (Sta Proviso) Provided also that in case of Coal or Lignite thermal generating station, the Gross Calorific Value shall be measured by third party sampling and the expenses towards the third party sampling facility shall be reimbursed by the beneficiaries.	Provided also that in case of Coal or Lignite thermal generating station, the Gross Calorific Value shall be measured <u>at mines end by third party sampling</u> and the expenses towards the third party sampling facility shall be reimbursed by the beneficiaries.	Modality of third party sampling to certify the GCV measurement is not clear. Detail modality may be provided for submission of views.

Sudgle Hundopadby Chief Engineer (Regulation) Regulation Department WBSEDCL

Draft Regulation	Proposed Options for Regulatory Framework	Rational/Comments of WBSEDCL
3. Page - 100; Regulation 52(2) 52. Computation and Payment of Energy Charge for Thermal Generating Stations: CVPF = (a) Weighted Average Gross calorific value of coal as received, in kCal per kg for coal based station <u>s less 85</u> <u>Kcal/Kg on account of variation during storage at</u> <u>generating station</u>	 52. Computation and Payment of Energy Charge for Thermal Generating Stations: CVPF = (a) Weighted Average Gross calorific value of coal as received, in kCal per kg for coal based stations less normative GCV loss on account of handling of coal from the unloading point to the firing point 85 Kcal/Kg on account of variation during storage at generating station; Provided that the Comission shall specify such norms for GCV loss which will be less than 85 Kcal/Kg. The Commission shall also specify a trajectory for reduction of such GCV loss. 	As already mentioned in our views against Draft Regulation 3(31), GCV as received should be measured at the Loading point (mines end). Norms for loss of GCV from unloading point (Station end) to firing point should be specified and such norms should be lower than 85 Kcal/Kg. The Commission should also specify downward trajectory of the norm for improvement of performance and promotion of efficiency. Otherwise it will create additional finacial burden on the end users. Views on the same has already been submitted by WBSEDCL in response to CEA's letter Dated 20-03-18 under Petition No: 244/MP/2016 before CERC. While specifying the norms of GCV loss and improvement trajectory, CERC should give due considerations to GCV loss figures for Indian leading government and private generation utilities, and international / global best pracitces on the same. The aim should be to achieve international standards.
4. Page - 93; Regulation -48 Transit and Handling Losses: The landed cost of coal or lignite during the month shall include the transit and handling losses as per the following norms :- Pit head - 0.20% Non-pit head (Up to 1000 KM) -0.80% (Above 1,000 KM) -1.20%	Transit and Handling Losses : The landed cost of coal or lignite during the month shall include the transit and handling losses as per the following norms :- Pit head - 0.20% Non-pit head (Up to 1000 KM) -0.80% (Above 1,000 KM) -1.20%	The transit loss norms for non pit head station of 0.8% has been prevalent for last 10 years through the Tariff Regulations 2009-14 and 2014-19. The transportation infrastructure have improved over the past 10 years, and therefore norms for transit loss should be tightened. CEA in its Recommendaion Paper Dated 10.12.18 mentioned about the inputs provided by only two entities (NTPC and RRVUNL) regarding transit loss, but does not provide any detailed analysis or computation breakup for the same. The Consultation Paper did not provide any justification. The Explanatory Memorandum also does not provide sufficient explanation. CERC has not considered actual transit loss figures for other government and private thermal generation stations in India. CERC also has not given due consideration to international benchmark figures / globally acceptable standards for transit loss of coal. In view of the above, the norms for transit loss should be kept unchanged as 2014-19 regulations or may be tightened, otherwise the relaxed norms will create additional burden on the consumers
 5. Page - 13; Regulation 3; Definition: 71 Thermal Generating Station' means a generating station or a unit thereof that generates electricity using fossil fuels such as coal, lignite, gas, liquid fuel or combination of these as its primary source of energy or <u>co-firing of biomass with coal</u> 6. Page - 103; Regulation - 52(4) Where the biomass fuel is used for blending with coal, the landed price of biomass fuel shall be worked out based on normative consumption as specified in these regulations or actual consumption, whichever is lower, and landed price discovered at the receiving end of the generating 	Thermal Generating Station' means a generating station or a unit thereof that generates electricity using fossil fuels such as coal, lignite, gas, liquid fuel or combination of these as its primary source of energy or co-firing of biomass with coal Where the biomass fuel is used for blending with coal, the landed price of biomass fuel shall be worked out based on normative consumption as specified in these regulations or actual consumption, whichever is lower, and landed price discovered at the receiving end of the generating station, inclusive of taxes and duties as applicable;	The Draft Regulation has not mentioned any thing on following matters: i) Methodology for certification of GCV & price of bio-mass which is obtained from un-organised sector. Biomass cost should be capped at the cost of blended coal used for generation in order to keep energy cost under contrd. ii) How such power produced from bio-mass be considered by Discom to meet RPO. CERC should address the issues first through Draft Regulations, then only comments/views can be provided on the same. However overall variable cost should not increase due to co-firing of bio-mass, should be ensured. The Regulations regarding this matter should be finalised only after undertaking the above steps.

