

**Minutes of the 1st Meeting of the Grid Coordination Committee (GCC) of Uttarakhand held on 22.5.2018 at Conference Room, PTCUL, Vidyut Bhawan, Majra, Dehradun.**

**The list of participants of the meeting on 22.5.2018 is attached at Annexure-A. The meeting was chaired by Shri Sanjaya Mittal, Chairperson GCC.**

**The Chairperson, GCC welcomed all the participants to the 1st GCC meeting.**

The Committee discussed the agenda and following decisions were taken: -

**1. Agenda by SLDC**

**a. Preparation of document for Operating Procedure for Uttarakhand grid: -**

Draft document for Operating Procedure for Uttarakhand Grid prepared by SLDC in compliance to regulation 6.1.1(4) of UERC (State Grid Code) Regulation 2016 was provided (through E-mail) to members for comments and suggestions. Also the draft document is available at SLDC website (ukslde.in).

**It was decided in the meeting that all the constituents shall submit their written comments/suggestions within one month to SLDC for finalization of the draft document and further submission to Hon'ble UERC for approval.**

**b. Mock Black Start exercise for year 2018-19: -**

As per State Grid Code (SGC) clause 6.9(2) "Mock trial runs of the procedure for different sub-systems shall be carried out by the constituents at least once in every six months under intimation to the SLDC" Diesel Generator sets for black start are to be tested on weekly basis and test report is to be sent to SLDC on quarterly basis.

It was noted that no Mock Black Start exercise has been carried out in Uttarakhand as per above provision of Grid Code. Also, weekly test report of DG sets for black start are not being provided to SLDC.

Member from UJVN Ltd informed that black start facility is available at Chibro Power House only and the member from privately owned generating station (Director SEPL) apprised to the committee that black start facility is not available with both the gas power plants (GIPL and SEPL).

**It was decided in the meeting that UJVN Ltd shall prepare action plan for carrying out the Mock Black Start exercise in consultation with SLDC and UPCL within one month and submit the same to SLDC. Member from UJVN Ltd also assured to regularly provide the weekly test report of DG sets to SLDC.**

**c. Amendment in SGC 2016 proposed by SLDC: -**

**Submission of the station-wise ex-power plant MW and MWh capabilities foreseen for the next day by IaSGS to SLDC.**

Clause 7.5(3) of SGC, 2016 states that "By 10 AM every day, the IaSGS shall advise the SLDC, the station-wise ex-power plant MW and MWh capabilities foreseen for the next day, i.e. from 00:00 Hrs. to 24:00 Hrs. of the following days."

However, clause 6.5(3) of IEGC, 2010 as amended form time to time states that "By 6 AM every day, the ISGS shall advise the concerned NRLDC, the station-wise ex-power plant MW and MWh capabilities foreseen for the next day, i.e. for 00:00 Hrs. to 24:00 Hrs. of the following days."

Hence clause 7.5(3) of SGC may be amended in lines with the relevant clause of IEGC, 2010 for providing sufficient time to SLDC for proper generation assessment and load forecasting on day-ahead basis.

SLDC informed that the proposed amendment is in lines with the IEGC, 2010 and running quite smoothly at inter-state level. Further, SLDC apprised that the process of making revision in SGC has been defined in Regulation 2.3 of SGC which is reproduced hereunder:

## Quote

### *“2.3 Procedure for Review & Revision of SGC*

- (1) Users seeking any amendment to the SGC Code shall send written requests to the Chairperson of Grid Coordination Committee (GCC) with a copy to the Commission. If the request is sent to the Commission directly, the same shall be forwarded to GCC who shall, in consultation with the Distribution Licensees, Generating Companies, Central Transmission Utility (CTU) and such other persons as the Commission may direct or GCC may decide to consult, review the State Grid Code provisions.*
- (2) Proposed changes/modifications in line with IEGC stipulations shall be circulated to all GCC members during GCC Meeting (which shall be convened at least twice in a year or as may be directed by the Commission) for their written comments within a reasonable time frame. Whenever it is observed that a certain provision of the SGC is not consistent with the IEGC, then the same shall be discussed in the GCC and the provision may be revised to make it consistent with IEGC.*
- (3) Based on the response received from the members of the GCC, a report shall be prepared and submitted to the Commission for approval. The report shall cover the following: -*
  - (a) Reports on the outcome of the proposed review.*
  - (b) Any proposed revision to the SGC as GCC thinks necessary for achievement of the objectives referred to in these Regulations/ transmission licence.*
  - (c) All written representations and objections submitted by the Users at the time of review.*
- (4) Any change from the previous version shall be clearly marked in the margin. In addition, a revision sheet shall be placed at the front of the revised version, noting the number of each changed sub-section, together with reasons for the change.*
- (5) STU shall maintain and upload State Grid Code Regulations with the latest amendments on its website.”*

