

# CS Energy submission: Compliance with dispatch instructions

4 November 2015

## Summary and key points

CS Energy welcomes the opportunity to comment on the Rule change proposal: Compliance with Dispatch Instructions.

Under Rule 4.9.8(a) generating units must comply with dispatch instructions unless to do so would threaten public safety or materially risk damaging equipment.

We agree with the AEMC's interpretation<sup>1</sup> of the objective of Rules 3.1.4(a)(4) and 4.9.8 because CS Energy wants to participate in an efficient market and wants to operate its assets in a power system that is safe and secure. The Rules should therefore ensure both objectives are met. For the reasons that both, or either, market efficiency and system security could be affected we consider Rules 4.9.8(a) and 4.9.8(b) are required to dissuade unreasonable instances of a generator not endeavouring to follow a dispatch instruction or supply a dispatch offer. We support these Rules being a civil penalty provision.

We agree with both the AER's 2006 guidance which interprets absolute compliance with this Rule as impractical and the Rule Proponent in its assessment of the uncertainty around the interpretation and enforcement of the Rule.

During the period when it was recognised by the AER that it was physically impossible for exact compliance to be achieved and participants should endeavour to meet dispatch instructions:

- no evidence has been provided, that the NEM was not operating securely;
- no evidence has been provided that there was a material problem with market efficiency through a disparity between dispatch and pricing<sup>2</sup>;
- Participants knew the Rules and knew AER would enforce unreasonable breaches of Rule 4.9.8(a) that were not consistent with the 2006 Guideline; and
- we considered the Rule ensured the level of security and market efficiency required.

Accordingly, changing the Rule to refer to 'reasonable endeavours' is not likely to have any material impact on the level of security and market efficiency of the NEM. Therefore 'reasonable endeavours' would not be to the detriment of the National Electricity Objective (NEO).

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<sup>1</sup> Page 2 of the AEMC Consultation Paper, 17<sup>th</sup> September 2015

<sup>2</sup> Referencing 3.1.4(a)(4) – market design principle

We consider that we currently have a Rule which over specifies what is required.

In order to ensure certainty and protect against future departures from issued AER guidance, CS Energy would prefer the rule to be formally changed to specify that the level of compliance required is 'reasonable endeavours'.

CS Energy would be supportive of guidance being provided, following consultation, which expresses how the AER interprets that obligation, and what it considers the limits for non-compliance to be. We have not yet determined whether it would be sensible for the AER guidance to reference the AEMO non-conformance process.

We also note the 'sister' rule to 4.9.8(a), which is 4.9.8(b), requires that participants 'must' ensure their units can comply with the latest dispatch offer. It may be sensible that this Rule mirrors the obligation of 4.9.8(a).

## Is there a problem with the current arrangements?

### Standard for compliance

**(a) Is the standard of compliance with dispatch instructions under the current arrangements, taking into account the AER's approach to enforcing it, important for the efficient and safe operation of the NEM?**

The Rule itself is clear: Clause 4.9.8(a) specifies that a registered participant must comply with a dispatch instruction given to it by AEMO unless to do so would, in the registered participant's reasonable opinion, be a hazard to public safety or materially risk damaging equipment.

However the AER had, in 2006, issued the following guidance<sup>3</sup>:

*'While Registered Participants must endeavour to comply with dispatch instructions, the AER recognises that exact compliance with dispatch instructions in every dispatch interval is a physical impossibility. Accordingly, the AER does not intend to pursue a breach of clause 4.9.8(a) with respect to minor departures from dispatch instructions that occur despite the best endeavours of a Registered Participant to comply.'*

On 12 February 2015, the Federal Court of Australia declared by consent that Snowy Hydro had breached clause 4.9.8(a) on nine occasions alleged by the AER. It appears that the interpretation of 4.9.8(a) in that case did not contemplate the compliance guideline issued by the AER in 2006.

On 14 May 2015 the AER released its Quarterly Compliance Report: January-March 2015, explaining its approach to the requirements of clause 4.9.8. In this report, the AER did not refer to 'endeavouring to comply with dispatch instructions' as it had done in 2006.

The AER added<sup>4</sup>:

*'The range of inquiries, preliminary investigations and enforcement matters we have undertaken since 2005 have highlighted some misinterpretation among participants regarding their obligations under 4.9.8(a). An example relates to the obligation to follow every dispatch instruction under 4.9.8(a) of the National Electricity Rules. Participants cannot ignore a current dispatch instruction in anticipation or preparedness for an expected future instruction.'*

*Our investigations have also highlighted the importance of participants understanding the related obligations under clause 4.9.8 which require participants to ensure that their plant is able to comply with their latest offer or bid at all times.'*

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<sup>3</sup> AER Compliance Bulletin, No 1 of 2006

<sup>4</sup> Quarterly Compliance Report: January-March 2015

*In light of these issues we appreciate the need for updated information and guidance relating to our expectations of participants and our approach to compliance in this area. This is something we plan to do in the coming months and we will keep participants informed of this work.'*

As a consequence of the above sequence of events, including that the updated information and guidance has not yet been issued by the AER, some confusion has been created as to the AER's view on the required standard of compliance, and how the AER's discretion will be applied in the future.

