CENTRAL ELECTRICITY REGULATORY COMMISSION NEW DELHI

No. No. L-1/18/2010-CERC

New Delhi, 16th August, 2011

NOTIFICATION (DRAFT)

In exercise of powers conferred under clause (h) of sub-section (1) of Section 79 read with clause (g) of sub-section (2) of Section 178 of the Electricity Act, 2003 (36 of 2003), and all other powers enabling it in this behalf, the Central Electricity Regulatory Commission hereby makes the following regulations to amend the Central Electricity Regulatory Commission (Indian Electricity Grid Code) Regulations, 2010, hereinafter referred to as "the Principal Regulations".

1. Short title, extent and commencement

(1) These Regulations may be called the Central Electricity Regulatory Commission (Indian Electricity Grid Code) (First Amendment) Regulations, 2011.

(2) These Regulations shall come into force with effect from the date of their publication in the official Gazette.

2. Amendment in Regulation 2.3.2 of Principal Regulations:

In sub-regulation (d) of Regulation 2.3.2 of Principal Regulations, the words "Metering and data collection" shall be substituted by the words "Meter data processing".

3. Amendment in Regulation 2.5.1 of Principal Regulations:

The sub-regulation (2) of Regulation 2.5.1 of Principal Regulations shall stand deleted.

4. Amendment in Regulation 3.4 of Principal Regulations:

The last sentence of the sub-regulation (c) of Regulation 3.4 of Principal Regulations shall be substituted as under:

"In case of associated transmission system where all PPAs have not yet been signed, and where agreement could not be Page 1 of 8

reached in respect of system strengthening schemes, the CTU may approach CERC for the regulatory approval in accordance with Central Electricity Regulatory Commission (Grant of Regulatory Approval for execution of Inter-State Transmission Scheme to Central Transmission Utility) Regulations, 2010. "

5. Amendment of Regulation 5.2 of Principal Regulations:

a) At the beginning of the sub-regulation (e) of Regulation 5.2 of Principal Regulations, following sentence shall be added:

"Maintenance of their power system elements shall be carried out by users, STUs and CTU in accordance with the provisions in Central Electricity Authority (Grid Standards) Regulations, 2010

b) After clause (iii) of sub-regulation (f) of Regulation 5.2 of Principal Regulations, following proviso shall be inserted.

"Provided that if a generating unit cannot be operated under restricted governor mode operation, then it shall be operated in free governor mode operation with manual intervention to operate in the manner required under RGMO."

- c) In sub-regulation (i) of Regulation 5.2 of Principal Regulations, the words and figures "49.7 Hz." shall be substituted with the words and figures "49.8 Hz."
- d) In sub-regulation (j) of Regulation 5.2 of Principal Regulations, the words and figures "49.5 Hz." shall be substituted with words and figures "49.7 Hz."
- e) In sub-regulation (j) of Regulation 5.2 of Principal Regulations, the following provisions shall be added at the end:

"All users and SEBs shall ensure that temporary over voltage due to sudden load rejection and the maximum permissible values of voltage unbalance shall remain within limits specified under Central Electricity Authority (Grid Standards) Regulations, 2010.

f) In sub-regulation (I) of Regulation 5.2 of Principal Regulations, following provisions shall be added at the end:

"RPC shall also prepare islanding schemes and ensure its implementation in accordance with Central Electricity Authority (Grid Standards) Regulations, 2010. All users and SEBs shall ensure Page 2 of 8 that installation and operation of protection system shall comply the provisions of Central Electricity Authority (Grid Standards) Regulations, 2010.

- g) In sub-regulation (m) of Regulation 5.2 of Principal Regulations, the words and figures "49.5-50.2 Hz." shall be substituted with the words and figures "49.7-50.2 Hz."
- h) sub-regulation (p) of Regulation 5.2 of Principal Regulations shall be substituted with the following:

"(p) Procedures shall be developed to recover from partial/total collapse of the grid in accordance with Central Electricity Authority (Grid Standards) Regulations, 2010 and to periodically update the same in accordance with the requirements given under Regulation 5.8. These procedures shall be followed by all the Users, STU/SLDC, CTU, RLDC and NLDC to ensure consistent, reliable and quick restoration."