Sudy to Kinchopedby Chief Engineer (Regulation) Regulation Department WBSEDCL

an amount and a

0

Chief Engineer (Regulation) Regulation Department WBSEDCL

م يعم السمين ، ويور

Draft Regulation	Proposed Options for Regulatory Framework	Rational/Comments of WBSEDCL
8. Page - 65; Regulation - 30(2) Return on equity shall be computed at the base rate of 15.50% for thermal generating station, transmission system including communication system and run of the river hydro generating station, and at the base rate of 16.50% for the storage type hydro generating stations including pumped storage hydro generating stations and run of river generating station with pondage:	Return on equity for thermal generating station shall be computed at the base rate of <u>10.85% if energy is despached and at a risk free rate equivalent to</u> yield of 10-year zero-coupon Government securities if energy is not dispatched but station is available. For transmission system including communication system, <u>ROE shall be lower than thermal generating station</u> . <u>ROE for run of the river hydro generating station shall be same as thermal generating station</u> . For storage type hydro generating stations including pumped storage hydro generating stations and run of river generating station with pondage, <u>ROE shall be 1% higher than thermal generating stations</u> .	 <u>Thermal generating stations</u>: As recorded in the Consultation Paper, capacity addition is no more a major challenge as adequate installed capacity (along with under-construction capacity) exists to meet the demand for the next 8-10 years and around 40000 MW of generation capacity and corresponding transmission capacity are stranded; also, the rate of interest has also come down thus favouring reduction of rate of return. In view of this, overall ROE should be capped at around 10.85% considering risk-free rate equivalent to yield of 10-year zero-coupon Government Securities, market return equivalent to BSE Sensex return, and Beta of 50%. This ROE of 10.85% will be applicable when the generating station is dispatching energy. When the station is not dispatching but is available, then, as proposed in the Consultation Paper, ROE should be allowed at risk-free rate equivalent to yield of 10-year zero-coupon Government Securities considering guaranteed recovery of fixed cost through firm tie-up with beneficiaries and no uncertainty in revenue-flow. <u>Transmission system</u>: ROE for transmission projects should be less than that of thermal generation projects, as the risk is less in transmission. <u>Hydropower projects</u>: ROE of Run of the river hydropower projects should be of similar level as thermal generating stations. For storage type hydro generating stations, additional incentives should be provided considering peak support. Views in this regard has already been submitted as part of providing views on the Consultation Paper and providing comments on Draft CERC Tariff Regulations 2019 vide letter no REG/Legal/CERC/64 dt 22.03.2018.
9. Page - 89; Regulation -42B Return on Equity of Integrated Mine : Return on equity shall be computed at the base rate of 15.50%. The base rate of return on equity shall be grossed up with the effective tax rate of the respective financial year.	Return on Equity of Integrated Mine : Return on equity shall be computed at the base rate of 10.85% . The base rate of return on equity shall be grossed up with the effective tax rate of the respective financial year.	Integrated mine is earmarked for supplying coal to the concerned generating company / generating station. Hence coal offtake from the integrated mine is certain and revenue-inflow to the integrated mine is secured, provided that generation of the concerned GENCO is not affected due to reduced offtake by its beneficiaries. Hence risk of an operational integrated mine is pegged with the risk of the concerned GENCO. In view of that, ROE of integrated mine should be capped at around 10.85% in the same manner as proposed in our views for ROE of thermal generating station.
10. Page - 84; Regulation 36 (1)		
Integrated Mine: Where the generating company has the arrangement for supply of coal or lignite from the integrated mine(s) allocated to one or more of its generating stations as end use project, the variable charge component of tariff of the generating station shall be determined based on the input price of coal or lignite, as the case may be, from such integrated mines in accordance with these regulations. For this purpose, the generating company shall maintain the account of such integrated mine separately	Where the generating company has the arrangement for supply of coal or lignite from the integrated mine(s) allocated to one or more of its generating stations as end use project, the variable charge component of tariff of the generating station shall be determined based on the input price of coal or lignite, as the case may be, from such integrated mines in accordance with these regulations. For this purpose, the generating company shall maintain the account of such integrated mine separately; Provided that the input price determined as per provisions of this Regulation shall be lower than the notified price of CIL for the corresponding grade of coal. The Commission shall also prescribe performance improvement trajectory for operation of such integrated mines; Provided that the generating company shall adopt third party sampling for measurement of Gross Calorific Value of coal or lignite at the mines end (loading point). The GCV thus measured shall be shared with the beneficiary.	 Coal mines are allocated to the generating company with the intent to ensure coal supply security as well as to enhance efficiency in coal production and to optimise cost of coal mining. In view of this, the input price of coal from the integrated mine should be less than the CIL-notified price for the same grade of coal. The Commission shall also introduce performance improvement trajectory for integrated mine operation. Para 22.4.1 (b) of the Explanatory memorandum states that the allocated coal blocks are difficult to operate and hence the mining cost may be higher than the CIL notified prices. However, DISCOM's view is that it is the responsibility of the concerned GENCO to address this matter by taking up the issue through the appropriate forum and thereby optimise O&M cost so as to achieve the overall aim of captive mining to ultimately protect the interest of the beneficiaries. The draft Regulation 2019-24 does not provide for measurement of GCV at mines end. Third party Sampling should be introduced for measurement of GCV of coal at the mines end (Loading point). The GCV values with grade of coal and its cost should be shared with the beneficiary so that the beneficiary can compare coal prices of similar grades source from other companies like CIL.

