Comments /Observations of SJVN in Draft CERC (Terms and Conditions of Tariff) Regulations, 2019

Clause No.	Provisions in proposed amendment	SJVN's Suggestion	Remarks
Regulation 6(1)(b)	Where the associated transmission system has not achieved the commercial operation as on the date of commercial operation of the concerned generating station or unit thereof, the transmission licensee shall make alternate arrangement for the evacuation from the generating station at its own cost, failing which, the transmission licensee shall be liable to pay the transmission charges to the generating company at the rate of the applicable transmission charges of the region as determined in accordance with the Sharing Regulations till the transmission system achieves the commercial operation.	This clause may be modified as under: Where the associated transmission system has not achieved the commercial operation as on the date of commercial operation of the concerned generating station or unit thereof, the transmission licensee shall make alternate arrangement for the evacuation of power from the generating station at its own cost, failing which, the transmission licensee shall be liable to pay the Capacity and Energy charges to the generating company or IDC, FC and IEDC till the transmission system achieves the commercial operation for an initial period of six month whichever is earlier.	Penalty on both the parties is related to transmission charges, whereas equal penalty in terms of capacity & energy charges etc., may be liveable on transmission licensee.
Regulation 22 (iv)	Initial spares shall be capitalised as a percentage of the Plant and Machinery cost upto cut-off date, subject to following ceiling norms:	This clause may be modified as under: Initial spares shall be capitalised as a percentage of the Plant and Machinery	• In Hydro Stations, Plant and Machinery cost is approx. 25 % of the total project cost. Therefore, considering

	(c) **Hydro generating stations including pumped storage hydro generating station**- 4 %.	cost upto cut-off date, subject to following ceiling norms: (c) **Hydro generating stations including pumped storage hydro generating station** - may be considered as 6 %. One more category of Hydro Stations may be added for plants affected from High Silt. Initial capital spare of such Hydro generating stations -may be considered as 10 %.	initial spare as 4 % of the plant and machinery cost, will be approx. 1 % of the total capital cost. The ceiling norms of Initial spares on Hydro generating stations is on very lower side. • Some Hydro generating stations are affected by High silt in River. Due to the high silt in the river, under water components damages substantially and requires heavy Annual Maintenance and even replacement every year. Therefore, to reduce the machine down time, more underwater spare parts are required to be purchased by the generating stations to support the Grid. • SJVN one of the Project i.e. RHPS, which is utilising the water of upstream

			Project i.e. NJHPS as its tail race extension, it was envisaged at design stage only, to procure more under water components as mandatory spare and six sets of under water components were ordered in the beginning alongwith Plant and Machinery in RHPS. The total cost of mandatory spares in RHEP is around 17 % of the Plant and machinery. The technical specifications with the six sets of mandatory spares were vetted by CEA after deliberation. • The Hon'ble Commission also recognised this fact by giving 5 % lower NAPAF, especially the Hydro generating stations facing high silt problems.
Add clauses	(1) The capital expenditure, in respect of	Following clauses may be added under	• Various capital expenditure

under Regulation 25	existing generating station or the transmission system including communication system, incurred or projected to be incurred on the following counts beyond the original scope, may be admitted by the Commission, subject to prudence check: (a) Liabilities to meet award of arbitration or for compliance of the order or directions in the order of any statutory authority, or order or decree of any court of law; (b) Change in law or compliance of any existing law; (c) Force Majeure Events; (d) Any capital expenditure to be incurred on account of need for higher security and safety of the plant as advised or directed by appropriate Indian Government Instrumentality or statutory authorities responsible for national or internal security; (e) Deferred works relating to ash pond or ash handling system in additional to the original scope of work, on case to case	Additional Capitalisation beyond Original Scope of Work in line with earlier Tariff Regulation, 2014: a) Any additional capital expenditure which has become necessary for efficient operation of generating station. The claim shall be substantiated with the technical justification duly supported by the documentary evidence. b) In case of hydro generating stations, any expenditure which has become necessary on account of damage caused by natural calamities (but not due to flooding of power house attributable to the negligence of the generating company) and due to geological reasons after adjusting the proceeds from any insurance scheme, and expenditure incurred due to any additional work which has become necessary for successful and efficient plant operation.	are required for efficient operation of plant for existing power stations due to rapid changes in the Technology as well as the requirement of Grid. • In Hydro Generating stations geological surprises/natural calamities can't be ignored. Hence, capital expenditure on such account may be allowed by the Commission under Additional Capitalisation.