No evidence has been provided, by AEMO or the Reliability Panel in that the NEM has not been operating securely during the period where it was clear that the AER's 2006 guidance applied (when it was recognised by the AER as being physically impossible for exact compliance to be achieved and participants should endeavour to meet dispatch instructions). During the same period, no evidence has been provided that there was a material problem with market efficiency through a disparity between dispatch and pricing<sup>5</sup>. It must be remembered that even with the interpretation outlined in the 2006 guidance it was recognised that participants must follow dispatch instructions or otherwise face a maximum penalty of \$100,000 per contravention. For these reasons we consider the Rule, including the AER's previous approach outlined in the 2006 guidance to enforcing it, ensured the level of security and market efficiency required under the Rules.

Accordingly, changing the Rule to refer to the concept of 'reasonable endeavours' is not likely to have any material impact on the level of security and market efficiency of the NEM: instead it will improve regulatory uncertainty for participants as to the required standard.

Conversely, the level of security and market efficiency is unlikely to be improved by any great extent by enforcing the literal meaning of the Rule; instead there is greater likelihood for penalties to be imposed on participants in circumstances where, even though endeavours were made to comply with an instruction, achievement of exact compliance is a physical impossibility.

**(b) Under the current rules, how may a participant's non-compliance with dispatch instructions affect other participants in the NEM?**

Non-compliance can affect settlement amounts, resulting in a transfer of wealth, without affecting power system security and are therefore relevant to 3.1.4(a)(4). A non compliance with a dispatch instruction can result in the price calculated from cleared targets (dispatch instructions) deviating from physical settlement. An effect, for example, is a generator not increasing generation (or not starting) and yet setting the price lower.

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<sup>5</sup> Referencing 3.1.4(a)(4) – market design principle

## Compliance costs

**(a) Are the costs of complying with the current rule greater than those which are likely to be incurred if there was an alternative compliance obligation that was less stringent, such as reasonable endeavours?**

The level of compliance if the Rule is interpreted as an absolute, (that is 'must comply'), can only impose greater cost if participants can incur those extra costs to comply. Unlike the Rule proponent we consider it doubtful that additional costs could materially improve the performance of generators in complying with the Rule. The Rule proponent operates a number of hydro units and standing gas turbines, rather than larger coal-fired thermal units.

**(b) How do the costs of complying with the current rule vary between participants?**

The principle costs associated with the compliance with dispatch instructions will relate to those plants with discontinuities in cost or operation. For instance plant with non-linear cost or technical characteristics, including start-stop costs, no-AGC<sup>6</sup>, mill costs, different operating modes, rough running bands, out of hours staffing, turbine follow mode etc. may incur higher costs in meeting dispatch targets. Participants cannot perfectly reflect some of these cost characteristics in dispatch offers.

## AER enforcement approach

**(a) Does the discretion the AER has in deciding whether to take enforcement action and the nature of that action mean there is uncertainty about the extent to which compliance with clause 4.9.8(a) is required?**

Yes, please refer to the earlier answer under 'Standard of Compliance'.

**(b) What are the consequences of any such uncertainty?**

As described by the Rule Change Proponent, *'An approach which requires reasonable endeavours, rather than exact compliance, reflects the reality of operating large, complicated equipment in a market where dispatch targets can change every five minutes. It means that generators continue to operate under an obligation to do everything they reasonably can to meet dispatch targets, without being exposed to penalties for a breach of the NER for every dispatch interval in which they are unable to meet their target exactly'*. CS Energy agrees with this statement, and considers the current uncertainty undermines the confidence of the generation sector.

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<sup>6</sup> Automatic Generation Control

## **Simultaneous compliance with dispatch instructions for energy and FCAS**

**(a) Are market participants able to simultaneously comply with dispatch instructions for energy and FCAS?**

Yes.

**If so, how do market participants manage to do this?**

### **Regulation FCAS**

Participants are provided with both an energy dispatch instruction and FCAS Regulation enablement. CS Energy considers that if it, at the end of the dispatch interval the unit is generating at a level that is different to the energy dispatch instruction, but within the FCAS Regulation enablement then it is compliant with 4.9.8 (a) and (b).

