CENTRAL ELECTRICITY REGULATORY COMMISSION

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Minutes of the Commission meeting held on 11th August, 2009

1.0 The following were present:

1. Dr. Pramod Deo, Chairperson

In Chair

- 2. Mr. R. Krishnamoorthy, Member
- 3. Mr. S. Jayaraman, Member
- 4. Mr. V.S. Verma, Member
- 5. Mr. Alok Kumar, Secretary
- 6. Mr. K.S. Dhingra, Chief (L)
- 7. Mr. K. Biswal, Chief (F)
- 8. Mr. Pankaj Batra, Chief (E)
- 9. Mr. Vijay Menghani, JC(E)
- 10. Mr. S.K. Chatterjee, DC(RA)

2.0 Review of the status of compliance of the pending decisions taken in previous meetings.

After perusing the status, the Commission directed that necessary action may be taken for seeking exemption under the Income Tax Act for the amount collected in UI pool account.

3.0 Present status of study on loss sharing being done by IIT, Mumbai.

The Commission noted the status report as on 6th July, 2009 and also considered the inputs from the Engg. Division suggesting that the same method using the same power flow should be used for transmission pricing and for calculation of transmission losses. The Commission desired that a detailed proposal be put up so that a comprehensive view could be taken.

4.0 The proposals for regulations under sections 35 and 36 of the Electricity Act, 2003.

After considering agenda note and the presentation made by DC(RA), the Commission directed to finalize the draft of regulations with certain modifications.

5.0 Consideration of the letter from PGCIL regarding tariff petitions for the period 2009-14, in the background of exercise by CERC for consolidating transmission tariff for schemewise.

After considering the matter, the Commission desired that the Working Group headed by Chief (F) may finalize the recommendations as early as possible.

6.0 Outline of the proposals regarding review of IEGC.

A presentation was made by Chief (Engg.), a copy of which is annexed. The Commission directed that draft amendments to IEGC may be prepared accordingly. The amendments may also include the following:

- a) The scheduling requirements relating to RLDC may be re-aligned to the new provisions in the regulations on connectivity which provide that any generating plant of capacity of 250 MW and above can seek connectivity to interstate transmission system.
- b) All the entities mentioned in Section 29(2) of the Electricity Act should be brought within the purview of IEGC so that action for grid indiscipline, if any, can be taken effectively.
- **7.0** The meeting ended with vote of thanks to the chair.

Revision in IEGC

Issues

Revision of Schedule

Grid Discipline

UI Provisions

Grid Security and operation parameters

Other Issues

Revision in daily schedule

- Present provisions in IEGC- Revision in DC of ISGS only and requisition by beneficiary (ies) in ISGS 6 time blocks
- The open access schedules accepted by the nodal agency in advance or on first-come-first-served basis may be cancelled or revised downwards. Such cancellation or downward revision in the open access schedules shall be effective after a minimum period of two (2) days:

- Inter-State Generating Station (ISGS): A Central/other generating station in which two or more states have shares and whose scheduling is to be coordinated by the RLDC
- 6.4.1 RLDCs shall coordinate the scheduling of generating stations owned by Central Government organizations (excluding stations where full share is allocated to host state), Ultra-Mega power projects and other generating stations of 1000 MW or larger size in which, States, other than the host State have permanent shares of 50% or more.

- Problem Pointed Out :
- A. Embedded IPP Unit Tripping Two effects on State:
 - **UI** Charges
 - Penalty for violation of IEGC clause 5.4.2(a) and 6.4.7
- в. NTPC URS Power remaining unutilized-Petition 134/2009

- A.(i)UI issue gets addressed through Intra State ABT
- (ii)Penalty Issue us 142 for two days Judicious Reporting of Over drawl by RLDCs
- (iii) For optimum utilization of power and grid security-Amendment in OA Regulation permitting schedule revision for Forced Outage only wef 6th time block(For units supplying interstate power >100 MW
- B. Not valid since beneficiary is allowed to revise schedule from 6th time blocks in ISGS.

