



National Electricity Market Summer Readiness Compliance Checklist

December 2019

NER Clause	Task
<p>Clause 3.13.2(h) – Requirement to notify changes to submitted data <i>Clause 3.13.2(h) requires a Scheduled Generator, Semi-Scheduled Generator or Market Participant to notify AEMO of any changes to submitted information within the times prescribed in the timetable.</i></p>	<input type="checkbox"/> Do you have systems and processes in place to ensure that AEMO is notified of any changes to submitted information as soon as possible?
<p>Clause 3.7.3(e)(1) – Available capacity <i>Clause 3.7.3(e)(1) requires a Scheduled Generator or Market Participant to submit available capacity of each scheduled generating unit, scheduled load or scheduled network service for each trading interval under expected market conditions.</i> AEMO uses this information in reserve calculations.</p>	<input type="checkbox"/> Is the available capacity submission based on current intentions and best estimates? <input type="checkbox"/> Have the available capacity values been provided 'under expected market conditions', including consideration of forecast weather conditions? Has a localised forecast been considered? <input type="checkbox"/> Have the available capacity submissions been sculpted to fit the ambient condition profile for affected trading intervals during the trading day? <input type="checkbox"/> Have forecast adverse ambient condition effects (e.g. air temperature, humidity, wind direction and speed, dust storms, solar irradiance, others?) been reflected in the capacity value consideration? <input type="checkbox"/> Have any power improvement technologies (e.g. evaporative cooling, fogging) been considered in the capacity value consideration? Do your submissions reflect how you intend to use those technologies? <input type="checkbox"/> Have any other factors that can affect output (e.g. fuel quality, historic generator performance under similar conditions) been considered in the capacity value consideration?
<p>Clause 3.7.3(e)(2) – PASA availability <i>Clause 3.7.3(e)(2) requires a Scheduled Generator or Market Participant to submit PASA availability of each scheduled generating unit, scheduled load or scheduled network service for each trading interval.</i> AEMO compares PASA availability to available capacity to help identify additional capacity to inform it of which generating units are or may be available for direction. Note: this guidance may also be relevant for clause 3.7.2(d)(1) - MT PASA</p>	<input type="checkbox"/> Are the PASA availability values based on current intentions and best estimates? <input type="checkbox"/> Does the submission represent what could be physically available on 24 hours' notice given the information at hand when the submission was made (regardless of cost)? <input type="checkbox"/> Does the submission include capacity which relies on a reasonable expectation that fuel (and transport, if applicable) can be sourced on 24 hours' notice? <input type="checkbox"/> Have any risks related to obtaining fuel been communicated to AEMO via the rebid reason field or direct contact with AEMO's control room? <input type="checkbox"/> If the forecast information changes, will the PASA Availability submission be updated? <input type="checkbox"/> Is clarification of any MT PASA entry with AEMO required (if your situation cannot be otherwise accurately represented by standard processes) to allow AEMO to consider alternative methods of representation?
<p>Clause 3.7.3(e)(4) – Daily energy availability for energy constrained plant <i>Clause 3.7.3(e)(4) requires a Scheduled Generator or Market Participant to submit projected daily energy availability for energy constrained scheduled generating units and energy constrained scheduled loads.</i> AEMO uses this information in reserve calculations. Note: this guidance may also be relevant for clause 3.7.2(d)(2) - MT PASA</p>	<input type="checkbox"/> Does the portfolio include any scheduled generating units or scheduled loads that are energy constrained (i.e. being those that have fuel to run, but not at maximum capacity across the entire trading day)? If so, this obligation will need to be considered and declared regardless of fuel type or energy source. <input type="checkbox"/> Is the daily energy availability submission based on current intentions and best estimates? Are any submissions based on what would reasonably be expected to occur given the current information and past experience? <input type="checkbox"/> Are any unconstrained generating units represented by the submission of either no value (a 'null entry') or a zero value for the ST PASA daily energy limit? Either entry is interpreted as indicating that the generating unit is not constrained by fuel for ST PASA. Note: this differs from MT PASA where a zero submission for the weekly energy constraint under clause 3.7.2(d)(2) means that the generating unit is fully constrained (has no fuel). <input type="checkbox"/> Are any applicable environmental constraints accounted for in your submission?