## Unquote

**It was decided in the meeting that members shall submit their comments in writing to SLDC within one month's time. Based on the response received from the members of GCC, a report shall be prepared by SLDC and submitted to the Commission for approval.**

- d. **Yearly Maintenance Program of IaSGS and Intra-state transmission lines in compliance to regulation 6.8.4(2) of SGC, 2016: -**
  - i. The proposed Yearly maintenance programme for Intra-State Generating units and Intra-state transmission lines may be provided for discussion and approval.  
PTCUL, UJVN Ltd and other constituents may provide the same to SLDC upto 31<sup>st</sup> October for next financial year. The same is pending at PTCUL end for the current financial year too.  
*The member from UJVN Ltd apprised GCC that UJVN Ltd has already submitted the outage/maintenance programme to SLDC.*  
**It was decided in the meeting that PTCUL, UJVN Ltd and privately owned generators shall provide their proposed Yearly Maintenance Programme to SLDC within stipulated time frame.**
- e. **Reactive Power Management: -**
  - i. Defective capacitor bank report. (Enclosed as **Annexure-2** for discussion)  
PTCUL may take action for repair of defective capacitor banks and for better operation of state grid.
  - ii. Healthiness of 50 MVAR Reactor.  
Healthiness of 50 MVAR reactor installed at 400/220 kV s/s Rishikesh may be updated and shall be maintained in healthy condition in view of frequent load crash & high system voltages.

*SLDC raised its concerns regarding reactive power management and its importance for smooth, reliable and secure operation of State grid. SLDC submitted that defective capacitor banks are not being repaired and the list of defective capacitors was shared with the members in the meeting.*

**It was decided in the meeting that the concerned wings of PTCUL shall take corrective action and submit the status to SLDC on monthly basis.**

**f. Solar plants & Sub-stations likely to be commissioned in next 6 months.**

Solar plants & Sub-stations likely to be commissioned in next 6 months may be informed for better planning of grid operations and proper load forecasting.

**Member from UREDA informed that no solar power plant is likely to be commissioned in next 6 months. PTCUL informed that following substations are likely to be commissioned in next 6 months:**

- i. 220KV/33KV IPP Dehradun.
- ii. 220KV/132KV Piran-Kaliyar.

**g. Frequent force outages of Transmission elements.**

No frequent trippings are there.

**a. SPS planned for Intra-State transmission system.**

No SPS planned by PTCUL.

**h. Current status of Telemetry data for solar plants and Bulk of Open Access consumers.**

SLDC raised its concern about the telemetry of solar plants and Bulk open access consumers and apprised to GCC that the clause 5.10 of SGC, 2010 is as follows:

*“5.10 Data and Communication Facilities*

*Reliable and efficient speech and data communication systems shall be provided to facilitate necessary communication and data exchange, and supervision/control of the grid by the SLDC, under normal and abnormal conditions. All agencies shall provide Systems to telemeter power system parameter such as flow, voltage and status of switches/ transformer taps etc. in line with interface requirements and other guideline made available to SLDC. The associated communication system to facilitate data flow up to SLDC, as the case may be, shall also be established by the concerned agency as specified by STU in connection agreement. All agencies in coordination with STU shall provide the required facilities at their respective ends and SLDC as specified in the Connection Agreement.”*

SLDC requested all the members to abide by the above regulation and provide the data and communication facilities up to SLDC for better monitoring of grid.

**It was decided in the meeting that UREDA shall take up the issue of telemetry of data with the solar plants (>1 MW) and shall also provide a list of solar plants along with their telemetry status to SLDC within one month's time.**

**i. Constraints in Intra-State Grid.**

A list of constraints in Intra-State grid was provided to PTCUL for taking appropriate action for strengthening of the grid and further for better operation.

*SLDC raised its serious concern regarding the constraints in the intra-state grid and apprised GCC that the constraints are being informed to PTCUL on half yearly basis for submission of progress reports and to submit action plan to remove the existing constraints.*

It was decided in the meeting that the concerned wing of PTCUL shall submit the action plan within one month's time to SLDC.

j. Tap Optimization.

Tap positions of ICTs installed at PTCUL sub-stations may be optimized using the excel sheet as provided by NRLDC. SLDC submitted that tap positions shall be optimized for better management of reactive power. **The excel sheet was provided to the members through email for further necessary action.**

2. OCC pending issues.

i. **Installation of 125 MVAR reactor at 400 kV Kashipur S/s and 80 MVAR reactor at 400 kV Srinagar S/s.**

SLDC apprised to the GCC members that as discussed in various OCC meetings, the installation of above reactors shall enhance the reliability, security of State grid in low load seasons/high voltage conditions. As the State network is growing at good pace and the additions of high voltage lines injects reactive power into the system during low load conditions so to compensate the same, installation of necessary reactors is utmost important. Further, SLDC requested to expedite the process of installation of reactors at the above locations.

