



# एन एच पी सी लिमिटेड

(भारत सरकार का उद्यम)

# **NHPC** Limited

(A Government of India Enterprise)

फोन/Phone :	
दिनांक / Date :	12.07.2019
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संदर्भ सं./ Ref. No. NH/Comml./Tariff/97/2019/ /47/-72

Sh S C Shrivastava
Chief (Engineering),
Central Electricity Regulatory Commission,
3<sup>rd</sup> & 4<sup>th</sup> Floor, Chanderlok Building,
36, Janpath, New Delhi- 110 001

Sub:- Constitution of expert group to review "Indian Electricity Grid Code and other related issues" - Reg.

Ref:- Public notice No. ENGG/2012/1/2019-CERC dated 21.06.2019

Sir.

In reference to above public notice dated 21.06.2019, the comments / suggestions / modifications to be made in the existing provisions of IEGC are enclosed at **Annexure-I** for further necessary action.

In addition to above, it is also brought to your kind notice that recently Ministry of Power has issued two office Memorandum / order namely, i) Office Memorandum dated 08.03.2019 - Measures to promote hydro power sector and ii) Order dated 28.06.2019 - Opening & Maintaining adequate Letter of Credit (LC) as Payment Security Mechanism under PPAs by Distribution Licensees. Copies of above notifications are enclosed at Annexure-II. As per notification dated 08.03.2019, all hydro Power Projects irrespective of its capacity has been declared as 'renewable'. Accordingly the first line appearing in Regulation 6.5(11) of IEGC may be deleted so that 'MUST RUN' status is extended to all hydro power projects. Further, MoP vide its order dated 28.06.2019 has made opening of Letter of Credit (LC) by the Discoms as a pre-requisite for dispatch of power by RLDC/SLDCs w.e.f 01.08.2019. Accordingly, the directions of MoP at serial no. 5, 7 & 8 of order dated 28.06.2019 may also be considered for incorporation in the provisions of IEGC.

Thanking You,

Yours Faithfully,

(A K Pandey)

General Manager (Comml.) Tele Fax No.0129-2256558

# COMMENTS ON INDIAN ELECTRICITY GRID CODE

SI. No.	Clause No.	Existing clause	Proposed Amendment
1.	6.3.A.2(i)	Where beneficiaries have been tied up for purchasing power from the generating station, trial run or each repeat of trial run shall commence after a notice of not less than seven days by the generating company to the beneficiaries and concerned RLDC or SLDC, as the case may be;	notice period to start the trial run as well as repeat trial run operation of Hydro units may be reduced and this clause may be
2.	6.3.A.2(ii)	Where the beneficiaries/buyers have not been tied up for purchasing power from the generating station, the trial run shall commence after a notice of not less than seven days by the generating company to concerned RLDC or SLDC, as the case may be.	If the beneficiaries are not being tied up with the generating station, then the notice period of seven days seems to be very long. In order to avoid the COD of generating unit this clause may be modified as under:  "Where the beneficiaries/buyers have not been tied up for purchasing power from the generating station, the trial run or the repeat trial run shall after a notice of not less than five days by the generating company to the beneficiaries and concerned RLDC or SLDC, as the case may be".
3.	6.3.A.3(iii)	Where the beneficiaries have been tied up for purchasing power from the generating station, the trial run or each repeat of trial run shall commence after a notice of not less than seven days by the generating company to the beneficiaries and concerned RLDC or SLDC, as the case may be.	Shall be in accordance with modified provisions at 6.3.A.2(i)



