Rethinking required!

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Recently all the major wind energy associations got together to challenge the CERC on Scheduling and Forecasting of wind power. Most of the winds IPPs feel that the UI implication of this exercise will adversely impact profitability of their projects. There are many who have questioned legality and jurisdiction of CERC in coming up with the Scheduling and Forecasting notification. An overwhelming majority of wind industry is for putting an immediate stop to this exercise. At the same time, however, Scheduling and Forecasting and the RRF mechanism has been initiated. The main concern of CERC in coming up with this requirement for wind farms is twofold

1) From grid stability and management viewpoint, it is important that all incoming and outgoing power flows are pre-assessed for generation and dispatch planning on a daily basis in fifteen minute slots; and

2) To integrate wind generation with UI mechanism, this is a commercial method of settlement in case of over deficit or surplus generation from any generator. Many stakeholders are of the view that forecasting can be undertaken but without the UI implication. In this scenario, when there are too many opinions on the issue, it is important to examine it in a logical and dispassionate manner. Today, we have nearly 19000 MW of installed wind power capacity in the country, if we go by governmental targets and industry ambitions, we may have a capacity of nearly 30000 MW by 2020 and this will only grow. Wind based generation is subject to natural seasonal, monthly, daily and hourly variations. These variations have to be accounted in the power system management. Therefore, those who are of the opinion that scheduling and forecasting should be stopped altogether are not taking a broad systemic view. At the same time, one need to realize that issues of grid stability and its management are system-wide issues and there can be many variables that impact grid parameters including possible forced outage of a conventional power plant and load demand variations. The cost of keeping the system in order should not be passed on to wind farm operator, just because he is generating green infirm energy. The regulator must see that these costs are apportioned equally across all stake-holders in the system. However, applying UI charges to wind operators cannot be fair as they have no control over nature and how winds would fluctuate. Scheduling and forecasting will also adversely affect investments in wind power projects. Since this is a power system issue which is the responsibility of the load dispatch centre (LDC) and the grid operator, ideally Scheduling and Forecasting exercise should be carried out by the grid operator either at load dispatch center or at the pooling station. It has been pointed out earlier in many discussions and also in this editorial that forecasting and scheduling at an aggregate level over a region is far easier than forecasting at each individual wind farm of 10 MW level. Also at a centralized level a better infrastructure to undertake scheduling and forecasting of wind projects can be set up. This would be a more efficient way of achieving the end objective of grid stability, however, the SLDCs and RLDCs seem to be reluctant in taking up this role. The wind turbine manufacturers can also not escape their share of responsibility, which is to ensure that

1) Direct R&D towards development of wind turbines with some minimum storage so that out-put can be smoothened and
2) Share SCADA data as required by the agencies involved in forecasting to ensure effective forecasting. The Regulators & the Industry need some rethinking on the issue.