



# FIVE MINUTE SETTLEMENT

## Draft determination - October 2017

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## Summary

Stanwell welcomes the opportunity to provide comment on the Australian Energy Market Commission’s (AEMC’s) five minute settlement draft determination (draft determination). Stanwell acknowledges that the draft determination is consistent with the preceding AEMC papers for this rule change request.

Stanwell supports the AEMC’s use of a more preferable rule change. We agree that the use of five minute bidding and five minute metering, as well as the retention of symmetrical settlement conditions between supply and demand side participants, will all contribute to the realisation of the intended benefits of this rule change.

This submission addresses implementation details which we consider require further development in order to make the rule change efficient and effective.

## IT system implementation

Stanwell has previously provided the commission with information relating to the complexity and likely timing of system changes required by the rule change proposal. AEMO's high level design, published alongside the draft determination, is consistent with the information provided by Stanwell. AEMO, having considered the draft determination, has indicated that a minimum of three years is required to update its systems, procedures, protocols and guidelines.

We note that the AEMO High Level Design indicates, among other things, the creation of new database structures for the receipt and storage of five minute bids, as well as processes for translating five minute bids to 30 minute bids. We reiterate our view that system re-development cannot be meaningfully started by participants until the rules and AEMO interfaces are defined and published.

Any implementation timeframe should include a measure of the duration between the finalisation of these interfaces and the provision of a testing environment (discussed below), as it is this period which will dictate what system development participants are able to undertake.

We consider that the proposal for AEMO to provide a pre-production environment for *“three to six months prior to the rule change becoming effective”* is far too short and thereby creates unnecessary risk. The systems to be tested in this environment are not just business critical, but market critical.

By comparison, the systems changes required for the Power of Choice metering rule change have included a ten month period between AEMO publishing final procedures and the rule becoming effective. Stanwell's exposure to this rule change is limited (relative to large retailers, networks, metering providers and metering coordinators), however even Stanwell is finding that it has been necessary to undertake system development in parallel with refinements to scoping and testing.

## Financial markets

The ability for market participants to enter into financial contracts is also likely to be affected by system development timeframes.

The rule change is intended to change the risk profile of participants who have exposure to the spot market. Accordingly, participants will need to develop or update systems which evaluate both the risks of spot market participation and hedging.

For Stanwell, and we expect all Australian Financial Services License (AFSL) holders, the ability to capture and value deals is necessary in order to discharge our AFSL obligations with respect to having adequate technological resources to provide financial services efficiently, honestly and fairly.

Depending on the lead time required for participants to gain approvals to trade financial products under the new market design, hedging timeframes for the 2021-22 financial year may become compressed, with early hedging inhibited by low liquidity. This will affect the contracting of end use customers as well as retailers and generators. Stanwell acknowledges that different participants may have significantly different approaches in relation to this aspect of their business.

## Drafting issues

Stanwell has previously noted the complexity of drafting required to implement the intent of the draft determination, and consider that further work is required to ensure that the final rule change is clear, consistent and able to provide long-term benefits to consumers.

The draft rule appears to create a number of inconsistencies and contains unexplained modifications. Stanwell's submission explores some examples, however we note that our analysis is not comprehensive. With such a fundamental change to the market design, which requires amendment to multiple provisions, there is an elevated risk of unintended consequences resulting from the proposed amendments. As such, we encourage the AEMC to detail the rationale for each of the changes proposed and engage with market participants to test the efficacy of the proposed rule changes. The AEMC could, for example, convene a workshop with market participants to test the meaning and operation of the proposed drafting.

### Pre-dispatch

The draft changes to pre-dispatch are complex and appear to produce unintended outcomes.

AEMO currently publish pre-dispatch with 30 minute resolution as required by the rules, and an additional dataset which has a five minute resolution over a one hour horizon. This additional dataset is commonly referred to as five minute pre-dispatch (or P5) but is not currently defined in the rules and accordingly does not include a number of the requirements of 30 minute pre-dispatch.

Inclusion of P5 in the rules was not part of the rule change and the concept did not gain significant support when raised at the public forum on *non scheduled generation and load in central dispatch*, including from the AEMO representative.

It is unclear whether the intent of the change is to formalise what AEMO currently does, or has them do something different. There is no indication in the draft determination that the AEMC intends for the pre-dispatch process to be materially changed, however the draft rule appears to create a number of changes to AEMO's processes. In contrast, AEMO's high level design indicates "*no initial changes to the existing implementation of pre-dispatch*".

Stanwell provides the following examples, noting that it is a non exhaustive list.

#### Pre-dispatch resolution and coverage

Clause 3.8.20(a) remains defined with reference to *trading intervals*, requiring that the pre-dispatch schedule cover:

"...each *trading interval* of the period commencing from the next *trading interval* after the current *trading interval* up to and including the final *trading interval* of the last *trading day* for which all valid *dispatch bids* and *dispatch offers* have been received..."

Under the current rules, 30 minute pre-dispatch covers this period, however under the draft rule it does not. Five minute pre-dispatch would contain information in relation to the first twelve *trading intervals* (including the current *trading interval*), while 30 minute pre-dispatch would contain information in relation to every sixth *trading interval* commencing with the sixth trading interval of the first *30 minute period* which has not commenced.

