

National Electricity Rules Clause	Task/ Expectations
<p>Clause 3.7B(b) – Unconstrained intermittent generation forecast <i>Clause 3.7B(b) requires an SSG to submit to AEMO the plant availability for each Semi-Scheduled Generating unit as soon as the SSG is aware that the plant availability is at least 6 MW below or above the nameplate rating of the unit. The SSG must also notify AEMO of changes to submitted plant availability until the plant availability is no longer at least 6 MW below or above the nameplate rating.</i></p>	<p><input type="checkbox"/> Have you identified and reviewed all of the factors (e.g. market and plant conditions) that affect the availability of your individual plant (including those set out in AEMO's NEM Operational Forecasting and Dispatch Handbook)?</p> <p><input type="checkbox"/> Do you have systems and personnel in place to actively monitor these factors to ensure that any changes in plant availability are identified and notified to AEMO in a timely manner? For example, do you actively monitor actual ambient temperatures and energy source availability to compare them with the forecasts upon which the relevant plant availability were based?</p> <p><input type="checkbox"/> Have you considered these factors when submitting anticipated availability over the forward time horizon? Do you promptly update anticipated availability as new information comes to light or as conditions change?</p> <p><input type="checkbox"/> Have you set up manual monitoring practices, as well as automated systems, to actively monitor influential factors (including those effecting energy source availability such as adverse ambient conditions) and alert the relevant staff to any changes?</p> <p><input type="checkbox"/> Do you have systems, processes and personnel in place to liaise with relevant TNSPs to ensure that network outages and runbacks have been communicated to, and managed by, AEMO through the central dispatch process?</p> <p><input type="checkbox"/> Do you have systems, processes and personnel in place to liaise with relevant DNSPs to ensure that network outages and runbacks have been communicated to AEMO and that outages are actively managed in your availability information unless instructed otherwise by AEMO?</p> <p><input type="checkbox"/> Do you have processes and personnel in place to ensure effective communication between plant operators and trading staff to verify that availability is accurately reflected in automated submissions, updating any errors when identified?</p> <p><input type="checkbox"/> Are you aware of the way that your bid energy Max Avail can be used to manage your commercial availability in the dispatch timeframe? The bid energy Max Avail can be used to manage commercial availability in the dispatch timeframe, noting this value will also limit the availability of the generating unit in SMPD, PD and PASA processes (DS, PD and Short-Term (ST)) if less than the UIGF.</p>
<p>Clauses 3.8.2(a) and 3.8.6(g) – Participation in central dispatch and generating unit offers for dispatch <i>Clause 3.8.2(a) and 3.8.6(g) require SSGs to submit dispatch offers containing 10 price bands and must specify for each trading interval and trading day:</i></p> <ul style="list-style-type: none"> • an incremental MW amount for each price band specified in the dispatch offer; and • an up ramp rate and down ramp rate. <p>Clause 3.8.8(b) – Validation of dispatch bids and offers <i>Clause 3.8.8(b) states that it is the responsibility of the SSG to check that the data contained in its generation dispatch offer or market ancillary service offer, as received and to be used by AEMO in the central dispatch process, is correct.</i></p>	<p><input type="checkbox"/> Do you have systems and personnel in place to monitor operational and commercial factors that affect your offers, bids and rebids?</p> <p><input type="checkbox"/> Are your bids, offers and rebids made with genuine intention on a reasonable basis? Do you have systems and personnel in place to ensure the bids, offers and rebids submitted reflect your commercial intention?</p> <p><input type="checkbox"/> Do you have systems and personnel in place to actively monitor the accuracy of offers, bids and rebids and to update with AEMO if they are no longer accurate?</p> <p><input type="checkbox"/> Are you familiar with the AER's Rebidding and Technical Parameters Guideline? Do you have processes and personnel in place to ensure technical parameters are bid in accordance with the Rules?</p> <p><input type="checkbox"/> Do you have systems and personnel in place to maintain relevant records such as rebid reasons and contemporaneous records in accordance with the relevant NER requirements?</p> <p><input type="checkbox"/> Where you have automated systems in place to actively monitor and submit offers, bids and rebids, are there relevant personnel available to actively monitor and act on any changes or errors identified in these systems?