Studiete Munkspadky Chief Engineer (Regulation) Regulation Department WBSEDCL

Draft Regulation	Proposed Options for Regulatory Framework	Rational/Comments of WBSEDCL
11. Page - 84; Regulation 36 (3) The input price of lignite from the integrated mine shall be determined by the Commission for which appropriate regulations shall be notified separately. Till such time, the Commission shall continue to adopt the guidelines specified by the Ministry of Coal, Government of India.	The input price of lignite from the integrated mine shall be determined by the Commission for which appropriate regulations shall be notified separately. The generator company shall introduce Third Party Sampling for measurement of cost and GCV of lignite at the mines end (Loading point). Till such time, the Commission shall continue to approve adopt cost at a level less than the guidelines specified by the Ministry of Coal, Government of India considering efficiency factor for operation of integrated mines by generation companies.	The draft Regulation 2019-24 does not provide for measurement of GCV of lignite at mines end. Third party Sampling should be introduced for measurement of GCV of lignite at the mines end (Loading point). The GCV values should be shared with the beneficiary so that the beneficiary can compare lignite prices of similar quality sourced from other companies. <u>CERC may consider any percentage reduction based on analysis of lignite cost of integrated mining based on efficiency because present uncertaininty of lignite supply from other lignite producers can be eliminated by higher & economic production where usage in the concerned Generating station is assured as per MOD.</u>
12. Page - 91; Regulation 45 (5)		
The input price per Metric Tonne (MT) at the start of supply from integrated mine shall be trued up by the generating company at the end of every financial year on the basis of actual cost taking into account the audited financial statements and cost audit report / cost accounting records as well as any directions of the Commission, if any, in this regard and shall refund or recover the amount from the beneficiaries at the Bank Rate.	The input price per Metric Tonne (MT) at the start of supply from integrated mine shall be trued up by the generating company at the end of every financial year on the basis of actual cost taking into account the audited financial statements and cost audit report / cost accounting records as well as any directions of the Commission, if any, in this regard and shall refund or recover the amount from the beneficiaries at the Bank Rate. Provided that; any over recovery of the fixed cost resulting from higher coal production than the target production shall be passed on to the beneficiary. Provided that; any under recovery of fixed cost resulting from lower coal production than the target production shall be borne by the generating company and shall not be passed on to the beneficiary. In case GENCO purchases coal at higher prices than the admitted input price, the net differential cost shall not be passed on to the beneficiaries.	Regulation 45.3 of Draft Regulation 2019-24 provides for determination of Input price per metric ton of coal from Integrated mine. If the actual coal production is less than the target, there will be under recovery of Fixed cost of the Integrated mine. Also the GENCO will have to procure coal from the market to meet it generation requirements. DISCOM will have to pay for this additional coal procurement. Therefore, the under recovery of fixed cost of Integrated mine resulting from shortfall in coal production should not be passed on to the DISCOMs. Otherwise this will create additional financial burden for the end users. For purchase of coal from alternative sources by Generating station at higher prices the differential cost (= Cost of coal procured from alternative sources - Input price of coal from Integrated mine) should not be passed on to the beneficiaries. If the actual coal production is higher than the target, the resulting over recovery of fixed cost of Integrated mines shall be passed on to the end users.
13. Page - 33; Regulation : 9(1); 2nd & 3rd proviso Provided further that the generating company or the transmission licensee, as the case may be, shall submit Auditor Certificate and in case of non-availability of Auditor Certificate, a certificate duly signed by an authorised person, not below the level of Director of the company, indicating the capital cost incurred as on the date of commercial operation and the projected additiona capital expenditure for respective years of the tariff period 2019-24; Provided also that where interim tariff of the generating station or unit thereof and the transmission system or element thereof including communication system has been determined based on Management Certificate, the generating company or the transmission company shall submit the Auditor certificate not later than 60 days from date of granting interim tariff	Provided further that the generating company or the transmission licensee, as the case may be, shall submit Auditor Certificate and in case of non-availability of Auditor Certificate, a certificate duly signed by an authorised person, not- below the level of Director of the company, indicating the capital cost incurred as on the date of commercial operation and the projected additional capital expenditure for respective years of the tariff period 2019-24. Provided also that where interim tariff of the generating station or unit- thereof and the transmission system or element thereof including- communication system has been determined based on Management- Certificate, the generating company or the transmission company shall- submit the Auditor certificate not later than 60 days from date of granting- interim tariff.	Consumers will be paying all cost passed by CERC where certification by Auditor is provided by the GENCO or TRANSCO. For new project, if cost & time over run is there from DPR approved by CEA, conditions laid down by CEA during approval of project & provisions of regulation shall have to be complied. In case of Cost & Time over run, views of beneficiary should be considered for approval of the revised project cost. Petition has already been filed by WBSEDCL before APTEL (Appeal No: 212 & 202 of 2015) in the same matter of time and cost over run in respect of TLDP III and the matter is sub judice. The same mechanism may be adopted for approval of capital cost of thermal generating stations as well.

Chief Engineer (Regulation) Regulation Department WBSEDCL

.......

Draft Regulation	Proposed Options for Regulatory Framework	Rational/Comments of WBSEDCL
14. Page - 71; Regulation : 33 (3) The salvage value of the asset shall be considered as 5% and depreciation shall be allowed up to maximum of 95% of the capital cost of the asset	The salvage value of the asset shall be considered <u>as</u> 10% <u>and depreciation shall</u> <u>be allowed up to maximum of</u> 90% of the capital cost of the asset	In reference to para 5.5.1. of the Explanatory memorandum, the Commission is of the view of reducing the salvage value of the assets from 10% to 5% in line with provisions of Companies Act 2013. Whereas, in previous Tariff Regulation (2014-19) salvage value was 10% in spite of such provisions of the Companies Act. The justification provided seems insufficient for reduction of salvage value to 5%. Furthermore, such reduction of salvage value will put additional burden on the DISCOM and the end consumers, which is not acceptable. Hence DISCOM is of the view that the existing regulatory provision of 10% salvage value should continue.
15. Page - 76; Regulation : 35 (1)(1) Operation and Maintenance Expenses: Provided that where the date of commercial operation of any additional unit(s) of a generating station after first four units occurs on or after 1.4.2019, the O&M expenses of such additional unit(s) shall be admissible at 90% of the operation and maintenance expenses as specified above; 	Provided that where the date of commercial operation of any additional unit(s) of a generating station after first four units occurs on or after 1.4.2019, the O&M expenses of such additional unit(s) shall be admissible at <u>90%, 85% and</u> <u>80%</u> of the operation and maintenance expenses as specified above <u>depending on size of units</u>	In the Tariff Regulations 2014-19, the norms for O&M expenses for additional units are more stringent through provisions of different multiplication factor(s) namely 90% & 85%. However, in these draft regulations the norms have been clearly relaxed by providing single multiplication factor of 90%. Explanatory memorandum does not provide any justification for the same. With the advent of Technology, new generating units should operate in a more efficient manner with optimized O&M costs. In view of this, the O&M cost norms for the additional units should not be relaxed. Para 21.5 of the Consultation Paper suggested rationalization of O&M expense of the additional units by applying multiplying factor of 0.90, 0.80, 0.85. Therefore the view of DISCOMs is that these multiplication factor as suggested by the Consultation Paper should be incorporated.
16. Page - 78; Regulation : 35 (1)(6) The Water Charges, Security Expenses and Capital Spares for thermal generating stations shall be allowed separately prudence check: Provided petition: Provided further that the generating station shall submit the assessment of the security requirement and estimated expenses;. Provided consumption of stores and spares and renovation and modernization.	The Water Charges, Security Expenses and Capital Spares for thermal generating stations shall be allowed separately prudence check: Provided petition: Provided further that the generating station shall submit the assessment of the security requirement and estimated expenses;. Provided consumption of stores and spares and renovation and modernization. At the end of MYT period, any excess amount paid by the beneficiaries based on O&M norms should be returned to them to reduce their burden.	Security Expenses and Capital Spares must be kept within O&M norms as it is in provisions of Tariff Regulations 2009-14. Separate treatment of such costs will bring uncertainty on overall O&M expenses. If such expenses i.e. security expense and capital spares are not controlled, then due to such bifurcation, additional burden will be passed on to the consumers of DBCOM. Also, at the end of MYT period, any excess amount paid by the consumers of Discom based on O&M norms should be reimbursed to reduce the burden. In addition, the Explanatory memorandum and the Consultation paper both has not provided any details on such matter.
17. Page - 80; Regulation : 35 (2 (C) The Security Expenses and Capital Spares for hydro generating stations shall be allowed separately after prudence check: Provided further that the generating station shall submit the assessment of the security requirement and estimated expenses at the time, the details of year wise actual capital spares consumed at the time of truing up with appropriate justification.	The Security Expenses and Capital Spares for hydro generating stations shall be allowed separately after prudence check: Provided further that the generating station shall submit the assessment of the security requirement and estimated expenses at the time, the details of year wise actual capital spares consumed at the time of truing up with appropriate justification. At the end of MYT period, any excess amount paid by the beneficiaries based on O&M norms should be returned to them to reduce their burden.	Security Expenses and Capital Spares must be kept within O&M norms as it is in provisions of Tariff Regulations 2009-14. Separate treatment of such costs will bring uncertainty on overall O&M expenses. If such expenses i.e. security expense and capital spares are not controlled, then due to such bifurcation, additional burden will be passed on to the consumers of DBCOM. Also, at the end of MYT period, any excess amount paid by the consumers of Discom based on O&M norms should be reimbursed to reduce the burden. In addition, the Explanatory memorandum and the Consultation paper both has not provided any details on such matter.