#### Overlapping pre-dispatch schedules

The draft rule will mean that there are two official pre-dispatch forecasts for the same *trading interval* where that *trading interval* is the last interval in a *30 minute period* and within one hour of dispatch. Stanwell seeks clarification of how this circumstance would be considered in relation to cl 3.8.20(g) if the two pre-dispatch schedules produce inconsistent targets.

Similarly, CI 3.8.22A(a1) deems that scheduled and semi-scheduled participants make a representation "through the *pre-dispatch schedules published by AEMO*". Stanwell seeks clarification of how such a representation would be considered to occur if the two pre-dispatch schedules produce inconsistent outcomes.

#### Determining a spot price forecast

The newly defined *30 minute price* appears only to be defined in arrears under cl 11.100.7, that is, it is not a forecast price. This is supported by cl 3.13.4 (g) and (h) referring to forecasts of *spot prices* (five minute prices) for *30 minute periods*.

In order to determine the forecast price at a five minute resolution, Stanwell expects that the forecast would need to include five minute resolution dispatch instructions for the preceding (five minute resolution) *trading intervals*.

It is unclear what benefit would be derived by publishing non-contiguous five minute price forecasts, or the sensitivities of those forecasts. It is equally unclear how relevant 30 minute price forecasts could be developed under the draft rule. Even if AEMO extend the publication period of five minute pre-dispatch under cl 3.8.20(b), the 30 minute pre-dispatch forecasts are still required to be published.

#### Requirement for additional details in relation to five minute pre-dispatch

CI 3.8.20(f) requires that "The *pre-dispatch schedule* must include the details set out in clause 3.13.4(f)". Under the current rules, 30 minute pre-dispatch requires this detail to be published but five minute pre-dispatch does not.

Stanwell seeks clarification of whether this will require additional reporting from AEMO.

### Compatibility of terminology

The draft rule proposes a redefinition of the term *trading interval* from 30 minutes to five minutes, the removal of the defined *dispatch interval*, and the creation of a defined *30 minute period*. There is an equivalent process in relation to *dispatch price*, *spot price* and *30 minute price*.

This approach appears to offer little in the way of benefits but will create issues with terminology used before and after the rule change becomes effective (and indeed, in writing this submission). Any reference to a *trading interval* will need to be qualified by when the reference is made, or what period it is made in relation to.

All references to *dispatch interval* are removed<sup>1</sup>, but references such as *dispatch bids*, *dispatch offers* and the *dispatch process* remain. AEMO will continue to run the *dispatch algorithm* and issue *dispatch instructions*, but will no longer do so for a *dispatch interval*, and will not produce a *dispatch price*.

In addition, not all actions which are currently done at a 30 minute frequency are proposed to become five minute actions. Some references to *trading interval* and *spot price* become *30 minute period* and *30 minute price*, while others remain unchanged. This leads to the requirement to consider each use of the term *trading interval* and determine whether it appropriately refers to a five or 30 minute period. Changing some instances to reference a *dispatch interval* or changing some instances to reference a *30 minute period* appears to require the same amount of effort.

Stanwell encourages the commission to retain the defined terms *dispatch interval* and *dispatch price* in relation to events which are to occur at a frequency consistent with the *dispatch process*.

For events which occur at a 30 minute frequency, Stanwell considers that either the retention of the defined *trading interval* or the proposed *30 minute period* is appropriate.

### Drafting relics

The draft rule contains a number of apparent drafting relics as well as unclear or inconsistent references. Stanwell provides a subset of these references below and encourages the AEMC to run a process whereby the intent of a change is defined, a drafting change is proposed and an impact assessment is performed.

*Intervention trading price interval* is still referenced in cl 3.12.2; 3.12.3(c); 3.15.7B(a4); 3.15.8(b), however it appears these references should be to *intervention pricing interval*.

3.13.7(d)(3) references comparisons of dispatch bids and dispatch offers with those in preceding (five minute) *trading intervals*, in the context of an AER report into outcomes in a *30 minute period*.

3.8.4(c) (d)(e), 3.8.6(a)(2) and (g), 3.8.6A(b), 3.8.7(c), 3.8.7A(b), all change “48 *trading intervals* in the *trading day*,” to “288 *trading intervals* in the *trading day*,” for no apparent reason. Simply removing the reference to “48” appears sufficient.

CI 3.13.4(l) and (m) appear to now require publication of the same information.

CI 3.8.20(b) contains a reference which no longer appears to make sense “...and no analysis will be made of operations within the *trading interval*, other than to ensure that *contingency capacity reserves* are adequate as set out in Chapter 4”. Stanwell seeks clarification of whether this reference should be to “...operations within a *30 minute period*...” or something else.

There are a number of “magic numbers” in the draft Rule, for example the change from \$5,000 per (30 minute) interval to \$1,000 per (five minute) interval in cl 3.12.2(b). Stanwell requests the AEMC to provide the rationale behind such changes.

<sup>1</sup> The use of *semi-dispatch interval* has been retained with the exception of its replacement within the definition of *dispatch level*.