</p> <p><input type="checkbox"/> Where you have automated systems in place, have you rostered technical and operational staff in a 24/7/365 fashion to maintain adequate manual oversight to ensure that the generating unit or load can comply with the latest market offer at all times? Do you have relevant personnel available to actively monitor generator output, offers and correct input of bid/rebid reasons and plant availability information? If utilising automated bidding systems, do you have systems, processes and personnel in place to ensure that all offers and rebids comply with overarching obligations around the provision of high quality and accurate information to AEMO and the market.</p> <p><input type="checkbox"/> Where you provide FCAS, have you reviewed your relevant FCAS obligations? The AER encourages participants to familiarise themselves with the AER's Contingency FCAS compliance bulletin which outlines our expectations regarding compliance with a number of critical obligations.</p> <p><input type="checkbox"/> Where you have contracted a third-party contractor to undertake operational functions, have you ensured that your agreement with the third-party supports compliance with relevant the NER obligations?</p>
<p>Clauses 3.8.22(c) and 3.8.22(ca) – Rebidding <i>Clause 3.8.22(c) requires every rebid to be accompanied by a brief, verifiable and specific reason to AEMO, as well as the time when the generator became aware of the reason for the rebid.</i></p> <p><i>Clause 3.8.22(ca) provides that an SSG must make a contemporaneous record of a rebid made in the late rebidding period</i></p>	<p><input type="checkbox"/> Are you familiar with the AER's Rebidding and Technical Parameters Guideline? Do you have processes and personnel in place to ensure technical parameters are bid in accordance with the Rules?</p> <p><input type="checkbox"/> Do you have systems and processes in place to review your decision to bid inflexible and to ensure that a brief, verifiable and specific reason for the inflexibility is provided to AEMO? Do you have systems and processes in place to promptly update AEMO once the abnormal conditions have ceased?</p> <p><input type="checkbox"/> Do you have systems and processes in place to maintain adequate records in relation to inflexible bids to substantiate the reasons provided to AEMO, if required by the AER?</p>
<p>Clauses 3.8.22A(a), 3.8.22A(b) and 3.8.22A(d) – Offers, bids and rebids must not be false or misleading <i>Clauses 3.8.22A(a) requires that participants must not make a dispatch offer, dispatch bid or rebid that is false, misleading or likely to mislead.</i></p> <p><i>3.8.22A(b) provides that an offer/bid or rebid is taken to be false or misleading if the party making it does not have a genuine intention to honour, or does not have a reasonable basis for making, the representations contained within the offer.</i></p>	<p><input type="checkbox"/> Are you familiar with the AER's Rebidding and Technical Parameters Guideline? Do you have processes and personnel in place to ensure technical parameters are bid in accordance with the Rules?</p> <p><input type="checkbox"/> Do you have systems and processes in place to review your decision to bid inflexible and to ensure that a brief, verifiable and specific reason for the inflexibility is provided to AEMO? Do you have systems and processes in place to promptly update AEMO once the abnormal conditions have ceased?</p> <p><input type="checkbox"/> Do you have systems and processes in place to maintain adequate records in relation to inflexible bids to substantiate the reasons provided to AEMO, if required by the AER?</p>
<p>Clauses 3.8.19(a1), 3.8.19(a2) and 3.8.19(b) – Dispatch inflexibilities <i>Clauses 3.8.19(a1) and 3.8.19(a2) set out the conditions under which an SSG must advise AEMO that a SSG unit is inflexible and states that this must be due to abnormal plant conditions or other abnormal operating requirements in respect of that SSG.</i></p> <p><i>Clause 3.8.19(b) states that when bidding inflexible, an SSG must provide AEMO with a brief, verifiable and specific reason for the inflexibility and must provide to the AER upon request for information to substantiate and verify the reason for the inflexibility.</i></p>	<p><input type="checkbox"/> Are you familiar with the AER's Rebidding and Technical Parameters Guideline? Do you have processes and personnel in place to ensure technical parameters are bid in accordance with the Rules?</p> <p><input type="checkbox"/> Do you have systems and processes in place to review your decision to bid inflexible and to ensure that a brief, verifiable and specific reason for the inflexibility is provided to AEMO? Do you have systems and processes in place to promptly update AEMO once the abnormal conditions have ceased?</p> <p><input type="checkbox"/> Do you have systems and processes in place to maintain adequate records in relation to inflexible bids to substantiate the reasons provided to AEMO, if required by the AER?</p>