	basis; Provided also that if any expenditure has been claimed under Renovation and Modernisation (R&M) or repairs and maintenance under O&M expenses, same expenditure cannot be claimed under this Regulation.		
Regulation 30 (2)(i)	Return on equity in respect of additional capitalization after cut off date within or beyond the original scope shall be computed at the weighted average rate of interest on actual loan portfolio of the generating station or the transmission system.	Return on equity (ROE) in respect of additional capitalization after cut off date within or beyond the original scope may be computed at Debt-Equity Ratio of 70:30. For the equity component, the provision of ROE as per the CERC Regulation should be maintained.	Additional capitalisation after cut off date within or beyond the original scope is generally infused by the generating station from their internal resources. Hence, it may be computed at Debt-Equity Ratio of 70:30.
<u>Add clause under Regulation 30 (2)</u>	In case of a new project, the rate of return shall be reduced by 1.00% for such period as may be decided by the Commission, if the generating station or transmission system is found to be declared under commercial operation without commissioning of any of the Restricted Governor Mode Operation (RGMO) or Free Governor Mode Operation (FGMO),	Downstream Tandem project may get exemption from FGMO/RGMO.	• Downstream project follow the tandem logic and behave in response to the upstream project. Governor Response is also obtained in the downstream project with some time delay.

	data telemetry, communication system up to load dispatch centre or protection system based on the report submitted by the respective RLDC;		
Regulation 35(2) (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. .	This clause may be modified as under: 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. (Similar to the previous Tariff Regulation 2014-19) In case of hydro generating station which have completed a period of three years as on 1.4.2019, operation and maintenance expenses of 2019-20 shall be worked out by applying escalation rate of 6.64% on the applicable operation & maintenance expenses as on 31.3.2019. The operation & maintenance expenses for subsequent years of the tariff period shall be worked out by applying escalation rate of 6.64% per annum.	• Wording "subject to maximum of 4% of admitted capital cost as on commercial date of the respective year" may be deleted. As, this condition may not recover the appropriate operation and maintenance expenses of the plant • O&M charges of NJHPS as proposed by the Commission for Fy 2019-20 to 2023-24 may not be meeting out the expected O&M of NJHPS as following additional factors are also to be considered: **a)** Tariff petition of NJHPS for the period 2014-19 is under consideration before

			the Hon'ble Commission. Due to high silt in river Satluj, more under water components were procured in NJHPS to reduce the down time of machines. These underwater components were capitalised in the petition under additional Capitalisation on account of efficient operation of plant. Order in the petition is reserved by the CERC. In case, some expenditure is not allowed under additional capitalisation then it would require to be covered under O&M expenses. **b)** Pay/wage revision impact of all CPSEs employees have not been finalised till date which was due from 01.01.2017 and therefore total financial implication

			on account of salary/wage revision of employees cannot be determined at this stage. **c)** Insurance cost of Hydro Power plant has been increased many fold due to Uttarakhand disaster as well as previous experiences of flash flood, Lake Formation in the upstream of river Satluj and Flooding of power house of NJHPS. **d)** In view of above, O&M expenses as proposed by the Hon'ble Commission for Fy 2019-20 and further escalated on year to year basis of approx. 4.7 % would not be sufficient to take care the actual O&M expenses to be incurred in the existing plant. **e)** Hence, operation and maintenance expenses of 2019-20 may be worked out

			by applying escalation rate of 6.64% (as allowed in the previous Tariff Regulation) on the applicable operation & maintenance expenses as on 31.3.2019. The operation & maintenance expenses for subsequent years of the tariff period may be worked out by applying escalation rate of 6.64% per annum.
Regulation 35(2) (a)	-	O&M expenses of RHPS is not mentioned in the draft Regulation, whereas it has completed 4 years of its successful operation since December, 2014.	412 MW of Rampur Hydro Power Station (RHPS) as a whole was commissioned on 16.12.2014. The Hon'ble CERC by its order dated 27.01.2015 had approved the O&M of RHPS till 2016-17, which was further extended by the Commission by its order dated 15.02.2017 till the tariff of the generating station for 2014-19 is determined based on the DIA report and the approved RCE. Thus, O&M expenses of RHPS may

			be proposed in the Regulation.
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.	This clause may be modified as under: The Security and Safety 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 and safety 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.	Safety Expenses is very important aspect of the generating station(s). So, it may also be allowed separately by the Commission after its Prudence Check.
Regulation 54(10)	In case the energy charge rate (ECR) for a hydro generating station, computed as per clause (5) of this Regulation exceeds ninety paise per kWh, and the actual saleable energy in a year exceeds { DE x (100 – AUX) x (100 – FEHS) / 10000 } MWh, the Energy charge for the energy in excess of the above shall be billed at ninety paise per kWh only:	This clause may be modified as under: In case the energy charge rate (ECR) for a hydro generating station, computed as per clause (5) of this Regulation exceeds ninety paise per kWh, and the actual saleable energy in a year exceeds { DE x (100 – AUX) x (100 – FEHS) / 10000 } MWh, the	The energy charges for the energy in Excess of Design energy for Hydro station are quite minimal. Since, the marginal cost for hydro generation is negligible, hence these charges should be priced at the average Area Clearing Price discovered in the Day ahead market segment of the