**It was decided that the concerned wing of PTCUL shall expedite the process and submit the status report, action plan along with the timelines to SLDC within one month.**

ii. **Planning, procurement and deployment of Emergency Restoration System.**

SLDC apprised to the GCC members that the issue is pending from many OCC meetings but no information about time frame is provided by PTCUL to NRPC. Being a hilly State, Uttarakhand is more prone to tower collapse situations so restore the affected line in minimum possible time is possible with the ERS. In view of above, ERS must be available with the PTCUL for early restoration of the affected line.

**It was decided that the concerned wing of PTCUL shall expedite the process and submit the status report, action plan along with the timelines to SLDC within one month.**

iii. **Healthiness of defense mechanism: Self certification.**

Report of Mock exercise for healthiness of UFRs carried out by PTCUL on quarterly basis is to be submitted to NRPC Secretariat and NRLDC. OCC, NRPC advised PTCUL to certify specifically, in the report that "All the UFRs are checked and found functional". Only T&C Division Roorkee, PTCUL has submitted the report in prescribed format.

**It was decided in the meeting that remaining T&C Divisions of PTCUL shall submit the reports in prescribed format of the quarter ending March-2018 on priority to SLDC for further submission to NRPC.**

iv. **UFR replacement.**

SLDC apprised that the status of replacement of static type UFRs is required to be communicated to NRPC as discussed during various OCC meetings.

**It was decided that the T&C wing of PTCUL shall expedite the process and submit the status report, action plan along with the timelines to SLDC within one month.**

v. **Status of FGMO/RGMO in thermal (Gas) plants.**

Status of FGMO/RGMO in thermal (Gas) plants was requested by NRPC through many OCC meetings but no information was provided by M/s GIPL, SEPL and UJVN Ltd.

SLDC apprised during the meeting that as per regulation 6.2 (6) of SGC 'all thermal generating units of 200 MW and above and all hydro units of 10 MW and above (except those with upto 3 hours pondage), which are synchronized with the Grid, irrespective of their ownership, shall have their governors under restricted mode of operation at all times.'

However, all other generating units including the hydro units of pondage upto 3 hours, Gas turbine/Combined Cycle Power Plants, wind and solar generators and Nuclear Power Stations shall be exempted.

**It was decided that the Member UJVN Ltd shall submit the status of FGMO/RGMO of the plants, if any, which comes under the ambit of above mentioned regulations.**

vi. **Non-representation in OCC from UPCL, PTCUL and UJVN Ltd.**

OCC raised its concern in 146<sup>th</sup> OCC meeting regarding non-representation in monthly meetings from UPCL, PTCUL and UJVN Ltd.

SLDC apprised the above mentioned concern of OCC to the members.

**It was decided in the meeting that PTCUL, UJVN Ltd and UPCL shall nominate one member each to attend the OCC meetings within 15 days and send the nominations to NRPC. Also a copy of nomination shall be provided to SLDC.**

vii. **Automatic Demand management system.**

The issue is pending from many OCC meetings but no information is being provided by UPCL.

SLDC apprised the concern of OCC to the members and also informed to that the regulation 7.4 (6) of SGC states that "*The SLDC, distribution licensee shall always restrict the net drawal of the State from the grid within the drawal schedules keeping the deviations from the schedule within the limits specified in the Deviation Settlement Mechanism Regulations. The concerned User and SLDC shall ensure that their Automatic Demand Management Scheme mentioned in sub-Regulation 6.5.1 of these Regulations acts to ensure that there is no over-drawal. If the Automatic Demand Management Scheme (ADMS) has not yet been commissioned, then action shall be taken as per manual demand management scheme to restrict the net drawal from grid to within schedules and all actions for early commissioning of ADMS shall be initiated.*"

**It was decided that UPCL shall expedite the process of commissioning of ADMS and shall submit the status report, action plan along with the timelines of commissioning of ADMS to SLDC within one month for further submission to NRPC.**

viii. **Mapping of Feeders under UFR scheme in SCADA.**

In the 141<sup>st</sup> OCC meeting, members were informed about the "Compendium of SPS in NR" (Annexure-9 of the MOM) which was released in the 40<sup>th</sup> NRPC meeting. All the utilities were requested to go through the compendium and identify feeders concerning their state and map the same in SCADA.

SLDC apprised the committee that the issue of mapping of feeders in SCADA is pending since many OCC meetings.

**It was decided in the meeting that the SCADA wing of PTCUL shall submit the status report, action plan along with the timelines for mapping the feeders under UFR scheme in SCADA to SLDC within 15 days.**

3. **Agenda by ACME Solar Holdings Ltd.**

- a. Protection equipments not available in 33/11 KV Grid Sub-station.

