No. 23/16/2020-R&R(Part-2) Government of India Ministry of Power

Shram Shakti Bhawan, Rafi Marg, New Delhi, 24th January, 2023

To,

1. Secretary, MNRE, New Delhi

- 2. Chairperson, Central Electricity Authority, Sewa Bhavan, R.K. Puram, New Delhi
- 3. Secretary, Central Electricity Regulatory Commission (CERC), New Delhi
- 4. Principal Secretaries/Secretaries (Power/Energy) of all State Governments/UTs

5. Secretaries of All State Electricity Regulatory Commissions/JERCs.

6. Chairman/CMDs of all PSUs under administrative control of Ministry of Power

7. CMD, SECI, New Delhi

- 8. CMDs/MDs of Discoms/Gencos of all State Governments
- 9. CMD, IEX LTD New Delhi & MD/CEO, PXIL, Mumbai/ HPX Delhi.

10. DG, Association of Power Producers, New Delhi.

11. President, FICCI, House No. 1, Tansen Marg New Delhi

12. President, CII, New Delhi

- 13. President, PHDCCI, New Delhi
- 14. ASSOCHAM, Chanakyapuri, New Delhi
- 15. Member, PRAYAS Energy Group, Pune
- 16. DG, Electric Power Transmission Association (EPTA), New Delhi
- 17. Chairman Indian Wind Power Association, New Delhi
- 18. Chairman, Indian Wind Turbine Manufacturers Association, New Delhi
- 19. Director General, National Solar Energy Federation of India (NSEFI), New Delhi.

20. Chairman, Solar Power Developers Association, New Delhi

Subject: Proposal on Day Ahead Operation of Security Constrained Economic Despatch (SCED)- Reg.

Sir/Madam.

I am directed to forward herewith a draft Proposal on Day Ahead Operation of Security Constrained Economic despatch (SCED), with request to provide your comments, if any, to this Ministry within 30 days from the date of this letter, i.e. by 22.02.2023. The comments may also be emailed at pk.sinha1966@gov.in and debranjan.chattopadhyay@nic.in.

This issues with the approval of Competent Authority.

Encl: as above

Yours faithfully.

(Dr. P.K. Sinha) Deputy Secretary to the Govt. of India

Ph: 011-2373 6275

Copy for information to: PS to Hon'ble Minister for Power and NRE, APS to MoSP, Sr. PPS to Secy (P), PS to CE (R&R), Ministry of Power.

Copy to: Technical Director, NIC Cell for uploading on MOP's website under "Current Notices" with the heading of "Seeking comments on draft Proposal on Day Ahead Operation of Security Constrained Economic Despatch.

(Draft)

Day-Ahead Operation of Security Constrained Economic Despatch (DA-SCED)

Background

Security Constrained Economic Dispatch (SCED) Pilot Project is under operation since April 2019. Fifty (50) regional entity thermal inter-state generating stations with total capacity of 59840 MW whose tariff is determined or adopted by the Central Electricity Regulatory Commission (CERC) are part of SCED optimization. An integrated software application has been developed in-house by Grid-India, which runs in real-time to optimise the total variable cost of generation pan-India, while meeting technical and grid security constraints.

SCED pilot has resulted in reduction of variable cost on pan-India basis to the tune of ₹ 2300 Crore and these benefits are being shared with generating stations and their beneficiary states.

The proposal for enlarging the scope of SCED to include more plants and to run the SCED on day ahead basis for providing a look ahead schedule is described below.

It is proposed to expand the scope of national level merit order scheduling under SCED by including all the regional entity thermal power plants, which can declare a compensation charge (like energy charge) on a monthly basis.

Subsequently intra-state thermal generators may be included in SCED which would require improvements/changes at the State Load Despatch Centres (SLDCs) and intra-state generator level, which are detailed in a separate section at the end of the document.

Proposed operation of day-ahead SCED

The generating stations shall submit their declared capability/Pmax along with ramp rate and minimum turndown level for the next day on D-1[by 0600 hrs]. The Energy Charge Rate/Compensation charge to be considered for SCED shall be submitted by the generating stations on a monthly basis.

Regional Load Despatch Centres (RLDCs) would prepare the entitlements and declare the share of each beneficiary on D-1[by 0700 hrs]. Beneficiaries shall submit their requisitions/schedules from ISGS on D-1[by 0800 hrs].

Assess the availability of reserves

Based on the station availability and the schedules submitted by beneficiaries/procurers RLDCs shall prepare the injection and drawl schedules [by 0930 hrs]. The first run of day-ahead SCED shall be carried out on D-1[at 0945 hrs] before opening of bidding window for Day-ahead market (DAM) in Power Exchanges. The look ahead schedules obtained after SCED run would be published on the scheduling portal. At this stage, any SCED schedules are provisional in nature. The power station thereby can participate in DAM/Real Time Market (RTM).