Chief Engineer (Regulation) Regulation Department WBSEDCL

Draft Regulation	Proposed Options for Regulatory Framework	Rational/Comments of WBSEDCL
18. Page - 83; Regulation : 35 (4)(C) The Security Expenses, Capital Spares and Self insurance reserve for transmission system and associated communication system shall be allowed separately after prudence check: Provided that the transmission licensee shall submit the assessment of the security requirement and estimated expenses, the details of year wise actual capital spares consumed and details of self insurance expenditure at the time of truing up with appropriate justification.	The Security Expenses, Capital Spares and Self insurance reserve for transmission system and associated communication system shall be allowed separately after prudence check: Provided that the transmission licensee shall submit the assessment of the security requirement and estimated expenses, the details of year wise actual capital spares consumed and details of self insurance expenditure at the time of truing up with appropriate justification. At the end of MYT period, any excess amount paid by the beneficiaries based on O&M norms should be returned to them to reduce their burden.	Security Expenses, Capital Spares and Self insurance must be kept within O&M norms as it is in provisions of Tariff Regulations 2009-14. Separate treatment of such costs will bring uncertainty on overall O&M expenses. If such expenses i.e. security expense and capital spares are not controlled, then due to such bifurcation, additional burden will be passed on to the consumers of DSCOM. Also, at the end of MYT period, any excess amount paid by the consumers of Discom based on O&M norms should be reimbursed to reduce the burden. In addition, the Explanatory memorandum and the Consultation paper both has not provided any details on such matter.
19. Page - 79; Regulation : 35 (2)(a) Hydro Generating Station: a) Following operations and maintenance expense norms shall be applicable for hydro generating stations which have been operational for three or more years as on 01.04.2019 subject to maximum of 4% of admitted capital cost as on commercial date of the respective year:	Hydro Generating Station: a) Following operations and maintenance expense norms shall be applicable for hydro generating stations which have been operational for three or more years as on 01.04.2019 subject to <u>maximum of 2% of capital cost as per approved</u> <u>DPR</u>	The effect of development of road-infrastructure undertaken under different Govt schemes & effect of modernisation and energy conservation has not been taken into account. O&M expense norms for Hydro Generating stations was raised from 2% to 4% of admitted capital cost for <200 MW Hydro Power plant in previous Tariff Regulation. Such O&M norms percentage has neither been reduced nor any trajectory has been given. Further some Hydro projects (i.e. TLDP III & IV) are well connected by NH with two major city i.e. Siliguri & Kalimpong, where distance is within 30-35 km. Such high O&M norms on project cost for such projects as given in the draft regulation is not acceptable. The proposed Draft Regulations has linked the O&M norms with admitted capital costs. In case of Cost over run, the O&M expenses will increase with increase in admitted capital cost; which is not acceptable. Hence CERC should consider for capping of O&M norms of Hydro power power projects at 2% of capital cost as per approved DPR. Accordingly, revised norms for O&M expenses for TLDP-III is proposed and the computation is enclosed as Annexure-B. Further, it is observed that although TLDP-IV is operational, norms for its O&M expenses are not proposed in the Draft Regulations;
20. Page - 79; Regulation : 35 (2)(a)		Annexure-B.
O&M expense norms for TLDP-III (Rs. Lakh): <u>FY20</u> : 7534.28; <u>FY21</u> : 7891.26; <u>FY22</u> : 8265.16; <u>FY23</u> : 8656.77; <u>FY24</u> : 9066.93	Proposed O&M expense norms for TLDP-III (Rs. Lakh): FY20: 3049.84; FY21: 3193.19; FY22: 3343.27; FY23: 3500.40; FY24: 3664.92 Proposed O&M expense norms for TLDP-IV (Rs. Lakh): FY20: 3828.93; FY21: 4008.88; FY22: 4197.30; FY23: 4394.58; FY24: 4601.12	In the future, norms for O&M expenses should be specified in Rs. lakh/MW in the manner similar to thermal generating stations instead of linking it to project cost, as project cost overrun will have an undue adverse impact on the O&M expenses. Para 14.6.2, 14.7.1 and 15.5.13 of the Explanatory Memorandum mentions yearly escalation rate of 3.2%, 4.7% and 3.2% for O&M expenses of Thermal, Hydro power plants and transmission projects respectively. It is observed from the explanatory memorandum that the CPI:WPI ratio for computing such escalation rate are considered 40:60 for thermal power plants & transmission projects and 75:25 for hydro power plants. DISCOM's view is that, for computation of O&M norms of Hydro projects, philosophy should be the same as thermal and transmission projects. Further, the O&M activities of Hydro Projects are much less than thermal power station, hence the escalation rate of O&M expense for hydro projects should be considered lower than that of thermal projects.