<table>
<tr>
<td></td>
<td></td>
<td>Energy charge for the energy in excess of the above shall be billed at the average Area Clearing Price discovered in the Day ahead market segment of the Power Exchanges only:</td>
<td>Power Exchanges. Further, a part of it can go into a hydro development fund for new assets.</td>
</tr>
<tr>
<td>Regulation 60 (4)</td>
<td>Normative annual plant availability factor (NAPAF) of the hydro generating stations already in operation</td>
<td>Normative annual plant availability factor (NAPAF) of the hydro generating stations already in operation- One more hydro generating station NAPAF is required to be added.
<table>
<tr><th>Station</th><th>Type of Plant</th><th>Plant Capacity (No. of Units X MW)</th><th>NAPAF (%)</th></tr>
<tr><td>Rampur</td><td>Pondage</td><td>6X68.67</td><td>82</td></tr>
</table>
</td>
<td>412 MW of Rampur Hydro Power Station (RHPS) as a whole was commissioned on 16.12.2014. The Hon’ble CERC by its order dtd. 27.01.2015 had approved the NAPAF of RHPS as 82 % for an initial period of 2 years, which was further extended by the Commission by its order dated 15.02.2017 till the tariff of the generating station for 2014-19 is determined based on the DIA report and the approved RCE. Hence, NAPAF for RHPS may be considered as 82 % for the period 2019-24.</td>
</tr>
</table>

Add Clause under Regulation 60	Norms of operation of Hydro Generating Station.	One more category of Type of Hydro Power station i.e. "**ROR with Pondage and running in tandem with upstream project**" may be added and NAPAF of such hydro generating stations may be find out separately by the Hon'ble Commission.	• 1500 MW of NJHPS is ROR with Pondage project. • 412 MW of RHPS is a tail race extension of NJHPS and is being operated in tandem with upstream project NJHPS. • The discharge released from Jhakri power house is being utilized by RHPS in steady state running conditions avoiding any spilling of water at Jhakri. • RHEP unit shall be tripped as soon as tripping of NJHPS unit is detected to avoid air entry into HRT of RHEP. Thus units of RHEP cannot be operative, when NJHPS is under shut down due to Forced Outage, Planned Outage and Miscellaneous Outage. • Peaking of NJHPS will be the peaking for RHEP.

			• As the operation of downstream project is dependent on upstream project, hence plant availability parameters of such downstream plant may be defined separately by adding one more category.
Regulation 69	**Late payment surcharge:** In case the payment of any bill for charges payable under these regulations is delayed by a beneficiary or long term transmission customers as the case may be, beyond a period of 45 days from the date of billing, a late payment surcharge at the rate of 1.25% per month shall be levied by the generating company or the transmission licensee, as the case may be.	This clause may be modified as under: **Late payment surcharge:** In case the payment of any bill for charges payable under these regulations is delayed by a beneficiary or long term transmission customers as the case may be, beyond a period of 45 days from the date of billing up to 60 days, a late payment surcharge at the rate of 1.25% per month shall be levied by the generating company or the transmission licensee, as the case may be. Further, In case the payment of any bill for charges payable under these	Late Payment Surcharge is penalty on account of delay in payment by a beneficiary beyond a period of 45 days from the date of billing. In the previous Tariff Regulation, this penalty was 1.5 % per month. Even then, beneficiaries were defaulting regularly for making the payment. Reduction in rate of Late Payment surcharge would increase more default. This would disturb the financial health of generating

		regulations is delayed by a beneficiary or long term transmission customers as the case may be, beyond a period of 60 days from the date of billing, a late payment surcharge at the rate of 1.50 % per month shall be levied by the generating company or the transmission licensee, as the case may be.	company to fulfil the future obligation.
Regulation 70(2)	Provided that in case of hydro generating stations, the net gain on account of Actual Auxiliary Energy Consumption being less than the Normative Auxiliary Energy Consumption, shall be computed as per following formulae provided the saleable scheduled generation is more than the saleable design energy and shall be shared in the ratio of 50:50 between generating station and beneficiaries	This clause may be modified as under: Provided that in case of hydro generating stations, the net gain on account of Actual Auxiliary Energy Consumption being less than the Normative Auxiliary Energy Consumption, shall be computed as per following formulae provided the saleable scheduled generation is more than the saleable design energy and shall be shared in the ratio of 60:40 between generating station and beneficiaries.	There must be some extra incentive exclusively to the Generating Station in terms of percentage sharing to reduce the Auxiliary Energy Consumption. Hence, the ratio 60:40 as per Tariff Regulations 2014-19 may please be maintained for 2019-24.
Regulation 72	The non-tariff income in case of generating station and transmission	This Regulation may please be withdrawn.	

	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		
Add Clause			• The Hon'ble Commission introduced the differential rates of Capacity Charge for Peak period of the month and Capacity Charge for Off-Peak period of the month for better management of load under Regulation 51(1) for **Thermal Generating Station.** • As defined under

			Regulation 51(2), Capacity Charge rate for Peak hours shall be 25% more than that of Off-Peak hours. • Under 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 corresponding to scheduled generation in excess of ex-bus energy corresponding to Normative Quarterly Plant Load Factor (NQPLF) as specified in Regulation 59 (B) of these regulations.

			• Similar concept can be introduced in case of Hydro Power Stations providing peaking support to the Grid in terms of incentive. Hydro stations giving higher Declared Capacity during peak hrs. as per the requirement of Grid may get some incentive in terms of percentage (%) of AFC on monthly basis or incentive in terms of percentage of ECR per kWh.