<p>Clauses 3.8.17, 3.8.18, 4.9.7(a) and 4.9.7(b) – Informing AEMO of self-commitment and self-decommitment decisions <i>Clauses 3.8.17, 3.8.18, 4.9.6 and 4.9.7 outline how and when a Scheduled Generator should inform AEMO of its intentions for self-commitment and self-decommitment of a scheduled generating unit.</i> Providing AEMO with the required notice, particularly for self-decommitment, avoids situations where AEMO must direct generators to synchronise at short notice to meet system security requirements.</p>	<input type="checkbox"/> Have any Scheduled Generators with nameplate rating of 30 MW or more that are intended to self-commit and synchronise or self-decommit and de-synchronise, been immediately advised to AEMO through PASA and pre-dispatch by submitting an amended available capacity profile? <input type="checkbox"/> Has an outline for self-commitment and self-decommitment been confirmed with AEMO advising the expected synchronising/de-synchronising time with at least one hour's notice? <input type="checkbox"/> Has this advice been updated five minutes before synchronising/de-synchronising, or have other arrangements been agreed with AEMO?
<p>Clause 3.8.20(g) – Pre-dispatch schedule and 4.9.8(b) – General responsibilities of Registered Participants <i>Clause 3.8.20(g) requires each Scheduled Generator, Scheduled Network Service Provider and Market Customer (who has classified scheduled load) and Market Participant (who has classified an ancillary service generating unit or load) to ensure that it is able to dispatch the relevant plant as required under the pre-dispatch schedule and, if necessary, is responsible for changing inputs via rebidding.</i> <i>Clause 4.9.8(b) requires a Scheduled Generator to ensure that each of its scheduled generating units is at all times able to comply with the latest generation dispatch offer under Chapter 3 in respect of that generating unit.</i></p>	<input type="checkbox"/> Are traders seeking input from operations staff to inform the expected plant capability before submitting dispatch offers? <input type="checkbox"/> Are the current plant capabilities being continually monitored and compared to the pre-dispatch schedule and the relevant dispatch targets from AEMO? <input type="checkbox"/> If capabilities are unlikely to meet the pre-dispatch schedule or dispatch target, have you informed AEMO of this through rebids, and if appropriate, by also contacting AEMO's control room directly? <input type="checkbox"/> Are actual ambient temperatures being monitored and compared to the forecasts upon which offers were based, to determine whether offers for the remainder of the day should be updated? <input type="checkbox"/> Are operations and traders communicating frequently during extreme weather events (when the plant may be more likely to derate)? <input type="checkbox"/> Are there systems in place to monitor real-time generator output against targets and alert operations and trading staff where it is away from target? <input type="checkbox"/> Are traders providing updated information to AEMO about current and anticipated plant capabilities?
<p>Clause 4.9.8(d) – Compliance with the latest market ancillary offers <i>A Market Participant which has classified a generating unit or load as an ancillary service generating unit or an ancillary service load, as the case may be, must ensure that the ancillary service generating unit or ancillary service load is at all times able to comply with the latest market ancillary service offer for the relevant trading interval.</i></p>	<input type="checkbox"/> Are any enabled FCAS services able to be delivered when required (as they are a key factor in ensuring AEMO can meet and maintain power system security)? Do you have the appropriate personnel and electronic facilities support this delivery? <input type="checkbox"/> Has your equipment been appropriately tested to ensure it is capable of meeting AEMO's Market Ancillary Services Specification when your contingency FCAS offer is called upon? <input type="checkbox"/> Have any actual contingency FCAS responses following an event been reviewed for compliance? Have learnings from those reviews been incorporated into your systems and processes? <input type="checkbox"/> Is it necessary to test individual elements of control systems or processes in isolation to provide a reasonable level of assurance that the overall response is likely to perform effectively when required? <input type="checkbox"/> Have there been any changes to plant, and if so, do these changes have the potential to impact on the ability to provide the services for which there is a commitment to provide? <input type="checkbox"/> Is performance of your equipment or load monitored and any issues self-reported to the AEMO and/or the AER in a timely manner? <input type="checkbox"/> Can you promptly comply with a request from AEMO to demonstrate the relevant plant's capability to provide the market ancillary service to the satisfaction of AEMO according to standard test procedures?
<p>Clauses 3.11.2(f) and (h) – Market ancillary services <i>Clause 3.11.2(f) requires a Market Participant which has classified a generating unit as an ancillary service generating unit or a load as an ancillary service load to install and maintain, in accordance with standards developed by AEMO, monitoring equipment to monitor and record the response of the relevant unit or load to changes in the frequency of the power system.</i> <i>Clause 3.11.2(h) states AEMO may request a report on how the relevant facility responded to a particular change in the frequency of the power system, and the Market Participant must provide this report promptly, but no more than 20 business days after AEMO's request.</i></p>	<input type="checkbox"/> Is a functioning data system in place to ensure the capture and 12 month retention of relevant ancillary service data in a form able to be provided to AEMO if requested? <input type="checkbox"/> Is an audit of these systems required to confirm that they capture the required data in a manner that could be provided to AEMO if requested? <input type="checkbox"/> Is the data system's storage capacity adequate to capture all of the required information? <input type="checkbox"/> Is compliance with the market ancillary services' offer supported by an appropriate testing and compliance program?