- i) In sub-regulation (r) of Regulation 5.2 of Principal Regulations, the words "one week" shall be substituted with the words and figues "24 hours"
- j) In sub-regulation (t) of Regulation 5.2 of Principal Regulations, the following shall be added at the end:

"Voltage fluctuation limits and voltage wave-form quality shall be maintained as specified in Central Electricity Authority (Grid Standards) Regulations, 2010.

6. Amendment in Regulation 5.4.2 of Principal Regulations:

- (a) In sub-regulation (a) of Regulation 5.4.2 of Principal Regulations, the words and figures "49.7 Hz." shall be substituted with the words and figures "49.8 Hz."
- (b) In sub-regulation (b) of Regulation 5.4.2 of Principal Regulations, the words and figures "49.5 Hz." shall be substituted with the words and figures "49.7 Hz."

7. Amendment in 5.6.2 of Principal Regulations:

After the last clause of the sub-regulation (b) of Regulation 5.6.2 of Principal Regulations, the following clause shall be added:

"All operational instructions given by RLDC and SLDC shall have unique code and it shall be recorded and maintained as specified in Central Electricity Authority (Grid Standards) Regulations, 2010."

8. Amendment in Regulation 5.7.4 :

- (a) In Sub-Regulation (b) of Regulation 5.7.4 of Principal Regulations, the words and figure "30th November" shall be substituted by the words and figure "31st October".
- (b) Sub-Regulation (c) of Regulation 5.7.4 of Principal Regulations shall be substituted as under:

"(c) RPCs Secretariat shall compile load generation balance report for peak as well as for off peak scenario and also prepare annual outage plan for transmission elements and major generating stations in the respective region. RPCs Secretariat shall then come out with the draft outage programme for the next financial year by 30th November of each year for the regional grid taking into account the available resources in an optimal manner and to maintain security standards. This will be done after carrying out necessary system studies and, if necessary, the outage programmes shall be rescheduled. Adequate balance between generation and load requirement shall be ensured while finalising outage programmes. The same shall be uploaded by the RPCs on their website."

(c) Sub-Regulation (d) of Regulation 5.7.4 of Principal Regulations shall be substituted as under:

"(d) The outage plan of the generating units and transmission system including inter-regional links shall be finalized in consultation with NLDC and RLDCs. The final outage plan shall be intimated to NLDC, Users, STUs, CTU, other generating stations connected to ISTS and the RLDC for implementation by 31st January of each year. The final outage plan shall be made available on the website of the respective utilities and on the websites of RPCs, RLDCs and NLDC. The final outage plan shall be intimated to NLDC, Users, STUs, CTU, other generating stations connected to ISTS and the RLDC for implementation by 31st January of each year."

(a) Amendment of Regulation 6.3 of Principal Regulations :

The third para of this Regulation shall be replaced by the following para.

"Similarly, the scheduling and despatch procedure for the generating stations of Sardar Sarovar Project (SSP) shall be as per the procedure formulated by Narmada Control Authority (NCA) in consultation with the Western Regional Load Despatch Centre (WRLDC)."

9. Amendment in Regulation 6.4 of Principal Regulations:

- (a) In sub-regulation 1 of Regulation 6.4 of Principal Regulations, the words " metering and energy accounting, issuance of UI accounts within the control area" shall be substituted by the words " meter data processing".
- (b) Sub-regulation 6 of Regulation 6.4 of Principal Regulations shall be substituted as under:

"The system of each regional entity shall be treated and operated as a notional control area. The algebraic summation of scheduled drawal from ISGS and from contracts through a long – term access, medium -term and short –term open access arrangements shall provide the drawl schedule of each regional entity, and this shall be determined in advance on day-ahead basis. The regional entities shall regulate their generation and/or consumers' load so as to maintain their actual drawal from the regional grid close to the above schedule. Deviation, if any, from the drawl schedule, shall be within the limits specified by the CERC in UI Regulations and it shall not cause system parameters to deteriorate beyond permissible limits and shall not lead to unacceptable line loading. Such deviation from net drawal schedule shall be priced through the Unscheduled Interchange (UI) mechanism prescribed by the Central Commission."