Sudipte Muskopadky Chief Engineer (Regulation) Regulation Department WBSEDCL

Draft Regulation	Proposed Options for Regulatory Framework	Rational/Comments of WBSEDCL
21. Page - 130; Regulation - 60(4)		WBSEDCL vide Petition no. 221/MP/2018, 222/MP/2018, 223/MP/2018, 316/MP/2018 and 330/MP/2018 has already contested the claim of NHPC regarding shortfall of generation compared to design energy related to TLDP-III and IV as it is clear that reasons for shortfall of
Downward revision of NPAF of TLDP -III from 85% to		generation were not beyond the control of NHPC. NHPC has not taken up the reinforcement work as per approved DPR.
78%.		This matter is sub judice with CERC. DISCOM's view is that the normative PAF of TLDP -III should be revised upward in a manner similar to Teesta V which is located upstream to TLDP - III on the same Teesta river.
22. Page - 100; Regulation 51(7)		
In addition to the capacity charge, an incentive shall be payable to a generating station or unit thereof @ 65 paise / kWh for ex-bus scheduled energy during Peak period and @ 50 paise / kWh for ex-bus scheduled energy during Off- Peak period in Regulation 59 (B) of these regulations	In addition to the capacity charge, an incentive shall be payable to a generating station or unit thereof @ 65 paise / kWh for ex-bus scheduled energy during Peak period and @ 35 paise / kWh for ex-bus scheduled energy during Off-Peak period in Regulation 59 (B) of these regulations	Since PLF incentive for ex-bus scheduled energy during Peak period has been increased, the same during Off Peak period should also be reduced by equal amount. Otherwise the overall financial impact on the end users will increase.
23. Page - 118; Regulation 59(A)	Normative Quarterly Plant Availability Factor (NQPAF)	
Normative Quarterly Plant Availability Factor (NQPAF) (a) For all thermal generating stations, except those covered under Regulation s (b), (c), (d), & (e) - 83% Provided that for the purpose of computation of Normative Quarterly Plant Availability Factor, annual scheduled plant maintenance shall not be considered.	 (a) For all thermal generating stations, except those covered under Regulation s (b), (c), (d), & (e) - 83%-(To be escalated above 85% based on hours lost due to scheduled plant maintenance) Provided that for the purpose of computation of Normative Quarterly Plant Availability Factor, annual scheduled plant maintenance shall not be considered. 	Since Scheduled plant maintenance is not being considered for computation of the NQPAF, such NQPAF should be escalated above 85% (which was the Normative PAF as per Tariff Regulations 2014-19) to the extent of the hours lost due to scheduled plant maintenance.
24. Page - 123; Regulation 59 (C)(B)(i)		The heat rate multiplication factor as per Tariff Regulations 2009-14 was 1.065, which was tightened to 1.045 vide Tariff Regulations 2014-19.
59(C)Gross Station Heat Rate: (b) New Thermal Generating Station achieving COD on or after 1.4.2009: (i) For Coal-based and lignite-fired Thermal Generating Stations: <u>1.05</u> X Design Heat Rate (kCal/kWh)	59(C)Gross Station Heat Rate: (b) New Thermal Generating Station achieving COD on or after 1.4.2019 : (i) For Coal-based and lignite-fired Thermal Generating Stations: 1.045 X Design Heat Rate (kCal/kWh)	Further increase of the said factor to 1.05 is not acceptable in view of improved operational efficiency resulting from technological advent and modernisation. Further, while setting the norm of 1.05, the Explanatory Memorandum has only considered seven (7) selected 500 MW thermal generating units. CERC should refer to heat rate margins of the leading government and private generating units of different size and vintage, and also should study globally acceptable standards and internal benchmarks. Appropriate norm should be specified only after considering all these aspects. Till then, the norm as per Tariff Regulations 2014-19 should be retained. Further, the draft regulation includes power plants Commissioned on or after 01.04.09, whereas Tariff regulations 2014-19 included plants Commissioned on or after 01.04.2014. So the draft regulations includes more number of plants for which the heat rate multiplication factor is higher. This will increase the energy charge burden on the beneficiaries. Hence, only plants Commissioned on or after 01.04.2019 should be included in this matter.

Suduple Huse hopedby Chief Engineer (Regulation) Regulation Department WBSEDCL

Draft Regulation	Proposed Options for Regulatory Framework	Rational/Comments of WBSEDCL
25. Page - 31; Regulation : 8 (6) Tariff of generating station using coal washery rejects	Tariff of generating station using coal washery rejects developed by Central or State PSUs or Joint Venture between a Government Company and Company other than the Government Company shall be determined in accordance with	
developed by Central or State PSUs or Joint Venture between a Government Company and Company other than the Government Company shall be determined in accordance with these regulations Provided further that the variable component of the tariff of such generating station or unit thereof shall be determined based on the fixed cost and the variable cost of the coal washery project Provided also that the Gross Calorific Value of coal rejects shall be as measured jointly by the generating company and the beneficiaries in a mutually agreed manner.	Provided further that the variable component of the tariff of such generating station or unit thereof shall be determined based on the fixed cost and the variable cost of the coal washery project Provided also that the Gross Calorific Value of coal rejects shall be as measured jointly by the generating company and the beneficiaries in a mutually agreed manner. <u>Provided further that CERC shall specify methodology for certification of</u> <u>GCV, determination of price of coal washery rejects, and shall also specify</u> <u>norms for SHR & Specific coal consumption of Generating station using coal</u> <u>washery rejects.</u>	The Draft Regulation 2019-24 & its Explanatory Memorandum is silent about methodologies for certification of GCV and determination of price of coal washery rejects, and norms for SHR and specific coal consumption of Generating Stations using coal washery rejects as primary fuel. CERC should address the issues first through Draft Regulations, then only comments/views can be provided on the same. The Regulations regarding this matter should be finalised only after that.
26. Page - 88; Regulation -42B		the second s
Operation and Maintenance Expenses : The Operation and Maintenance expenses of mine shall be determined based on the original project cost for first year and thereafter, it shall be escalated at the average rate of wholesale price index (WPI) for each financial year.	Operation and Maintenance Expenses : The Operation and Maintenance expenses of mine for first year shall be determined based on the original project cost <u>as per approved DPR</u> , and thereafter it shall be escalated at the average rate of wholesale price index (WPI) for each financial year.	If the O&M expenses of integrated mine are determined based on actual project cost, then any escalation of project cost will result in escalation of O&M expenses. This will then create unnecessary financial burden on the end users. In consideration of this, to promote efficiency in mine project implementation and reduce unnecessary buden on the beneficiaries, O&M expenses of integrated mine should be determined based on project cost as per approved DPR.
27. Page - 36; Regulation - 10(9)		
Where the capital cost considered in tariff by the Commission on the basis of projected additional capital expenditure falls short of the actual additional capital expenditure incurred by more than 10% on year to year basis, the generating company or the transmission licensee shall recover from the beneficiaries or the long term customers as the case may be, the shortfall in tariff corresponding to difference in additional capital expenditure, as approved by the Commission, along with interest at the bank rate as prevalent on 1st April of the respective year.	Where the capital cost considered in tariff by the Commission on the basis of projected additional capital expenditure falls short of the actual additional capital expenditure incurred by more than 10% on year to year basis, the generating company or the transmission licensee shall recover from the beneficiaries or the long term customers as the case may be, the shortfall in tariff corresponding to difference in additional capital expenditure, as approved by the Commission, along with interest at 0.80 times the bank rate as prevalent on 1st April of the respective year.	The tariff regulations 2014-19 provided for an interest rate of 0.80 times bank rate for recovery of the shortfall amount of additional CAPEX from the beneficiaries. Any increase of the interest rate will create additional financial burden on the consumers. In view of this, the interest rate in this regard should be kept unchanged as per Tariff Regulations 2014-19. Further, no explanation has been provided in the Consultation paper & Explanatory Memorandum on this matter.

