# Summary of the comments and suggestions received on Approach Paper on Terms and Conditions of Tariff Regulations for the tariff period 1.4.2014 to 31.3.2019

(Ref No. 20/2013/CERC/Fin(Vol-I)/Tariff Reg/CERC Date: 25th June'2013)

### 5.3 Operational Norms for Hydro Station

The Comments are invited in regard to following issue, namely

Comments are invited on the need to review the existing approach for operational norms for further improvement and Normative Annual Plant Availability Factor (NAPAF).

### **Comments/Suggestions:**

Sr. No.	Name of organization/ stakeholder	Comments/ Suggestions			
A)		Cs/SERCs/Other Commissions)			
A.1	Chhattisgarh State Electricity Regulatory Commission (CSERC)	For existing plants, the existing method based on the design energy may be continued.			
B) Government Departments					
B.1	Government of Punjab, Dept. of Power	CERC may continue with the NAPAF values fixed by it in the tariff regulation 2009-14.			
B.3	Govt. of Tripura, Dept. of Power	The existing approach of 50:50 for sharing of capacity charge and energy charge may be good for the old project commissioned before 2014 however 2 <sup>nd</sup> approach of 60:40 for capacity and energy charges would be suitable for projects commissioned on or after 2014.			
C) Cen	C) Central Sector (Generators/Transmission Cos./ NLDCs/RLDCs)				
C.1	Tehri Hydro Development Corporation Limited (THDC Ltd.)	The existing NAPAFs should not be disturbed.			
C.2	Narmada Hydroelectric Development Corporation Ltd. (NHDC Ltd.)	In big Reservoir like Indira Sagar, levels changes from Maximum at the end of monsoon to Minimum at the beginning of next Monsoon. As a result, the variation in available head at different levels is quite large from 46 m to 65 m. The Machines are not designed to operate at full capacity at minimum head i.e. at MDDL. Thus, Machine Rating varies from 125 MW (Plate Rating) at FRL to 85 MW at MDDL. Accordingly, the Project PAFY gets affected adversely, even if the generating units are available. To overcome this deficiency, peaking capability of generating units corresponding to reducing water heads, the Installed Capacity (IC) in the PAFY Formula may be replaced with Peaking Capability of Generating Station corresponding to reducing levels of Reservoir.			
C.3	National Hydroelectric	Same numbers of NAPAF should be continued in next tariff			

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	Power Corporation (NHPC)	period as in past also CI was kept fixed for tariff periods
C.4	North Eastern Electric Power Corporation Ltd. (NEEPCO)	There is a need for review of existing values of NAPAF and auxiliary consumption based on actual data of hydro generating stations for last 4 years. While computing the normative auxiliary consumption for a station, it is necessary to consider the transformation losses separately if the station is with single phase transformer.
		In the existing regulation, 50% of AFC is linked with PAF and 50% of AFC is linked with scheduled energy. This is based on the premise that hydrology risk is to be shared by the generator & the beneficiary in the ratio of 50:50. But in the regime of Requisitioned Base Scheduling, generator's risk percentage is more than 50% due to hydrology as well as less scheduling. Therefore, 50% AFC linked to scheduled energy needs to be reviewed.
		Further, as water availability is a parameter for declaring the plant availability, so in case of low water level, generator should be protected (at least 50% can be shared by the beneficiaries) for achieving the availability which is linked to the 50% AFC and not attributable to the generators.
D)State	e Sector (Generators/Trans	mission Cos./Distribution Cos./SEBs/SLDCs)
D.1	Madhya Pradesh Power Generation Co Ltd	The Generating Companies do not have any control over the release and in many cases they are unable to give DC on account of restriction put by various State / Inter State Authority. It is therefore suggested that the DC considered for determination of PAFM should account for deemed availability on account of constraints put by State/Inter State Authority on release of water.
D.2	Rajasthan Discom Power Procurement Centre.	Commission may stick to NAPAF values fixed in tariff regulation 2009-14.
D.3	Uttar Pradesh Power Corporation Ltd. (UPPCL)	The Commission may stick to the NAPAF values fixed by it in the tariff regulation 2009-14 and the prayer of HEPs to revise these data every year on some pretext or the other may be rejected outright.
D.4	Chhattisgarh State Power Distribution Co. Ltd.	National Electricity and Tariff Policy envisage to ensure, availability of the electricity to every household at reasonable price. Keeping this in view, the Commission may consider upward revision in NAPAF values fixed by it in the tariff regulation 2014-19 and lower side revision should not be allowed under any circumstances to ensure higher availability of energy from existing sources.
D.5	MP Power Management Company Ltd.	National Electricity and Tariff Policy envisage to ensure availability of the electricity to every household at reasonable price. Keeping this in view, the Commission may consider upward revision in NAPAF values fixed by it in the tariff regulation 2009-14 and lower side revision should not be

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		allowed under any circumstances to ensure higher availability of energy from existing sources.
D.6	Maharashtra State Power Generation Co. Ltd.	The beneficiaries must also share the hydrology benefits in the ratio of 50:50. No escape route should be provided to the generators to avoid risk. The norms of auxiliary power consumption from 0.7% to 1.2% are considered reasonable and the same can be retained.
D.7	Tamil Nadu Generation and Distribution corporation limited (TANGEDCO)	The existing norms for auxiliary power consumption may be continued for the present tariff period also as the scope of rationalization or saving is very limited.
E) Priv	ate Sector (Generators/Trar	scos./Distribution Cos)
E.1	Jindal Power Limited	Normative Annual Plant Availability Factor (NAPAF) and auxiliary consumption should be allowed to the utility based on the actual data or NAPAF for last 4 to 5 years. We request the Commission to continue to provide relaxation in operational data for special category states, including NE states
E.2	Moser Baer Electric Power Limited.	As per EA 2003, Hydro projects need to be approved by CEA.
E.3	Jaiprakash Power Ventures Ltd.	Keeping in view the rising trend of tariff, the rate for the energy generated over and above the design energy should be increased to at least Rs 1.25/kWh
E.4	BSES Yamuna Power Limited	Comments shall be offered based on data submitted by CGU.
E.5	Association of Power Producers (APP)	Hydro generating station auxiliary power shall include operations at reservoirs called Head Works and also colony power as these are generally at remote locations. Norms shall be higher for lower sized plants as aux. power is totally dependent upon the size of sets also. The smaller size sets installed in the past will need higher norms. The auxiliary power norms could be decided like as done in case of thermal sets depending upon sizes;125, 250 and 500 MW thermal sets having 10, 7.5 and 6%; hydro stations below 100 MW need to be given 3%, Below 200 MW - 2%.
F) Oth	er Organizations/Institution	ns/Banks/Investors
F.1	Federation of Indian Chambers of Commerce and Industry (FICCI)	The existing provision may be continued.
G) Ind	ividual /Public Group/Any	others
G.1	Shri R.B.Sharma	It is proposed that the beneficiaries must also share the hydrology benefits in the ratio of 50:50. No escape route should be provided to the generators to avoid risk which should be equally shared.  The norms of auxiliary power consumption varying from 0.7% to 1.2% are considered reasonable and the same can be retained
G.2	Shri Arun Kumar Dutta	The factors are fluid and hence no comments are offered. However, the existing risk factor of 50:50 may be continued.