Grid Discipline

- Inclusion of provision in case of violation under sec 5.2 System Security aspects in IEGC
- A,B and C messages issued by RLDCs, in case of overdrawl by constituents.
- Weekly reporting of non-compliance by utilities compulsory for the RLDCs and RLDC to move petition in case of persistent non-compliance. This would obviate the suo-motu proceedings by the Commission in case of over-drawl.
- The provision 5.4.2 (a) regarding manual demand disconnection may suitably be reworded to make regional entities initiate action to ensure that frequency does not go below 49.5 Hz. Deleting "Endeavour to" or defining % magnitude of reduction in overdrwal
- Reduction of 50% OD below 49.5 Hz and reducing it to Zero at 49.2 Hz- Secretary Power Meeting

Grid Discipline-Continued

- FGMO operation –As per CERC order
- Stringent Demand Side management including UFR installation and operation. Reporting of default by the entity in UFR operation may be made to the Commission in addition to RPCs.
- SLDC would be made more responsible for Grid Operation and energy accounting by strengthening IEGC para 2.6. in line of ES Act Sec 32(e).

UI ISSUES

- Non-Consistency between IEGC and UI Regulation w.r.t certain clauses of UI payment Schedule
- The provisions wrt UI payment may be deleted from IEGC and reference made to UI Regulations

Grid Security and operation

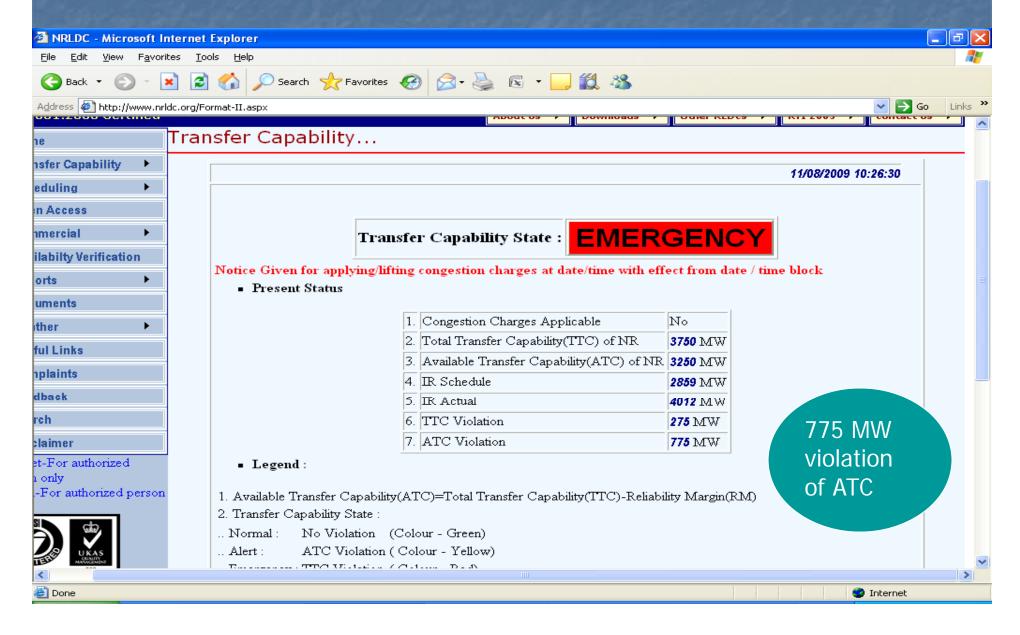
5.4.1 9 r _In consitency in Voltage parameters-To make it consistent with CEA planning criteria and Grid Standards

Nominal	Max	Min
765 kV	800	728
400	420	380 in place of 360 kV

Grid Security and operation

- Loading of Inter regional corridors (like TTC/ATC) and under voltage relays in States need to be mentioned as a Grid security aspects in addition to frequency and voltage control.
- Critical System element should be restored within time limit as per Standards of performance of Transmission Licensees being finalized.
- Voltage control measure like capacitor, to be added within time limits as prescribed by RPCs. Violation to be reported to CERC.