Chief Engineer (Regulation), Regulation Department WBSEDCL

Draft Regulation	Proposed Options for Regulatory Framework	Rational/Comments of WBSEDCL
28. Page - 62; Regulation : 28 Special provision for thermal generating station which have completed 25 years of operation from commercial operation date: (1) In respect of a thermal generating station that has completed 25 years of operation from the date of commercial operation, the generating company and the beneficiary may agree on an arrangement where the total cost inclusive of the fixed cost and the variable cost for the generating station as determined under these regulations, shall be payable on scheduled generation instead of the pre-existing arrangement of separate payment of fixed cost based on availability and energy charge based on schedule	Provision may be deleted.	Neither the Consultation paper nor the Explanatory Memorandum provides adequate justification for introduction of this new provision. DISCOM's view is that Merit order despatch (MOD) should continue based on variable cost for purchase of power by DISCOM. Consumer will be more benefited on account of reduction of fixed cost in case of power received as per MOD from existing thermal generator company on completion of life. In view of the above the new provision may be omitted.
 29. Page - 25 & 26; Regulation : 6 (1) & 6(2) Treatment of mismatch in date of commercial operation: 1) In case of mismatch of the date of commercial operation of the generating station and the transmission system, the treatment of the transmission charges shall be determined as under 2) In case of mismatch of the date of commercial operation of the transmission system and the transmission system of other transmission licensee, the treatment of the transmission licensee, the treatment of the transmission charges shall be determined as under 	Treatment of mismatch in date of commercial operation: 1) In case of mismatch of the date of commercial operation of the generating station and the transmission system, the treatment of the transmission charges shall be determined as under 2) In case of mismatch of the date of commercial operation of the transmission system and the transmission system of other transmission licensee, the treatment of the transmission charges shall be determined as under Any transmission charge paid by GENCO or TRANSCO (as the case may be), due to mismatch of COD shall not be passed on to the beneficiaries	For any mismatch in date of commercial operations of Generation Project or Transmission projects; if any transmission charge is being paid by GENCO or TRANSCO, DISCOMs must not be burdened with any such charges due to the stated mismatch. Consumer shall not take any burden of such cost.

Chief Engineer (Regulation) Regulation Department WBSEDCL

Draft Regulation	Proposed Options for Regulatory Framework	Rational/Comments of WBSEDCL
30. Page - 143; Regulation - 72	Sharing of Non-Tariff Income: The non-tariff income in case of generating station and transmission system on account of following shall be shared in the	
Sharing of Non-Tariff Income: The non-tariff income in case of generating station and transmission system on account of following shall be shared in the ratio of 50:50 with the beneficiaries and the long term customer on annual basis: a) Income from rent of land or buildings; b) Income from sale of scrap; c) Income from statutory investments; d) Interest on advances to suppliers or contractors; e) Rental from staff quarters; f) Rental from contractors; g) Income from advertisements; h) Interest on investments and bank balances; Provided that the interest or dividend earned from investments made out of Return on Equity corresponding to the regulated business of the Generating Company shall not be included in Non-Tariff Income.	station and transmission system on account of following shall be shared in the ratio of 50:50 with the beneficiaries and the long term customer on annual basis.shall be deducted while determining its Annual Fixed Charge: a) Income from rent of land or buildings; b) Income from sale of scrap; c) Income from statutory investments; d) Interest on advances to suppliers or contractors; e) Rental from staff quarters; f) Rental from contractors; g) Income from advertisements; h) Interest on investments and bank balances; i) Income from sale of by-products & rejects resulting from generation of electricity; j) Income from hire charges from contactors and others ; k) Income from sale of tender documents ; l) Any other non-tariff income incidental to Generation or Transmission business Provided that the interest or dividend earned from investments made out of Return on Equity corresponding to the regulated business of the Generating Company shall not be included in Non-Tariff Income.	 Non Tariff income for GENCO and TRANSCO is an additional source of revenue and it is incidental to electricity business. Such income helps in partial recovery of the costs. Therefore, such income should be deducted from the Gross ARR to determine the net revenue recoverable from the beneficiaries. The list of Non Tariff income should also include income from sale of by-products & rejects resulting from generation of electricity (like fly- ash, coal rejects, rejects from FGD system etc.), Income from hire charges from contactors and others, Income from sale of tender documents
31. Page - 143; Regulation - 71		
Sharing of saving in interest due to re-financing : If re- financing of loan by the generating company or the transmission licensee, as the case may be, results in net savings on interest and in that event the costs associated with such re-financing shall be borne by the beneficiaries and the net savings shall be shared between the beneficiaries and the generating company or the transmission licensee, as the case may be, in the ratio of 50:50.	Sharing of saving in interest due to re-financing: If re-financing of loan by the generating company or the transmission licensee, as the case may be, results in net savings on interest and in that event the costs associated with such re-financing shall be borne by the beneficiaries and the net savings shall be shared between the beneficiaries and the generating company or the transmission licensee, as the case may be, in the ratio of 50:50. <u>2:1</u>	The tariff regulations 2014-19 provided for sharing of benefits due to refinancing of loan between beneficiary and GENCO or TRANSCO at 2:1. The Consultation paper did not mention about any change in the ratio. The Explanatory memorandum does not provide sufficient explanation on changing the ratio. Therefore the earlier provision as per Tariff Regulation 2014-19 should be retained because this will have more beneficial impoct on the consumer
32. Page -115/116; Regulation - 56(2)/56(4)		The Commission should specify the methodology for computation of actual availability factor of the communication system. The Commission
Normative Availability of Communication System (NACF)		should also specify how such actual availability factor data will be shared with the beneficiaries. These are important as these will ensure clarity and transparency from the point of view of billing and payments by the TRANSCO to the beneficiaries.

