



**Independent Market Operator**

**The IMO's decision: Proposed  
Replacement Power System  
Operation Procedures:**

**Competitive Balancing and Load  
Following Market 1 – PART A**

Ref: PPCL0021

**Date: 19 June 2012**

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## EXECUTIVE SUMMARY

### *Procedure Change Proposal*

System Management proposes to replace the Power System Operation Procedure (PSOP): Dispatch and PSOP: Communications and Control Systems which have been impacted by the new Balancing and Load Following markets scheduled to commence on Balancing Market Commencement Day<sup>1</sup>.

### *Consultation*

- System Management formally submitted the Procedure Change Proposal on 6 January 2012 with a request for submissions closing on 6 February 2012.
- A further consultation period was held in accordance with the public notice published on 19 March 2012. The further consultation period ended on 29 March 2012.
- The replacement PSOPs were discussed by members of the System Management Procedure Change and Development Working Group at its 12 December 2011 meeting (prior to formal submission) and the Rules Development Implementation Working Group at its 22 March 2012 meeting (during the further consultation period).
- One submission was received from Landfill Gas & Power (LGP) during the formal consultation period. Submissions from Alinta, the IMO, LGP and Synergy were received during the further consultation period.

### *The IMO's Assessment*

The IMO notes that for the purposes of approval System Management has decided to separate the two PSOPs and progress these separately. The decision in this document relates to the PSOP: Communications and Control Systems (Part A).

The IMO has found the proposed replacement PSOP to be consistent with the Wholesale Market Objectives, the Market Rules, the Electricity Industry Act and the Regulations.

### *Practicality and Cost of Implementation*

No costs associated with the implementation of the proposed replacement PSOP or issues with the practicality of the proposed replacement PSOP have been identified by either the IMO or System Management.

### *The IMO's Decision*

The IMO's decision is to accept the proposed replacement PSOP: Communications and Control Systems.

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<sup>1</sup> For further details refer to the Final Rule Change Report for the Rule Change Proposal: Competitive Balancing and Load Following Market (RC\_2011\_10) available on the Market Web Site.

***Next steps***

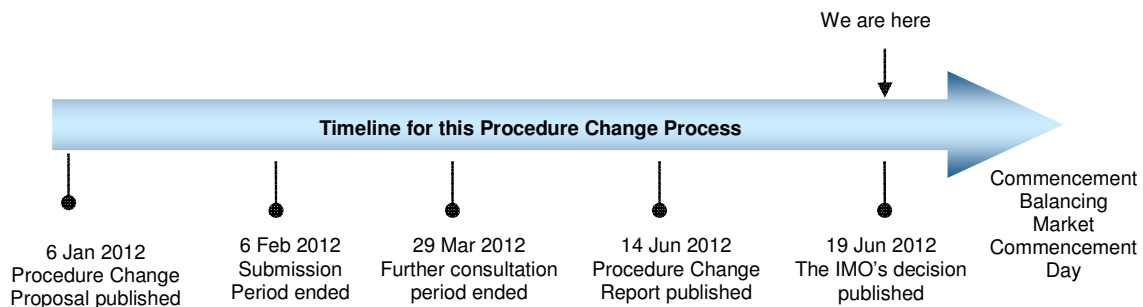
The replacement PSOP: Communications and Control Systems will commence at 8.00 AM on the Balancing Market Commencement Day.

## 1. INTRODUCTION

On 6 January 2012, the Independent Market Operator (IMO) published a Procedure Change Proposal from System Management titled “Replaced PSOPS: Competitive Balancing and Load Following Market 1”, regarding the replacement of the Power System Operation Procedure (PSOP): Dispatch and the PSOP: Communications and Control Systems.

The proposal has been processed according to the Procedure Change Process under clause 2.10 of the Wholesale Electricity Market Rules (Market Rules). The IMO notes that for the purposes of approval System Management has decided to separate the two PSOPs and progress these separately. The decision in this document relates to the PSOP: Communications and Control Systems (Part A).

The key dates in processing Part A of this Procedure Change Proposal are:



## 2. PROPOSED AMENDMENTS

### 2.1 Summary of the Proposal

In its proposal, System Management notes that following feedback from Market Participants and the findings of the Verve Energy Review, a proposal to establish competition in the provision of both Balancing and Load Following Ancillary Services was developed. The resulting amendments to the Market Rules were progressed by the Rule Change Proposal: Competitive Balancing and Load Following Market (RC\_2011\_10)<sup>2</sup>. System Management considered it was therefore necessary to make related and relevant changes to the PSOPs impacted on by RC\_2011\_10.

System Management also notes that it has included a number of minor and typographical amendments to the PSOP consistent with its endeavour to continuously seek to improve the integrity and accuracy of the PSOPs.