<p>Clause 3.8.21(f) – On-line dispatch instructions <i>Clause 3.8.21(f) requires SSGs to ensure they have facilities to receive dispatch instructions.</i></p> <p>Clauses 4.9.2(a) and 4.9.2(d) – Instructions to Scheduled Generators and Semi-Scheduled Generators <i>Clause 4.9.2(a) gives AEMO the power to, at any time, give an instruction to the Generator in relation to any of its generating units (a dispatch instruction), in accordance with NER 4.9.5(a).</i></p> <p><i>Clause 4.9.2(d) requires SSGs to ensure that operational personnel for each generating system are available at all times to receive immediately act upon dispatch instructions issued by AEMO. These personnel must be capable of immediately implementing AEMO's instructions or responding to urgent requests, such as to: switch off, or re-route, a generator, call equipment into service, take equipment out of service, commence operation or maintain, increase or reduce active or reactive power output, shut down or vary operation, change the generating unit's voltage control system set point to give a nominated voltage, or do any other act or thing necessary to be done to maintain power system security or for reasons for public safety.</i></p> <p>Clauses 4.9.8(a), 4.9.8(a1), 4.9.8(e) – General responsibilities of Registered Participants <i>Clauses 4.9.8(a), 4.9.8(a1), 4.9.8(e) contain the overarching obligations requiring registered participants to comply with AEMO dispatch instructions, including the requirement for SSGs to ensure that each of its Semi-Scheduled Generating units is at all times able to comply with its latest dispatch offer. This is with the exception of circumstances where to do so would be a hazard to public safety, materially risk damaging equipment or when providing primary frequency responses.</i></p>	<p><input type="checkbox"/> Have you set up facilities to receive dispatch instructions as required under the NER? Are they robust such that there is a facility in place at all times?</p> <p><input type="checkbox"/> Do you have relevant operational personnel available at all times (24/7/365) to receive and immediately act upon dispatch instructions?</p> <p><input type="checkbox"/> Do you have systems and personnel in place to continually monitor current output and plant capabilities and compare these to the relevant dispatch targets from AEMO?</p> <p><input type="checkbox"/> Where the current capabilities are likely to deviate from the dispatch target or, for a semi-dispatch interval, exceed the semi dispatch cap, do you have systems and personnel in place to ensure that AEMO is informed through rebids or updated plant availability and, if appropriate, also by contacting AEMO's control room directly?</p> <p><input type="checkbox"/> Where you provide FCAS services, do you have systems and processes in place to ensure you are able to deliver the required services?</p> <p><input type="checkbox"/> Where you have contracted a third-party contractor to undertake operational functions, have you ensured that your agreement with the third-party supports compliance with relevant the NER obligations?</p>
<p>Clause 3.8.23(b) – Failure to conform to dispatch instructions excluding wholesale demand response units <i>Clause 3.8.23(b) provides that where the SSG fails to respond to a dispatch instruction within a tolerable time and accuracy, it will be declared by AEMO as non-conforming and notified as such by email.</i></p>	<p><input type="checkbox"/> Do you have systems and processes in place to investigate and keep records for instances of non-conformance or non-compliance with dispatch instructions and the semi-dispatch cap?</p> <p><input type="checkbox"/> Have you reviewed the AER's Compliance Bulletin No. 1 to understand the difference between AEMO's non-conformance process and non-compliance with dispatch instructions?</p>
<p>Clause 4.11.1 and SS.2.6.1 – Remote control and monitoring devices <i>Clause 4.11.1 requires SSGs to have remote monitoring equipment to transmit to, and receive from, AEMO's control centres in real time as per Schedule 5.2.6.1 of the NER.</i></p> <p><i>It further requires remote control and monitoring devices to be installed and maintained in accordance with the standards and protocols determined and advised by AEMO.</i></p> <p>Clause 4.10.2(b) – Power system operating procedures <i>Clause 4.10.2(b) provides that a Registered Participant must observe the requirements of the relevant power system operating procedures.</i> <i>Specifically, AEMO's power system operating procedures (SO OP 3705) sets out linear ramping requirements for SSGs.</i></p>	<p><input type="checkbox"/> Do you have systems and processes in place to review, test and rectify SCADA issues within the reliability requirements outlined in the standards and protocols developed by AEMO? These documents include AEMO's Standard for Power System Data Communications and Communication System Failure Guidelines.</p> <p><input type="checkbox"/> Are you familiar with all relevant AEMO power system operating procedure?</p> <p><input type="checkbox"/> Do you have systems and processes in place to regularly review and ensure that your operations meet the requirements of the current power system operating procedure?</p>