Chief Engineer (Regulation) Regulation Department WBSEDCL

Draft Regulation	Proposed Options for Regulatory Framework	Rational/Comments of WBSEDCL
 33. Page - 43; Regulation : 17(2) (2) The generating company or the transmission licensee shall submit the resolution of the Board of the company or approval of the competent authority in other cases regarding infusion of funds from internal resources in support of the utilization made or proposed to be made to meet the capital expenditure of the generating station or the transmission system including communication system, 	The generating company or the transmission licensee shall submit the resolution of the Board of the company or approval of the competent authority in other cases from Cabinet Committee on Economic Affairs (CCEA) regarding infusion of fund from internal resources in support of the utilization made or proposed to be made to meet the capital expenditure of the generating station or the transmission system including communication system, as the case may be	Neither the Consultation paper nor the Explanatory memorandum provides proper explanation /definition of competent authority. Hence the provisions of Tariff Regulations 2014-19 should be retained. Otherwise such equity infusion will create additional burden on consumers in form of ROE.
as the case may be		

Chief Engineer (Regulation) Regulation Department WBSEDCL

and a summer of the second

The below table was submitted as part of Comments on draft CERC (Terms and Condition of Tariff) Regulations, 2019. Ref: Discussion held at the ERPC meeting on 12.03.2018. (*Memo No-REG/Legal/CERC/64*) (Dated: 22/03/2018)

	Sample list of therma	al plants running after co	ompletion of 25 yrs		
Sr. No.	Plant name	State	Utility	Capacity	Month of
1	Bhusawal TPS, Unit - 2	Maharashtra	MahaGenco	210	Commissioning
2	Bhusawal TPS, Unit - 3	Maharashtra	MahaGenco	210	May-82
3	Chandrapur TPS Maha, Stage -1, Unit -1	Maharashtra	MahaGenco	210	Apr-83
4	Chandrapur TPS Maha, Stage -1, Unit - 2	Maharashtra	MahaGenco	210	May-84
5	Chandrapur TPS Maha, Stage -1, Unit - 3	Maharashtra	MahaGenco	210	lun-85
6	Chandrapur TPS Maha, Stage -1, Unit -4	Maharashtra	MahaGenco	210	Jul-86
7	HasdeoTPS, Korba West, Unit -1	Chhattisgarh	CSPGCL	210	lun-83
8	Hasdeo TPS, Korba West, Unit - 2	Chhattisgarh	CSPGCL	210	Mar-84
9	Hasdeo TPS, Korba West, Unit - 3	Chhattisgarh	CSPGCL	210	Mar-85
10	Hasdeo TPS, Korba West, Unit - 4	Chhattisgarh	CSPGCL	210	Mar-86
11	Koradi TPS, Unit - 5	Maharashtra	MahaGenco	200	Apr-78
12	Koradi TPS, Unit - 7	Maharashtra	MahaGenco	210	lun-83
13	Nasik TPS, Unit - 3	Maharashtra	MahaGenco	210	Apr-79
14	Nasik TPS, Unit-4	Maharashtra	MahaGenco	210	May-80
15	Nasik TPS, Unit-5	Maharashtra	MahaGenco	210	lul-81
16	Parli TPS, Unit-3	Maharashtra	MahaGenco	210	Sen-80
17	Parli TPS, Unit-4	Maharashtra	MahaGenco	210	Mar-85
18	RaichurTPS, Unit -1	Karnataka	KPCL	210	Apr-85
19	RaichurTPS, Unit - 2	Karnataka	KPCL	210	May-86
20	RoparTPS, Unit -1	Punjab	PSPCL	210	Apr-84
21	RoparTPS, Unit - 2	Punjab	PSPCL	210	May-85
22	Satpura, Stage - 2, Unit - 6	Madhya Pradesh	MPPGCL	200	Apr-78
23	Satpura, Stage - 2, Unit - 7	Madhya Pradesh	MPPGCL	210	May-79
24	Satpura, Stage - 3, Unit - 8	Madhya Pradesh	MPPGCL	210	Jun-82
25	Satpura, Stage - 3, Unit - 9	Madhya Pradesh	MPPGCL	210	Apr-83
26	Tuticorin TPS/Thoothukudi TPS (TTPS), Unit -1	Tamil Nadu	TANGEDCO	210	Apr-77
27	Tuticorin TPS/Thoothukudi TPS (TTPS), Unit - 2	Tamil Nadu	TANGEDCO	210	May-79
28	Tuticorin TPS/Thoothukudi TPS (TTPS), Unit - 3	Tamil Nadu	TANGEDCO	210	Jun-81
29	Ukai Thermal Power Station, Stage 1, Unit - 3	Gujarat	GSECL	200	Apr-79
30	Ukai Thermal Power Station, Stage 1, Unit - 4	Gujarat	GSECL	200	Dec-79
31	Ukai Thermal Power Station, Stage 1, Unit - 5	Gujarat	GSECL	210	Jan-85
32	Wanakbori Thermal Power Station, Unit -1	Gujarat	GSECL	210	Apr-82
33	Wanakbori Thermal Power Station, Unit - 2	Gujarat	GSECL	210	May-83
34	Wanakbori Thermal Power Station, Unit - 3	Gujarat	GSECL	210	Jun-84
35	Wanakbori Thermal Power Station, Unit - 4	Gujarat	GSECL	210	Apr-86
36	Wanakbori Thermal Power Station, Unit - 5	Gujarat	GSECL	210	Dec-86
37	BokaroTPS B, Unit -1	Jharkhand	DVC	210	Apr-86
38	Korba STPP, Stage -1, Unit - 2	Chhattisgarh	NTPC	200	Oct-83
39	Korba STPP, Stage -1, Unit - 3	Chhattisgarh	NTPC	200	Mar-84
40	Neyveli TPS - 2, Stage 1, Unit - 3	Tamil Nadu	NLC	210	Mar-86
41	Ramagundam, Stage -1, Unit - 2	Andhra Pradesh	NTPC	200	Sep-84
42	Ramagundam, Stage -1, Unit - 3	Andhra Pradesh	NTPC	200	Dec-84
43	Singrauli Thermal Power Station, Unit - 3	Uttar Pradesh	NTPC	200	Mar-83
44	Singrauli Thermal Power Station, Unit - 4	Uttar Pradesh	NTPC	200	Nov-83
45	Singrauli Thermal Power Station, Unit - 5	Uttar Pradesh	NTPC	200	Feb-84
46	Singrauli Thermal Power Station,	Uttar Pradesh	NTPC	500	Dec-86