<p>Clause 4.8.1 – advising AEMO of threats to the secure operation of the power system <i>A Registered Participant must promptly advise AEMO or a relevant System Operator at the time that the Registered Participant becomes aware, 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>	<input type="checkbox"/> Have any identified risks (such as the potential to reduce output or go out of service), including those which you consider may have only a limited impact on power system security, been promptly communicated to AEMO so it may form a comprehensive understanding of any potential impacts on the power system? <input type="checkbox"/> Do you have established systems and processes to remain informed of circumstances which could be expected to pose risks to equipment or power system security? Do you monitor broader communiques (e.g. market notices) and factor this in to your decision making? <input type="checkbox"/> Is training for operators and traders flexible to allow them to adapt to emerging risks within the power system security and communicate these risks to AEMO? Is training reviewed regularly and updated if required? <input type="checkbox"/> Are you maintaining a holistic awareness of risks to equipment and power system security, even if you have contracted some of your functions to third parties? <input type="checkbox"/> Do your procedures and guidelines for assessing risks to equipment and power system security give consideration to AEMO's procedures, including the Power System Security Guidelines?
<p>Clause 4.9.9 – Scheduled Generator Plant Changes <i>A Scheduled Generator must, without delay, notify AEMO of any event which has changed or is likely to change the operational availability of any of its scheduled generating units, whether the relevant generating unit is synchronised or not, as soon as the Scheduled Generator becomes aware of the event.</i></p>	<input type="checkbox"/> Have any changes or possible changes in operational availability whether the unit is synchronised or not) been promptly advised to AEMO? <input type="checkbox"/> Are systems and processes in place to actively monitor the factors that affect the operational availability of plant allowing you to promptly notify AEMO of any changes or possible changes to plant (rather than relying on AEMO to make contact)? <input type="checkbox"/> Has any event already changed the operational availability of the scheduled generating unit (including fuel constraint parameters, if appropriate), thereby requiring rebid(s) to AEMO updating offers or PASA to reflect the revised capability of the unit (including during the predispatch period)? <input type="checkbox"/> Does any event have implications (realised or potential) for the operational availability of a generating unit on an ongoing basis, such as a long term outage or impairment of a unit, that requires discussion with AEMO?
<p>Clause 4.9.2(d) – Personnel to receive and immediately act upon dispatch instructions <i>A Scheduled Generator or Semi-Scheduled Generator must, with respect to its generating units that have an availability offer of greater than 0 MW (whether synchronised or not), ensure that appropriate personnel are available at all times to receive and immediately act upon dispatch instructions issued by AEMO to the relevant Generator.</i></p>	<input type="checkbox"/> Are sufficient resources available to control and direct generating units to meet dispatch instructions and to satisfy this obligation 'at all times'? <input type="checkbox"/> If generation assets are being operated by third parties under contract, are there sufficient agreements between the parties to ensure these obligations are met? <input type="checkbox"/> Do you have contingency plans in place to have extra personnel available to provide additional support if required to respond to market events? <input type="checkbox"/> When preparing for market events, do you consider whether additional personnel will be required and plan accordingly? <input type="checkbox"/> Are roles and responsibilities for equipment operation in response to AEMO dispatch instructions defined and agreed, including any agreements that exist between third parties? <input type="checkbox"/> Have you considered making provisions to record telephone conversations with AEMO?
<p>Clause 4.11.3 – Power system voice/data operational communication facilities <i>A Network Service Provider, System Operator, Distribution System Operator, Generator or Market Participant to advise AEMO of each nominated person for the purposes of giving or receiving operational communications in relation to each of its facilities.</i></p>	<input type="checkbox"/> Have you advised AEMO of each nominated person for the purposes of giving or receiving operation communications in relation to each of your facilities and provided the required details for each person? <input type="checkbox"/> Do the nominated persons have the technical capability to give and receive concerning the arrangements for, and actual operation of, the power system in accordance with the Electricity Rules? <input type="checkbox"/> Are the nominated persons still the best contact for AEMO and are the contact details provided to AEMO still current? <input type="checkbox"/> Do you have systems and processes in place to ensure that communications systems are maintained and repaired within required timeframes?
<p>Clause 4.15 – Compliance with generator performance standards <i>Generators are required to implement and maintain specific compliance programs in accordance with clause 4.15 of the Electricity Rules.</i></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? <input type="checkbox"/> Are your ongoing generator performance standards compliance validation programs fully effective and up to date, notably during times of impeding high demand or other adverse conditions? <input type="checkbox"/> Are compliance programs and associated documentation up to date and prepared according to the current Reliability Panel template? <input type="checkbox"/> Have you reviewed your testing requirements and, where possible, prioritised testing ahead of peak periods? <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?

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.