TTC Violation today



OTHER ISSUES

- Some definition are to be added or modified to make them consistent with other regulations-Def of Beneficiary different in IEGC and OA regulation
- Changes are required in planning code (chapter-3) and Connection Conditions (Chapter-4) and in some other places to make it consistent with new Connectivity, Long term and Medium term access regulations.
- Some provisions are to be amended to make them consistent with open access regulations- 2.3.4 Now no role of RPC in Open Access
- Role of SLDC in provision 2.6 should be more elaborated keeping in view the role of SLDCs in grid operation.
- Model connection agreement is to be included and necessary changes are to be made in chapter-4 (Connection Conditions).
- The demand estimate by utilities/ SLDCs are to be made more stringent.

OTHER ISSUES-CONTINUED

- Certain provisions like 2.3.5 -role of RPCs are to be amended to make them consistent with Tariff Regulations, 2009 - Capacity Index Certificate and PLF certificates not required now.
- Provision for detailed operating procedure for national grid may be inserted.
- Amendments specially in chapter- 5, operating code for regional grids, are required in view of integration of regional grids and set up of NLDC.
- In view of multiplicity of players in the electricity sector other than the States, regional entity concept in addition to state beneficiaries for the purpose of Grid Discipline are to introduced.

Messages

	Frequency	OD
A	<49.5 Hz	Instantaneous 150 MW or 12% more than Schedule
В	<49.2 Hz	Continuous 40 MW
		for last 10 min 200 MW for last 5 min when downward trend in freq.
С	<49.2 Hz	Continuous 40 MW for last 20 min 200 MW for last 15 min

- A message is a Warning Message below 49.5 Hz.
- B message is violation of IEGC clause 5.4.2(a) and 6.4.7.
- C message is violation of Clause 5.4.2(b) of IEGC and sections 29(2)/29(3) of EA 2003

Frequency of NEW Grid-Jan-Jun,09

	Jan-09	Feb-09	Mar-09	Apr-09	May-09	Jun-09
<48.5 Hz	0.00	0.00	0.00	0.00	0.00	0.00
<49.00 Hz	2.11	3.26	1.9	19.63	6.57	19.33
49.00-50.50 Hz.	97.79	96.67	98.08	80.06	91.07	80.18
> 50.50Hz	0.1	0.07	0.02	0.31	2.36	0.49
Avg. Freq.	49.58	49.45	49.6	49.46	49.68	49.51

Frequency Profile of NEW grid April-July 2009

Percentage of time frequency remained	Month			
	April 2009	May 2009	June 2009	July 2009
<49.0 Hz	5.53	1.06	7.00	1.04
<49.2 Hz	19.63	6.57	19.33	4.75
<49.5 Hz	56.36	29.99	49.34	27.91
49.2-50.3 Hz	80.06	91.07	80.18	94.72
>50.3	0.31	2.36	0.49	0.53
Average Freq	49.46	49.68	49.51	49.64

- **Solution Alternatives** Problem duration is 2 days
- A) Judicious Reporting of Over drawl by RLDCs excluding such cases- Safety from imposition of Sec 142.
- B) Amendment in OA Regulation permitting schedule revision for Forced Outage only wef 6th time block(For units supplying interstate power >100 MW)- Possibility of Gaming
- C) Amendment in OA for all players once in a day-Uncertainty in Scheduling
- D) RLDC scheduling of these unit as Regional entity- Exceptions under 6.4.1

- Solution Alternatives-
- A) As per 6.5 (20) home state can revise its schedule (if possible margin in ISGS is available) or can collect UI from IPP- Buyer State unaffected

Before

State schedule from ISGS=2000

IPP Sale schedule=300 MW

Total State Schedule = 1700 MW

After tripping of IPP

State Drawl= 2000 MW UI = 300 MW