Seitigt Muchopadby

Chief Engineer (Regulation) Regulation Department WBSEDCL

Sample list of hydro plants running after completion of 35 yrs							
Sr. No.	Plant name	State	Utility	Capacity	Year of		
					Commissioning		
1	BHAKRA LEFT	Himachal Pradesh	Bhakra Beas Management Board (BBMB)	540	1960-1961		
2	BHAKRA RIGHT	Himachal Pradesh	Bhakra Beas Management Board (BBMB)	785	1966-1968		
3	DEHAR	Himachal Pradesh	Bhakra Beas Management Board (BBMB)	990	1977-1983		
4	PONG	Himachal Pradesh	Bhakra Beas Management Board (BBMB)	396	1978-1983		
5	GANGUWAL	Punjab	Bhakra Beas Management Board (BBMB)	77.65	1955-1962		
6	KOTLA	Punjab	Bhakra Beas Management Board (BBMB)	77.65	1956-1961		
7	BAIRA SIUL	Himachal Pradesh	NHPC	180	1980-1981		
8	GIRI BATA	Himachal Pradesh	HPSEBL	60	1978		
9	LOWER JHELUM	J&K	JKSPDC	105	1978-1979		
10	MUKERIAN -1	Punjab	PSPCL	45	1983		
11	SHANAN	Punjab	PSPCL	110.00 -	1932-1982		
				(1 10.00 -			
				(1/20)+			
12	JAWAHAR SAGAR	Rajasthan	RRVUNL	(4/15)	1972-1973		
13	R P SAGAR	Rajasthan	RRVUNL	172	1968		
14	CHIBRO (YAMUNA)	Uttarakhand	UJVNL	240	1975-1976		
15	CHILLA	Uttarakhand	UJVNL	144	1980-1981		
16	DHAKRANI	Uttarakhand	UJVNL	33.75	1965-1970		
17	DHALIPUR	Uttarakhand	UJVNL	51	1965-1970		
18	КНАТІМА	Uttarakhand	UJVNL	41.4	1955-1956		
19	KHODRI	Uttarakhand	UJVNL	120	1993-1950		
20	KULHAL	Uttarakhand	UJVNL	30	1975		
21	RAMGANGA	Uttarakhand	UJVNL	198	1975-1977		
22	MATATILLA	Uttar Pradesh	UPJVNL	30.6	1965		
23	OBRA	Uttar Pradesh	UPJVNI	00	1070 1071		
24	RIHAND	Uttar Pradesh	UPJVNI	300	1970-1971		
25	UKAI	Gujarat	GSECI	300	1901-1905		
26	KOYNA DPH	Maharashtra	MAHAGENCO	36	1974-1976		
27	KOYNA-I&II	Maharashtra	MAHAGENCO	600	1960-1981		
28	KOYNA-III	Maharashtra	MAHAGENCO	320	1902-1907		
29	VAITARNA	Maharashtra	MAHAGENCO	520	1975-1978		
30	GANDHI SAGAR	Madhya Pradesh	MPPGCI	115	1970		
31	Donkarayi Canal HPS	Andhra Pradesh	APGENCO	25	1960-1966		
32	НАМРІ	Andhra Pradesh	APGENCO	25	1983		
33	LOWER SILERU	Andhra Pradesh	APGENCO	460	1930-1904		
34	MACHKUND	Andhra Pradesh	APGENCO	114 75	19/0-19/8		
35	NAGARJUN SGR RBC	Andhra Pradesh	APGENCO	60	1933		
36	SRISAILAM	Andhra Pradesh	APGENCO	770	1983-1990		
37	T B DAM	Andhra Pradesh	APGENCO	110	1982-198/		
38	UPPER SILERU-1	Andhra Pradesh	APGENCO	30	1957-1964		
39	LOKTAK	Manipur	NHPC	120	1967-1968		
			WHEL	105	1983		

Sudop to Muchopaday

Chief Engineer (Regulation) Regulation Department WBSEDCL

Particulars	Unit	TLDP-III	TLDP-IV	Basis
Installed Capacity	MW	132	160	
Capex approved by CEA	Rs. Cr.	768.92	1061.38	
O&M cost for first year	% of approved Capex	2%	2%	As per CERC Tariff Regulations 2009-14
Scheduled Commissioning Date		Mar 2007	Sep 2009	
Yearly escalation:				
Till 2009	%	4.00%		As per CERC Tariff Regulations 2004-09
2009 to 2014	%	5.72%	5.72%	As per CERC Tariff Regulations 2009-14
2014 to 2019	%	6.64%	6.64%	As per CERC Tariff Regulations 2014-19
2019 to 2024	%	4.70%	4.70%	As per CERC Tariff Regulations 2019-24
O&M Expense:				
2007-08	Rs. Lakh	1537.84		
2008-09	Rs. Lakh	1599.35		
2009-10	Rs. Lakh	1690.84	2122.76	
2010-11	Rs. Lakh	1787.55	2244.18	
2011-12	Rs. Lakh	1889.80	2372.55	
2012-13	Rs. Lakh	1997.90	2508.26	
2013-14	Rs. Lakh	2112.18	2651.73	
2014-15	Rs. Lakh	2252.43	2827.81	
2015-16	Rs. Lakh	2401.99	3015.57	
2016-17	Rs. Lakh	2561.48	3215.81	
2017-18	Rs. Lakh	2731.56	3429.34	
2018-19	Rs. Lakh	2912.94	3657.04	
2019-20	Rs. Lakh	3049.84	3828.93	
2020-21	Rs. Lakh	3193.19	4008.88	
2021-22	Rs. Lakh	3343.27	4197.30	
2022-23	Rs. Lakh	3500.40	4394.58	
2023-24	Rs. Lakh	3664.92	4601.12	

Annexure-B - Proposed norms for O&M Expenses for TLDP-III and TLDP-IV

Sudepter Kuchopadly

Chief Engineer (Regulation) Regulation Department WBSEDCL