- b. SE /Executive Engineer will ensure Grid availability to all solar plants. Grid availability major concern. Generators incurring heavy financial losses.
- c. Sub-stations specifically UPCL (D) need to be modified
- d. Transmission infrastructure to be upgrade.
- e. ACME Solar power evacuation at Gadarpur Cheeni mill 33/211 GSS Grid outage regularly 2- 3 hours in best generation month Feb to June.
- f. Solar plants connected at 33/11kV UPCL substations needs to be connected to 132/33kV PTCUL s/s
- g. Problem of grid synchronization because of relay settings.
- h. For synchronizing the ABT meters with SLDC, coordination with SLDC required.

**All the concerns of ACME solar holdings Ltd were discussed in the meeting and it was decided that UPCL shall carry out the protection audit of all the feeders on which solar plants are connected and submit the report to SLDC within one month. Also, it was decided that UPCL shall take the required action in the above mentioned concerns of ACME Solar Holdings Ltd.**

#### **Additional Agenda A: (by SLDC)**

##### **Over-drawal by UPCL (NRLDC agenda in 147<sup>th</sup> OCC)**

- a. As per NRLDC agenda in 147th OCC meeting held on dated 15.05.2018, UPCL is continuously overdrawing for most of the time in past months even though as per regulation 7(1) of CERC regulations 2014 (Deviation settlement and related matters) it is required that OD/UD of electricity by any buyer during a time block shall not exceed 12% of its scheduled drawl or 150 MW, whichever is lower.
- b. UPCL is overdrawing for average 11 numbers of time blocks and under-drawing for 16 numbers of time blocks during the day from the period w.e.f. 01.04.18 to 22.04.18.
- c. Also violation of regulation 7(10) of CERC (Deviation Settlement and related matters) Regulations 2014 (sustained deviation from schedule in one direction) is being done by UPCL.
- d. Total number of zero crossing violations during the period mentioned above are 74.

SLDC apprised the GCC members that UPCL is continuously over-drawing from the grid and violating the State Grid Code regulations. NRLDC is sending non-compliance messages to SLDC in all cases and same is being informed to UPCL immediately but the proper actions is not being taken by UPCL.

**It was decided that UPCL shall take corrective action for maintaining the drawal of power from grid as per the schedule. This shall include proper load forecasting on day ahead basis, and adherence to relevant regulation(s)/directions stated above.**

#### **Additional Agenda B: (by SEPL)**

Director, SEPL (member to represent the privately owned generating stations) raised the issue of non-compliance of N-1 condition at Mahuakheraganj and Kashipur area network.

**It was decided that PTCUL shall expedite the process of commissioning of 315 MVA, 400/220 kV ICT at 400 s/s Kashipur for ensuring N-1 compliance of ICTs. Since, one more gas based generating station (Beta) is expected to get commissioned in future as apprised by Director(SEPL), PTCUL shall take up the connectivity issue with M/s GIPL in light of the system study report for the area and directions of Hon'ble Commission given in the relevant order(s).**

# ATTENDANCE SHEET (MEETING ON D. FED 22/05/2018)

ANNEXURE - 7

S.No	Name	Designation	Organization	Mobile No.	E-Mail	Signature
1						
2	Deep Sah	CE	SLDC	7088117906	deep.sah@kerala.gov.in	Deep Sah
3	B.S. Srinivasan	ACOME		7921099693	b.s.srinivasan@spcmis.in	
4	Kamath Madhu					
5	S. Sabar (P)					
6	Aash: Nandan Pant	Dy GM WUNH	WUNH	9456690137	pant123@wunh.com	
7	Meg. Bahadur	GM (Comm)	UJVNL	9456590823	mb.theapa@ujvnl.com	
8	Anampara Shalasa	SE (SLDC)	SLDC	9927178458	anampara.shalasa@slcdc.org	
9	Rajesh K. G	BE (SLDC)	SLDC	7088117550	rajeshk@slcdc.org	
10	Sangy Kumar	CE Govt	UPCL	9310677555	sangy@upcl.com	
11	PODUS Parmar	SE UPCL	UPCL	9917400642	podus.parmar@upcl.com	
12	C.P Agrawal	Dy CPO	UREDA	9897913509	cpa@ureda.org	
13	G. A. NAIDU	Director (P)	SEPL	9871120363	ganaidu@sepl.com	
14	Vinayak Shetty	Executive Engineer	SLDC	7088117954	vinayak.shetty@slcdc.org	
15	Dafakar Kumar	BE	SLDC	7088117956	dafakar.kumar@slcdc.org	
16	Ankit Kumar	AE	SLDC	7088117842	ankit.kumar@slcdc.org	
17						
18						
19						
20						