# Observations on Draft Ancillary Services Operations Regulation (ASOR) 2015

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1. The proposed 'Ancillary Services Operations Regulation (ASOR) 2015' would help improve grid operation in general and quality in particular.
2. Most of the provisions are found to be in order considering the objective.
3. To improve grid operation (security and quality) further, some suggestions are made for the consideration of CERC during next course of revision.
4. Frequency control, voltage control & line loading and congestion control may be better addressed through ASOR. There is no need for UI based frequency control, as ASOR may very well address the same. In the absence of UI, the present free scheduling culture would go and frequency specific scheduling may get in. Through ASOR we may be able to operate the system at a stipulated frequency,50 Hz or any other close frequency(49.85/49.90/49.95),as decided by the authorised agency. In the proposed new operating scenario, FGMO would replace RGMO. Reliable and quality power supply may be ensured with the new arrangement.
5. Drawal entities (Distribution licensees, OA consumers etc.) may schedule their drawal day ahead based on their demand (load curve), and identify their generation (based on long term and short term purchase contacts) at 50 Hz. or any other stipulated frequency. SLDC may do prudence check on the drawal/generation requirements at stipulated frequency and regulate the schedule. RLDC/NLDC may arrange power up/down from regulation reserve pool for controlling frequency at stipulated frequency to take care for possible inadvertent flow/unforeseen conditions through ASOR.
6. It is possible to implement Secondary control/AGC /Semi EMS in a new (but purposeful) format. Grid friendly characteristics of wind /solar units in frequency/voltage control and grid security aspects may have to be utilised appropriately. ASOR would address the balancing issues relating to infirm RE power. The associated cost issues have to be addressed in time to accommodate more wind/solar power in to the grid. Study can be initiated for each of the above cited issues to adopt suitable options.
7. The issues concerning reactive power scheduling and generator(including distributed generators) reactive power pricing may have to be deliberated for possible adoption in our grid system to improve voltage profile.
8. Regulation Reserve pool has to be broad based in the absence of UI and to accommodate more wind/solar power. Regulation reserve up/down with different ratings/ limits have to be kept in the reserve pool. ASOR may not be restricted to surplus power/un requisitioned power management, instead it should be treated as a technical tool to improve and strengthen Grid operation.
9. The pricing mechanism may be framed to attract more regulation reserve participating entities in ASOR. Power market apart from power business would strengthen grid operation.
10. NLDC, as the apex controller, may have to closely monitor the system frequency to operate at 50 Hz./stipulated frequency in co-ordination with RLDC. Voltage control & line loading and congestion control may be taken care by RLDC and SLDC.