- (c) In the first sentence of sub-regulation 7 of the Regulation 6.4 of the Principal Regulations, the words and figures "49.7 Hz." shall be substituted with words and figures "49.8 Hz." and in second and third sentences, the words and figures "49.7 Hz." shall be substituted with words and figures "49.7 Hz.".
- (d) A new sub-regulation 10 (a) shall be added after sub-regulation 10 of the Regulation 6.4 of the Principal Regulations as under:

"A generating station, including a captive generating plant which has been granted connectivity to the grid shall be allowed to inject infirm power into the grid during testing including full load testing before its COD for a period not exceeding three months after obtaining prior permission of the concerned Regional Load Despatch Centre:

Provided that the concerned Regional Load Despatch Centre while granting such permission shall keep the grid security in view and ensure that injection of such infirm power is only for the purpose of testing, prior to COD of the generating station or a unit thereof. The treatment of such infirm power shall be in accordance with Central Electricity Regulatory Commission (Grant of Connectivity, Long-term Access and Medium-term Open Access in inter-State Transmission and related matters) Regulations, 2009, amended time to time."

(e) In sub-regulation 11 of Regulation 6.4 of the Principal Regulations, the words and figures "49.7 Hz." shall be shall be substituted with words and figures "49.8 Hz."

10. Amendment in Regulation 6.5 of Principal Regulations:

(a) The sub-regulation 19 of the Regulation 6.5 of Principal Regulations shall be replaced by following:

"Notwithstanding anything contained in Regulation 6.5.18, in case of forced outage of a unit of a generating station (having generating capacity of 100 MW or more) selling power under Short Term bilateral transaction, the generator or trader or any other agency selling power from this generating station shall immediately intimate the outage of the unit along with the requisition for revision of schedule and estimated time of restoration of the unit, to SLDC/RLDC, as the case may be. The schedule of all the long- term and medium-term beneficiaries and the buyers under short-term bilateral transaction, getting power, directly under long-term Power Purchase Agreements or through sale by trader or any other agency or by generator itself under short-term open access, from the generating station of which the unit has gone under forced outage, shall be reduced on pro-rata basis. The schedule of beneficiaries, sellers and buyers of power from this generating station shall be revised accordingly. The schedule of the generator and the beneficiaries/buyer shall be revised, accordingly. The revised schedules shall become effective from the 4th time block, counting the time block in which the forced outage is declared to be the first one. The RLDC shall inform the revised schedule to the seller and the buyer. The original schedule shall become effective from the estimated time of restoration of the unit. However the transmission charges as per original schedule shall continue to be paid for two days.

Provided that the schedule of the buyer and seller shall be revised after forced outage of unit, only if, the source of power (particular generating station) for a particular transaction has clearly been indicated during short-term open access application and the unit of that generating station goes under forced outage."

(b) In the sub-regulation 23 (i) of the Regulation 6.5 of Principal Regulations the words "The schedule by wind power generating stations may be revised by giving advance notice to SLDC/RLDC, as the case may be" shall be substituted by the words "The schedule by wind power generating stations (excluding collective transactions) may be revised by giving advance notice to SLDC/RLDC, as the case may be":

11. Amendment in Annexure-1 of Principal Regulations (Complementary Commercial Mechanism):

(a) Para 4 (ii) of Annexure-1 of the Principal Regulations shall be substituted as under:

"(ii) The schedule by such wind power generating stations supplying inter-state power under long-term access, medium-term and short-term open access (excluding collective transactions) may be revised by giving advance notice to RLDC. Such revisions by wind power generating stations shall be effective from 6th timeblock, the first being the time -block in which notice was given. There may be maximum of 8 revisions for each 3 hour time slot starting from 00:00 hours during the day."

- (b)The last sentences of para 5 and 7 i.e. "Illustrative calculations in respect of above mechanism are given in Appendix" shall be deleted.
- (c) Para 15 of Annexure-1 of the Principal Regulations shall be substituted as under:

"15. The RLDC shall table the complete statement of the regional UI account, the regional Reactive Energy pool account and Congestion Charge Account in the RPC's Commercial Committee meeting, on a quarterly basis, for audit by the latter."

(d) In para 16 of Annexure-1 of the Principal Regulations, the words "Interfaces for Scheduling and UI Accounting In Inter-regional Exchanges" shall be substituted with the words "Interfaces for Scheduling of Inter-regional Exchanges".

- (e) In sub-para 1 of para 16 of Annexure-1 of Principal Regulations, the words "and UI accounting" shall be deleted.
- 12. Appendix to the Principal Regulations shall be deleted.

(Rajiv Bansal) Secretary