### **Contingency FCAS**

With regards to contingency FCAS services (6 seconds, 60 seconds and 5 minute services), CS Energy considers that if, at the end of the dispatch interval the unit is generating at a level that is different to the energy dispatch instruction, and this difference is attributable to responding to an FCAS Contingency when enabled for FCAS services then it is compliant with 4.9.8 (a) and (b).

### **Governor control systems**

Most large thermal units are automated to comply with dispatch instructions through AGC but also have an inherent automatic “droop” characteristic that ensures the unit provides frequency control. The droop characteristic is specified in the Generator Performance Standards. A typical droop characteristic means a unit will inversely change load in proportion to system frequency, with for example, a 5% change in frequency, resulting in a 100% change in load.

Some control systems allow the inherent droop can be prevented or limited by putting in a frequency “deadband”. A typical deadband is a setting that prevents the units' "droop" characteristic from controlling the unit load within a symmetrical “deadband” of system frequency either side of 50Hz. Different control systems have different deadbands. Only if the frequency changes to a level beyond the deadband, the unit’s droop characteristic will result in it changing load.

The use of the droop characteristic is supported by Rule 3.15.6A(k)(5) which provides that a Scheduled Participant will not be considered to be contributing to a deviation in the frequency of the power system if it is, using 4 second data, off the target trajectory within the dispatch interval in a manner that serves to correct system frequency.

## **Is the proposed solution appropriate?**

### **Use of reasonable endeavours**

#### **(a) What is the likely impact on the behaviour of market participants having a reasonable endeavours obligation?**

We question the practical ability for participants to respond to the absolute obligation of ‘must comply’ contained within the wording of the Rule and agree with the sentiment expressed by the AER in the 2006 compliance guideline. It is likely that formally including a reasonable endeavours obligation into the Rule will reflect the practicalities of scheduling and dispatching plant and reduce the significant regulatory uncertainty that currently exists for market participants. The AER would still have power to allege breaches of 4.9.8 (a) if there are any unreasonable breaches of the rule.

#### **(b) How is a reasonable endeavours obligation likely to impact uncertainty and compliance costs?**

It will reduce uncertainty, but in our view will probably not significantly change costs.

#### **(c) What would amount to reasonable endeavours in complying with a dispatch instruction?**

We would request that guidance be given by the AER on their interpretation of what is required to achieve reasonable endeavours (following consultation with relevant stakeholders), but would expect that guidance to take into account the physical limitations of operating plant in responding to, and complying with, dispatch instructions together with other operational issues that may be outside a participant’s control.

### **Use of AEMO's non-conformance process**

#### **(a) Is AEMO's non-conformance process appropriate for the purpose proposed in the rule change? Is it likely to impact on market efficiency or power system security if used in this way?**

We do not consider it necessary for the AEMO non-conformance process to be explicitly referenced in 4.9.8(a) as we consider the Rule can work effectively provided that it is confirmed within the Rule that reasonable endeavours to comply are sufficient. However, we do consider that at least providing guidance as to the acceptable limits of non-compliance and therefore the AER’s interpretation of what ‘reasonable endeavours’ requires would be useful. We have not yet determined whether it would be sensible for the AER guidance to reference the AEMO non-conformance process.

#### **(b) It is appropriate for compliance with dispatch instructions to be partly determined by AEMO?**

See above.

## **Financial incentives to comply with dispatch instructions**

**(a) If the proposed rule is made, are the financial incentives provided by the FCAS cost recovery process and removal of the generator's offer from the basis of setting the wholesale spot price, sufficient for market participants to comply as precisely as possible, with dispatch instructions?**

We do not consider the financial incentives flowing from the above are sufficient to ensure generators follow dispatch instructions. They incentivise 'everyday' compliance with dispatch instructions, but would not dissuade unreasonable instances of a generator not endeavouring to follow a dispatch instruction (for example, not following an instruction to start an operating plant, even after the unit has set the Regional Reference Price at the unit's offer price). This is why we support the inclusion of 4.9.8(a) and 4.9.8(b) in the Rules and these being a civil penalty provision.

## **Are there other alternatives to the rule change proposal?**

**(a) If there is a problem with the current arrangements, is there an alternative solution which better addresses the problem?**

We have a Rule which over specifies what is required. We agree with both the AER's 2006 guidance, which interpreted this Rule as impractical, and the Rule Proponent in its assessment of the uncertainty around the interpretation and enforcement of the Rule.

In order to ensure certainty and protect against future departures from issued guidance CS Energy would prefer the rule to be formally changed to specify that the level of compliance required is 'reasonable endeavours'. CS Energy would be supportive of guidance being developed, following consultation, which expresses how the AER interprets that obligation, and what it considers the limits for non-compliance to be.