SI.	Clause	Existing clause	Dromonad Amandus (
No.	No.		Proposed Amendment
4	6.3.A.2(vi)	Where on the basis of the trial run, a unit of the generating station fails to demonstrate the unit capacity corresponding to Maximum Continuous Rating or Installed Capacity or Name Plate Rating, the generating company shall have the option to either de-rate the capacity or to go for repeat trial run. If the generating company decides to de-rate the unit capacity, the demonstrated capacity in such cases shall be more or equal to 110% of de-rated capacity.	There may be cases wherein the generating plant is available for generation not at rated capacity but at a reduced capacity due to non completion of all associated plant structures in upstream downstream of the project or on account of non completion of other projects in the river basin. In these cases, the generating unit/plant may not be able to demonstrate Maximum Continuous reting or installed Capacity or Name plate Capacity. This shall delay the commercial operation of the plant though the plant can safely be operated at reduced capacity. Accordingly, there is need for addition in the given clause as under:
			Where on the basis of the non-completion of all associated plant features/structures or as the case may be, the generating station is available to run at reduced capacity, the generating station shall have the option to declare the Reduced unit capacity for a period of not less than six months and demonstrate in the trial run, the declared unit capacity. On the completion of the declared period, the generating station shall have the option to seek extension of the period or declare availability of unit capacity corresponding to Maximum Continuous rating or installed Capacity or Name plate Capacity and go for a trail run for this capacity.
5			In addition to above the following is also submitted in respect of Clause 6.3A (Commercial Operation of Generating Stations and Inter-State Generating Stations)
			"where the transmission line or substation is dedicated for evacuation of power from a particular generating station, the generating company and transmission licensee shall endeavour to commission the generating station and the transmission system simultaneously as far as practicable and shall ensure the same through appropriate Implementation Agreement in accordance with Regulation 12(2) of these Regulations"



SI.	Clause	Existing clause	Proposed Amendment
No.	No.	A 4	2 8 0 1
			The above provisions have shortcoming with regards to the requirement (endeavor) of simultaneous commissioning/COD of transmission system and generating unit. This is not technically and practically feasible. In case of hydro generating units, at least 15 days are required for carrying out all the schedule commissioning tests after availability of transmission system (grid voltage). Therefore, transmission system (grid voltage) availability shall always be preceding to commissioning / COD of generating units. Further, there are specific requirements under the clause 6.3(2)(i) of IEGC (4th Amendment) for trial operation of generating unit
			In view of the above requirements, there needs to be a provision in the IEGC as under:  "The dedicated transmission system shall be made available at least 30 days prior to the schedule commissioning/COD of the generating station or the unit thereof".
6	6.3B	Heading "Technical Minimum Schedule for Central Generating Stations and Inter-State Generating Stations".	From the provision and deliberation in the Explanatory Memorandum, it is implicit that the point is related to "Thermal generating Stations" Therefore the Heading may be modified as under:  "Technical Minimum Schedule for Thermal Central Generating Stations and Inter-State Generating Stations".

(In Myssell)

F.No.15/2/2016-H-I (Pt.) Government of India Ministry of Power

> Shram Shakti Bhawan, Rafi Marg New Delhi, dated the 8<sup>th</sup> March, 2019

## OFFICE MEMORANDUM

## Subject: MEASURES TO PROMOTE HYDRO POWER SECTOR

In reference to communication received from Cabinet Secretariat vide D.O. No. 11/CM/2019(iii) dated 7.3.2019, the undersigned is directed to inform that the Government has approved the following measures to promote hydropower sector:-

- 2. Declaring LHPs ( > 25 MW projects) as Renewable Energy source:
- 2.1 Large Hydropower Projects (LHPs, i.e. > 25 MW projects) are declared as Renewable Energy source. However, LHPs would not automatically be eligible for any differential treatment for statutory clearances such as Forest Clearance, environmental clearance, NBWL clearance, related Cumulative Impact Assessment & carrying Capacity study, etc., available to Small Hydropower Projects (SHPs), i.e., projects of capacity up to 25 MW. Ministry of Power shall continue to be the administrative Ministry for LHPs.
- 3. Hydro Purchase Obligation (HPO) as a separate entity within Non solar Renewable Purchase Obligation (RPO):
- 3.1 Hydropower Purchase Obligation (HPO) is notified as a separate entity within Non Solar Renewable Purchase Obligation (RPO). The HPO shall cover all LHPs commissioned after issue of this Office Memorandum as well as the untied capacity (i.e., without PPA) of the commissioned projects. This HPO will be within the existing Non-Solar RPO after increasing the percentage assigned for it so that existing Non-Solar RPO for other renewable sources remains unaffected by the introduction of HPO. The trajectory of annual HPO targets will be notified by Ministry of Power based on the projected capacity addition plans in hydropower sector. Necessary amendments will be introduced in the Tariff Policy and Tariff Regulations to operationalize HPO.
- 4. Tariff rationalisation measures for bringing down hydropower tariff:
- 4.1 Tariff rationalisation measures including providing flexibility to the developers to determine tariff by back loading of tariff after increasing project life to 40 years, increasing debt repayment period to 18 years and introducing escalating tariff of 2%.
- 4.2 The levellized tariff over the useful life of the project may be calculated on the basis of the norms specified in the CERC regulations and thereafter, the determination of year wise tariff, for a long term PPA for procurement of Hydro Power for a period of not less than specified years (depending upon the repayment plan for the debt raised by the generator such that major part of the loan is repaid during the tenure of such PPA), may be left to the Developer and DISCOMs as per their feasibility and depending upon the terms of repayment of loan negotiated with the lenders subject to-
  - (a) submission of such complete calculations with assumptions to be provided by the generator of hydro power at the time of filing of the application; and
  - (b) upfront approval by the appropriate Regulatory Commission.

