TRANSMISSION CORPORATION OF TELANGANA LIMITED
VIDYUT SOUDHA:: HYDERABAD – 82
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State Load Despatch Centre (An ISO 27001:2022 certified entity)

From
The Chief Engineer/SLDC,
TGTRANSCO
Vidyut Soudha,
Hyderabad.

To
The Member Secretary/SRPC
29 Race Course Cross Road,
Bengaluru - 560009

Lr.No.CE(SLDC)/SE(SLDC)/DE(DS&IT)/D.No. 52 /2026,Dt: 27 .10.2026

Sir,

Sub: Disconnection of pumped storage/BESS/ESS during under-frequency conditions where separate AUFR loads are already provided – Discussion point in OCC Meeting - Reg

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Preamble

1. The State recorded a peak demand of **20,018 MW on 16.10.2026**, met through internal generation, external power drawal and utilization of stored energy through the pumped-storage operation of the Nagarjunasagar Hydel Project.

2. The State has approximately **10,000 MW of Lift Irrigation Scheme (LIS) loads**, which are critical for irrigation and water supply. These schemes operate in cascade mode, involving sequential water transfer from one reservoir to other reservoirs under Kaleshwaram, Palamuru in Rangareddy and Seetharama Devadula Lift schemes.

3. Further, the State has pumped-storage facilities of approximately **1,500 MW.** Under certain operating conditions, LIS loads may be around **3,000 MW** and pumped-storage pumping loads around **1,000 MW**. Their sudden disconnection may disrupt the entire water transfer chain, affect irrigation and water supply operations, and complicate subsequent restoration. Also, impacts State Load Generation Balance to a large extent.

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4. Further, large scale storage projects of BESS and PSP are planned in the State.

5. The State/Utility has already identified designated feeders to provide the prescribed quantum of load relief under the Automatic Under-Frequency Relay (AUFR) scheme as per the National level studies and approved in NPC.

6. Regulation 29(12) Note 2, of the CERC (Indian Electricity Grid Code) Regulations, 2023 provides for automatic disconnection of pumped-storage plants operating in pumping mode and ESS operating in charging mode before the first-stage UFR operation, whose default setting is 49.40 Hz.

7. Therefore, the cumulative impact of these bulk load disconnections on grid security, **Operational implication of LGB** and essential LIS operations requires careful technical consideration before implementing above clause as the Telangana State is established large scale LIs compared to other States in India.

Agenda Item

Deliberation on the disconnection of all LI Schemes and pumped-storage plants operating in pumping mode and BESS/ESS operating in charging mode during under-frequency conditions, considering the existing required AUFR load-relief arrangements, grid security requirements and the potential disruption to essential cascade-based LIS operations for recommending to Hon'ble CERC.

Yours faithfully,

Chief Engineer /SLDC

Copy submitted to:
The Director (Grid and Transmission Management)/TGTRANSCO/VS/Hyderabad

Copy communicated to :
1) The Executive Director/SRLDC/29 Race Course Cross Road/Bengaluru-560009.
2) The Chief Engineer/Power Systems/TGTransco/VS/Hyderabad

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