CENTRAL ELECTRICITY REGULATORY COMMISSION

NEW DELHI

Petition No. 01/SM/2016

Coram: Shri Gireesh B. Pradhan, Chairperson
Shri A. K. Singhal, Member
Shri A. S. Bakshi, Member
Shri M.K.Iyer, Member

Date of Order: 12th January, 2016

IN THE MATTER OF

Determination of mark-up for delivery of Regulation Up Services, under Central Electricity Regulatory Commission (Ancillary Services Operations) Regulations, 2015.

ORDER

The Central Commission notified the Central Electricity Regulatory Commission (Ancillary Services Operations) Regulations, 2015 (hereafter termed as the 'ASO Regulations'), on 13th August 2015. For implementation of Reserves Regulation Ancillary Services (RRAS), the first step is to enable frequency control through utilization of surplus capacity available in inter-State generating stations (ISGS) or through Regulation Down instructions on ISGS.

2. Regulations 13.3 and 13.4 of the ASO Regulations are provided as under:

"13.3 The RRAS Provider(s) shall be paid at their fixed and variable charges, with mark-up on fixed cost, as decided by the Commission through a separate order from time to time in case of Regulation Up services for the quantum of RRAS scheduled, from the Regional Deviation Pool Account Fund.

Provided that, the fixed and variable charges allowed by the Commission and as applicable at the time of delivery of RRAS shall be used to calculate the payment for this service and no retrospective settlement of fixed or variable charges shall be undertaken even if the fixed or variable charges are revised at a later date.

13.4 The RRAS Provider(s) shall adjust the fixed charges to the original beneficiaries for the quantum of un-requisitioned surplus scheduled under Regulation Up service."

3. In pursuance of the aforesaid provision in the regulation, the Commission proposes to determine the mark-up for RRAS providers for Regulation Up services.

4. In this context, it is pertinent to refer to the Statement of Reasons accompanying ASO Regulations wherein it has been explained that mark-up shall be applied to fixed cost, and shall

be decided based on factors such as age, ramp rate, loss of efficiency, additional wear and tear of the unit, etc. It is clarified that both the generating station and the original beneficiary(ies) are being remunerated through payment of fixed and variable charges for providing Regulation Up service. The mark-up seeks to only compensate for the additional wear and tear or loss in efficiency, if any, that may be caused due to increased ramp up and ramp down cycles under Ancillary Services scheduling.

5. In the draft Central Electricity Regulatory Commission (Indian Electricity Grid Code) (Fourth Amendment) Regulations, 2015, it has been proposed to fix the technical minimum for operating the thermal generating stations at 55%, and a provision has been made to compensate the generator for operating at this technical minimum to take care of heat rate degradation and increase in secondary fuel oil consumption.

6. A similar approach is proposed to be adopted in case of Regulation Up services; however, data on ramp rate, loss of efficiency and additional wear and tear (if any) is not available at this point of time. The Commission feels that this data shall be gathered and compiled over time once the Ancillary Services Regulations are implemented by NLDC and RLDCs which will help quantify the requisite compensation.

7. As of now, the other alternative to determine the mark-up is to link it to the incentive that is given to generators for achieving higher than normative PLF of 85%. The Commission has followed two broad principles to ascertain this incentive in the past. During the control period 2004-09, it was set at 25p/unit. Subsequently, CERC (Terms and Conditions of Tariff) Regulations, 2009 modified the approach by making the incentive a function of fixed charges and vintage of the plant. Thus, the incentive for achieving plant availability over Normative Annual Plant Availability Factor (NAPAF) of 85% was set at one-half of fixed charges for generating stations in commercial operation for less than ten (10) completed financial years, and equal to fixed charges for older stations.

8. The prevailing Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2014, specify an incentive of 50 paise for generating stations when their Plant Load Factor (PLF) exceeds the Normative Annual Plant Load Factor (NAPLF) of 85%. Regulation 30(4) of the said regulation states as under:
"Incentive to a generating station or unit thereof shall be payable at a flat rate of 50 paise/kWh for ex-bus scheduled energy corresponding to scheduled generation in excess of ex-bus energy corresponding to Normative Annual Plant Load Factor (NAPLF) as specified in Regulation 36(B)."
The approach towards incentive was modified as the gap between Plant Availability Factor (PAF) and Plant Load Factor (PLF) for thermal generators started to increase over time. This incentive serves to push the generating stations for better planning of fuel and maintenance cycles, and keeping units as efficient as possible.

9. It is to be noted here that the schedule under Ancillary Services Regulation is not proposed to be considered for PLF-linked incentive for the generating station. That is, if the PLF goes beyond 85% only on account of schedule under Regulation Up service, the generator shall not receive

the incentive under CERC (Terms and Conditions of Tariff) Regulations, 2014. Thus, the calculation of incentive shall be only based on schedule from beneficiaries, excluding schedule under RRAS.

10. Since the ISGS shall be required to comply with the instructions of concerned RLDC for Regulation Up service, the Commission feels that the incentive for Regulation Up service should be equivalent to incentive for the generating stations for achieving PLF beyond 85%. This is expected to sufficiently cover any additional operating expenses incurred.

11. Based on the above rationale, the Commission proposes to set the mark-up for participation in Regulation Up Ancillary Services at 50 paise/unit.

12. The Commission will decide the mark-up for Regulation Up Service after considering the comments of the stakeholders. Accordingly, the Commission invites comments from the stakeholders by 29th January, 2016. Comments received after this date shall not be considered.

Sd/-	**sd/-**	**sd/-**	**sd/-**
(M.K.Iyer) **Member**	**(A.S. Bakshi)** **Member**	**(A. K. Singhal)** **Member**	**(Gireesh B. Pradhan)** **Chairperson**