- 5. Budgetary Support for Flood Moderation/ Storage Hydro Electric Projects (HEPs):
- 5.1 In-principle approval is accorded for providing budgetary support through the budgetary grant of Ministry of Power for Flood Moderation component for Storage HEPs to be set up in future. The value of flood moderation component will be worked by technical agencies, viz., CWC, etc. in accordance with the guidelines. The amount required for flood moderation/ storage costs shall be released, through MoP budgetary provisions after appraisal of each project, on a case to case basis, by Public Investment Board (PIB)/ Cabinet Committee on Economic Affairs (CCEA) as per due process.
- 6. Budgetary Support to Cost of Enabling Infrastructure, i.e., roads/ bridges:
- 6.1 In-principle approval is accorded for providing budgetary support through the budgetary grant of Ministry of Power for funding enabling infrastructure for hydropower projects i.e. roads / bridges. This support shall be applicable for projects starting construction after notification of this Office Memorandum. This budgetary support would be provided after appraisal/ approval of each project by PIB/ CCEA as per the extant rules/ due process. The limit of this grant for such roads and bridges would be as follows:
  - a) Rs. 1.5 crore per MW for projects upto 200 MW,
  - b) Rs. 1.0 crore per MW for projects above 200 MW.
- 7. This issues with the approval of the Competent Authority.

(S Benjamin)

Under Secretary to the Govt of India

Telefax: 23324357

Email: ben.gangte@nic.in

- 1. The Chairman, All State Electricity Boards / State Power Utilities
- 2. The Chairman, Central Electricity Authority, New Delhi.
- 3. The Principal Secretary / Commissioner (Power), All State Government and U.T.s
- 4. The CMDs of all PSUs under the administrative control of Ministry of Power
- 5. Chairperson, CERC
- 6. Chairpersons of all SERCs

#### Copy to:

- 1. Secretary, Department of Economic Affairs, Ministry of Finance
- 2. Secretary, Department of Expenditure Ministry of Finance
- 3. Secretary, Department of Financial Services, Ministry of Finance
- 4. Secretary, Department of Revenue, Ministry of Finance
- 5. Secretary, MNRE
- 6. Secretary, MoEF
- 7. Secretary, DoNER
- 8. CEO, NITI Aayog
- 9. Secretary, MoWR
- 10. Chairperson, CWC

#### Copy also for kind information to:

- 1. Director, Cabinet Secretariat, Rashtrapati Bhawan, New Delhi w.r.t D.O. No. 11/CM/2019(iii) dated 07.03.2019
- 2. Director, PMO, South Block, New Delhi.
- 3. All Joint Secretaries/ FA /EA of the Ministry of Power, Shram Shakti Bhawan, New Delhi.
- 4. All Director, Ministry of Power, Shram Shakti Bhawan, New Delhi.
- 5. Director (Tech.) NIC cell, MoP with the request to upload on the website of Ministry.

#### Copy to:

- 1. Chief Engineer (R&R) Ministry of Power, Shram Shakti Bhawan, New Delhi- with a request to issue appropriate directions to CERC/SERCs per Section 107 of the Electricity Act-2003 to incorporate above tariff rationalization measure as mentioned at Para 3.1, 4, 4.1 & 4.2 above in the Tariff Regulations and also for appropriate changes for other Paras above.
- 2. Chairperson, CEA- with a request to take necessary action to implement the above decisions.

