

Clause number / Subject	Existing wording	SB Energy's Observations
5.2 (u) Load curtailment	Special requirements for Solar/ wind generators System operator (SLDC/ RLDC) shall make all efforts to evacuate the available solar and wind power and treat as a must-run station. However, System operator may instruct the solar /wind generator to back down generation on consideration of grid security or safety of any equipment or personnel is endangered and Solar/ wind generator shall comply with the same.	<p>We request the honourable Commission to amend regulations to encourage suitable revisions / any other mechanism in interstate schedules that will encourage SLDCs to prioritize green power.</p> <p>1. Present situation</p> <p>The Wind / Solar generators are being curtailed in most cases due to low demand even after complying scheduling and forecasting regulation with DSM penalty. SLDCs are not transparent in planning & scheduling of Grid demand and generation. Must-run status of RE generators is not complied with, due to higher DSM charges on interstate deviations, Inadequate Conventional generators outage planning and reserve shutdowns during high wind seasons and spinning reserves.</p> <p>Power curtailment to RE generators is done through verbal communication from the local operator which has no traceability even with SLDC/RLDC. This possess a serious risk (in the form of heavy potential penalties) to the generator, as grid operator is not able to substantiate at a later stage in the case of backing down instructions given to generators.</p> <p>2) The term 'Grid security' is frequently used as a tool to curtailing RE power. Hence we request for detailed definition of Grid Security. The order / steps to reduce / increase the power to meet the situation while honouring Must run status. We request to consider to increase the operational frequency band in which RE power can be curtailed (only if Grid frequency is >50.20 Hz). This shall prompt SLDC to redefine the control mechanism to promote more RE generations.</p> <p>3) Curtailment of conventional power, STOA, Interstate power should precede RE-power curtailment in the State in the curtailment procedure during instances of Grid security. The curtailment procedure / guidelines can be amended in the Grid code.</p> <p>4) In order to streamline this anomaly, we request the Commission to formulate necessary digitized methodology that is recordable and traceable. All verbal instructions should be backed up by written instruction within 24 hours with codes for backing down.</p> <p>5. RE Tariff is determined through a transparent bidding process. Unlike for conventional generators, there is no two-part tariff available. Backing down a conventional source upto the technical minimum does not affect the conventional generator and as per their PPAs they continue to get their capacity charges. But backing down / curtailment of a Solar / Wind project directly impacts the commercial interests of developer as no instrument is available to compensate their costs.</p> <p>Proposal: "MUST RUN" status to be enforced and only in exceptional circumstances of maintaining grid security and safety and that too as a last resort. Only after exhausting all other measures including backing down of conventional generators to the technical minimum, the SLDC/RLDC may issue order of backing down.</p>
6.5 23 (ii) :		<p>No commercial impact of deviation from schedule generation if the Solar / Wind generator accepts the schedule as proposed by RLDC:</p> <p>If the generator agrees to the RLDC schedule (which has been prepared on the basis of weather forecast), any deviation on account of weather variations must not have any commercial impact on the generator.</p>
6.3 (B) (new provision):		<p>Any backing down / curtailment of the scheduled generation on the direction of the SLDC/RLDC must be treated as deemed generation with appropriate compensation.</p> <p>Since this loss is due to reasons beyond the control of the solar / wind developer and for none of its fault, it cannot be penalized to bear any loss of revenue on this account. For conventional generators, appropriate remedies are available for compensation of losses in their PPAs.</p> <p>The solar / wind developer needs to be placed back at the same economic position as he would have been had such instructions not been issued. In other words, solar developer should be paid for the generation loss considering this as Deemed Generation at the rate agreed in the PPA</p> <p>The method and modalities of compensation may be deliberated by the CERC. E.g. the Deemed Generation may be calculated as Average of actual generation during the corresponding period of previous day and next day.</p>
Regulation 6.5 of Part 6 of Principal Regulations:	<p>The schedule by wind and solar generators which are regional entities (excluding collective transactions) may be revised by giving advance notice to the concerned RLDC, as the case may be. Such revisions shall be effective from 4th time block, the first being the time-block in which notice was given. <u>There may be one revision for each time slot of one and half hours starting from 00:00 hours of a particular day subject to maximum of 16 revisions during the day.</u></p> <p>For Wind - 16 revisions and for solar - 09 revisions are possible.</p>	<p>Commission is requested to review the provision of one revision for each time slot of one & half hours.</p> <p>As solar & wind generation is unpredictable and is not in control of generator, the frequency of revisions can be increased by keeping the total numbers of revisions same (16 - wind & 9 - solar) to carry out proper scheduling & forecasting.</p> <p>As such we request the commission to make schedule revision and comes into effect from 2th time block. This will improve more responsive grid and better security.</p>
Roles of SLDCs	All Users, SEB, SLDCs, RLDCs, and NLDC shall take all possible measures to ensure that the grid frequency always remains within the [49.90-50.05 Hz] band.	Roles of SLDCs & SEBs needs to be more detailed out on grid security management.
Forecasting & scheduling	Each state has its own absolute error band & regulations.	We request review of standardizing Forecasting and Scheduling regulation with uniform guidelines across the states with standard absolute error bands, pooling and DSM penalties. This will enable ease of operation for all generators.
Payment of DSM Charges in absence of LTA operationalisation	Plants commissioned on STOA basis because of non-readiness of evacuation network based on LTA requirements needs to bear the DSM charges for not fault of generators.	We request waiver of DSM charges to be payable by generators as it is not justified in such circumstances.
Part 5, 6		Role of SPPD (Solar Power Park Developer) should be defined. SPPD is an intermediary between the SPD (Solar Generator) and the Grid
Part 5, 6		Hybrid Power Developer should be defined and the role elaborated
Margins for DSM		We request the Commission to not reduce the Forecast margins currently available to the Solar and Wind energy Producers. Instead, we suggest the setting up of large Regional entities which will aggregate the forecasts from all RE Generators in the region and make a common forecast which will have much lesser uncertainty. In this manner, the Grid will have greater stability without resorting to penalties for the Generator

Margins for DSM		<p>Even within a short 15 minute window, there is high variability of solar and wind resource. If the resource is poor at the start of the 15 minute period, but improves towards the second half of the 15-minute period, there is a good chance to achieve the scheduled generation for the period. However, the RE generator (especially for SECI, NTPC projects) are prohibited by the terms of the PPA from injecting above the rated capacity at the Point of Injection. This is often enforced by the SPPD by using relay settings set to the Rated capacity. Considering the above, the Commission is requested to not reduce the current margins for DSM.</p>
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