<p>Clause 4.11.3 – Power system voice/data operational communication facilities <i>Clause 4.11.3 requires SSGs to ensure they maintain relevant voice/data communication facilities and current contact details so the AEMO Control Room can contact the generator's operational personnel at all times.</i></p>	<p><input type="checkbox"/> Do you have systems and processes in place to maintain relevant voice/data communication facilities?</p> <p><input type="checkbox"/> Have you provided to AEMO contact details for your trading team for bidding/dispatch purposes, as well as contact details for voltage control and system security personnel?</p> <p><input type="checkbox"/> Do you have systems and processes in place to regularly review the contact details provided to AEMO and update these where these are no longer the most appropriate contacts?</p> <p><input type="checkbox"/> Where you have contracted a third-party contractor to undertake operational functions, have you ensured that your agreement with the third-party supports compliance with relevant the NER obligations?</p>
<p>Clauses 4.8.1 and 4.8.2(a) – Registered Participants' advice and protection or control system abnormality <i>Clause 4.8.1 requires SSGs to monitor and promptly advise AEMO of any circumstance which could be expected to adversely affect the secure operation of the power system or any equipment owned or under the control of the Registered Participant or a Network Service Provider.</i></p> <p><i>Further, clause 4.8.2(a) requires SSGs to monitor and promptly advise AEMO of any relevant protection system or control system that is defective or unavailable for service.</i></p>	<p><input type="checkbox"/> Do you have systems and personnel in place to monitor and promptly advise AEMO of any circumstances that could be expected to adversely affect the secure operation of the power system? Have you identified key factors that pose a risk to your equipment? Do you gather relevant information to promptly identify risks?</p> <p><input type="checkbox"/> Do you have systems and personnel in place to monitor and promptly advise AEMO of any relevant protection system or control system that is defective or unavailable for service?</p>
<p>Clause 4.15 – Compliance with Performance Standards <i>Clause 4.15 requires SSGs to implement and maintain effective compliance programs for their plant and to meet relevant requirements under the Generator Performance Standard.</i></p> <p>Clause 5.3.9 – Procedure to be followed by a Generator proposing to alter a generating system <i>Clause 5.3.9 requires, where the SSG's GPS has been previously accepted by AEMO and NSPs, it must submit to AEMO and relevant NSPs information regarding the proposed alterations. This is with exceptions to SSGs making modifications to comply with the Primary Frequency Response Requirements.</i></p>	<p><input type="checkbox"/> Do you have systems and processes in place to regularly review and update your compliance programs in accordance with any changes to the AEMC Reliability Panel's template for generator compliance programs?</p> <p><input type="checkbox"/> Has there been a breach or likely breach of a performance standard, requiring an immediate clause 4.15(f) Notice of Non-compliance with Registered Performance Standards to AEMO?</p> <p><input type="checkbox"/> Are your ongoing generator performance standards compliance validation programs fully effective and up to date, notably during times of impending high demand or other adverse conditions?</p> <p><input type="checkbox"/> Are compliance programs and associated documentation up to date and prepared according to the current Reliability Panel template?</p> <p><input type="checkbox"/> Have you reviewed your testing requirements and, where possible, prioritised testing ahead of peak periods?</p> <p><input type="checkbox"/> Do you evaluate the effectiveness of your testing processes and procedures on an ongoing basis and update them when potential improvements are identified?</p> <p><input type="checkbox"/> Are you familiar with all settings that impact your plant's ability to comply with its generator performance standards? Have these been notified to AEMO?</p> <p><input type="checkbox"/> Do you have systems and protocols in place to ensure that plant changes are only made in line with the processes set out in NER clause 5.3.9?</p>

Relevant supporting documents	AEMO documents
<p>AER documents</p> <p>National Electricity Market Compliance Bulletin and Checklist</p> <p>Compliance Bulletin No 1 – Compliance with dispatch instructions, offers and bids</p> <p>Compliance Bulletin No 3 – Monitoring and enforcing compliance of electricity offer, bid and rebid information</p> <p>Rebidding and Technical Parameters Guideline</p> <p>Contingency FCAS Compliance Bulletin</p> <p>Generator Performance Standards information booklet</p>	<p>AEMO documents</p> <p>Pre-Dispatch (SO OP 3704)</p> <p>Dispatch (SO OP 3705)</p> <p>Spot Market Operations Timetable</p> <p>Australian Wind Energy Forecasting System (AWEFS)</p> <p>Guide to Data Requirements for AWEFS and ASEFS</p> <p>NEM Operational Forecasting and Dispatch Handbook for wind and solar generators</p> <p>Guide to Intermittent Generation</p> <p>Power System Data Communication Standard</p> <p>Communication System Failure Guidelines</p> <p>Generator Performance Standards information</p>

This information is provided for guidance only and is not an exhaustive list that guarantees compliance. Market participants will need to make a commercial decision about how best to operate, guided by private legal advice, where appropriate.