### No. 23/22/2019-R&R Government of India Ministry of Power

Shram Shakti Bhawan, Rafi Marg, New Delhi, 28<sup>th</sup> June, 2019

#### ORDER

Subject: Opening and maintaining of adequate Letter of Credit (LC) as Payment Security Mechanism under Power Purchase Agreements by Distribution Licensees -Reg

- 1.0 Under the Electricity Act 2003, Regional Load Despatch Centres (RLDC) and State Load Despatch Centres (SLDC) are cast with the statutory responsibility to ensure that that the supply of electricity is made in accordance with the contracts.
- 2.0 Section 28 (3) (a) of the Electricity Act 2003 provides that the Regional Load Despatch Centre shall be responsible for optimum scheduling and despatch of electricity within the region, in accordance with the contracts entered into with the licensees or the generating companies operating in the region.
- 3.0 Similarly as per provisions of Section 32 (2)(a) the State Load Despatch Centre shall be responsible for optimum scheduling and despatch of electricity within a State, in accordance with the contracts entered into with the licensees or the generating companies operating in that State.
- 4.0 The Power Purchase Agreements have the provision regarding maintenance of adequate Payment Security Mechanism mainly in the form of Letters of Credit by the Distribution Licensees/ Procurers of Power. A robust Payment Security System requires adequacy and validity of Letter of Credit to cover the payments due on account of drawal of power.
- 5.0 It has been seen that despite the above provisions, the Letters of Credit are not being given and there is huge outstanding on account of unpaid power bills. This makes it difficult for the Generators to pay for the fuel, which has to be pre-paid, to continue the generation. The Generators are also required to pay to the Railways in advance for the rakes. If this situation persists, the Generators will not be able to pay for fuel/transportation leading to shortfall in generation of electricity. There will thus be wide spread load shedding on account of lack of generation. It is essential therefore that all the provisions mentioned above are implemented strictly. NLDC & RLDC are therefore directed as follows:
  - i. In accordance with Section 28 (3) (a), the NLDC & RLDC shall despatch power only after it is intimated by the Generating Company and /Distribution Companies that a Letter of Credit for the desired quantum of power has been opened and copies made available to the concerned Generating Company.
  - ii. The intimation to NLDC and RLDC shall specify the period of supply.

- iii. RLDC shall dispatch electricity only up to the quantity equivalent of value of Letter of Credit.
- iv. The dispatch shall stop once the quantum of electricity under LC is supplied.
- v. The concerned generating company shall be entitled to encash the LC after expiry of grace period, i.e. 45 to 60 days as provided in the PPA.
- vi. In the event power is not dispatched for any reason given above, the Distribution licensee shall continue to pay the Fixed Charge to the Generating Company.
- 6.0 It shall also be ensured by the Load Despatch Centre that the regulated entity, during the period of regulation, has no access to procure power from the Power Exchanges and they shall not be granted Short Term Open Access (STOA).
- 7.0 In case scheduling and despatch of power produced by any generator is not done due to non-opening of Letter of Credit by the Distribution licensee, then the Distribution licensee would be liable to pay compensation to the generator as per the terms of Power Purchase Agreement or Power Sale Agreement, as the case may be, the distribution licensee has entered in with the generator.
- 8.0 NLDC/RLDC/SLDC shall carry out such duty cast under Electricity Act, 2003 from 01.08.2019.
- 9.0 This issues with the approval of Minister of State (I/C) for Power and NRE.

DRC

(Debranjan Chattopadhyay) Under Secretary to the Government of India Ph: 011-2373 0265

#### To,

- 1. CMD, POSOCO / Heads of NLDC & RLDCs
- 2. Principal Secretary/Secretary (Power/Energy), State Governments/UTs For necessary communication to Discoms/ SLDCs
- 3. All Generating Companies
- 4. All Distribution Companies
- 5. Secretaries of All State Electricity Regulatory Commissions(SERCs)/JERCs.

#### Copy to:

- 1. Chairperson, CEA, Sewa Bhawan, RK Purarn, New., Delhi
- 2. Secretary, CERC/FOR, Chandralok Building, Janpath, New Delhi

#### Copy also for information to:

- 1. All Joint Secretaries, Ministry of Power
- 2. PS to MOS (I/C) for Power and NRE
- 3. PPS to Secy.(P), PPS to AS(SNS), PPS to CE(RR)