<sup>2</sup> Note that the final Amending Rules resulting from RC\_2011\_10 were approved by the Minister on 20 March 2012. Refer to the following webpage for further details: [http://www.imowa.com.au/RC\\_2011\\_10](http://www.imowa.com.au/RC_2011_10)

Full details of the Procedure Change Proposal are available at: <http://www.imowa.com.au/PPCL0021>.

### **3. CONSULTATION**

#### **3.1 Market Advisory Committee or Working Group**

The Market Advisory Committee (MAC) has delegated the role of:

- considering System Management Procedure Change Proposals to the System Management Procedure Change and Development Working Group (clause 2.3.17(a)); and
- considering, assessing, developing and undertaking post-implementation evaluation of change to the Market Rules associated with the issues list agreed at the 11 August 2010 MAC meeting to the Rules Development Implementation Working Group (RDIWG).

Details of the discussion of the proposed replacement PSOPs by these Working Groups is outlined below. At the time of publishing the Procedure Change Proposal the IMO notified the MAC and noted that it would convene a meeting of the MAC to discuss should two or more members wish to (clauses 2.10.8 and 2.10.9). No MAC member contacted the IMO in this regard.

#### **12 December 2011 – System Management Procedure Change and Development Working Group Meeting**

Prior to formal submission the proposed replacement PSOPs were discussed by the Working Group at its 12 December 2011 meeting. Following discussion at the Working Group, there were no agreed changes to the relevant PSOPs required.

At the conclusion of the meeting the Chair advised members that there would be further out of session consultation on the PSOPs to allow members more time to evaluate the amendments. No further comments were received by System Management during this out of session consultation period.

#### **22 March 2012 – RDIWG Meeting**

Subsequent to System Management's request to the IMO to undertake a further consultation period with all of industry, the updated replacement PSOPs were also presented to the RDIWG for discussion at its 22 March 2012 meeting. During the meeting the following main points were raised with respect to the PSOP: Communications and Control Systems:

- Mr Corey Dykstra stated that section 2.2.2(b) was confusing. Mr Cameron Parrotte advised that similar feedback had been received from another party, and confirmed that the wording will be clarified.

- Dr Steve Gould stated that section 2.2.1 was also confusing. Mr Parrotte advised that the intention of section 2.2.1 was what System Management deemed as the standard requirements for a Market Participant who had specific conditions imposed on them. The Chair advised that the IMO could assist with redrafting the clause, and requested it be circulated to the RDIWG by the end of the week for consideration.
- In regards to section 2.1.1(a), Mr Parrotte stated the feedback received from Market Participants was that business-to-business (B2B) was the preferred way to proceed. System Management would commence workshops in late April to determine what the portal and B2B will look like. As of December B2B and Automated Governor Control (AGC) would be acceptable methods of responding to Dispatch Instructions for Facilities without exemptions.
- The Chair queried if Market Participants would be ready for December, and asked System Management if there would be a degree of leeway for those who were not ready. Mr Andrew Stevens advised that B2B had always been the preferred option but it had not been mandatory until now. Mr Dykstra agreed with the Chair's request for the provision of a degree of flexibility.
- The Chair suggested that, in order to ensure fairness, Market Participants should be provided with a reasonable lead-time regarding the implementation of the B2B solution. Mr Stevens advised that there wasn't any visibility at the moment on what the B2B was going to look like, and asked if System Management were going to insist that it was mandatory. Mr Stevens advised that 18 months was a realistic lead-time, and that if they were expected to be ready by December, they would need to see the specifications now.
- The Chair advised that there were some organisations who would find it easy to accommodate the B2B by 5 December, but that some wouldn't, therefore a degree of flexibility is needed to be provided to those Market Participants who experience difficulties in meeting the deadline. Mr Parrotte confirmed that System Management would consider all the feedback provided about introducing a degree of flexibility for the take up on B2B in December. Mr Brad Huppatz advised that the feedback provided regarding B2B was that it was highly desirable, but it should not be mandatory. Mr Parrotte advised that System Management were initially proceeding with SMS and email notifications, along with the portal, in order to communicate.
- Mr Dykstra queried the references to MPI, the portal, and the website within the procedure (notably section 2.1.1(c) and 2.2.1(a)) and requested the procedure be updated to ensure consistent use of terminology. Mr Kelloway advised that some investigation needed to be done to ensure that AGC covered the Balancing market. Mr Dykstra expressed concern over the lack of clarity in regards to the technology options that were available.

- Mr John Rhodes expressed surprise at the reference to 24x7 monitoring for Demand Side Programmes (DSPs) and obligations within section 2.5 of the PSOP, and queried why it was needed, as this resulted in a mismatch between 24x7 and the Monday to Friday obligations for dispatch. Mr Parrotte advised that System Management would review this section of the procedure.
- Mr Andrew Sutherland advised that they were eager to get to establish an operating agreement with System Management, and queried how defined the agreement was. Mr Kelloway advised that it was similar to the operating protocol, but there would be more to the agreement from a Dispatch point of view. Mr Sutherland advised that if it was not in the procedure then they needed to have further details on it.

### **3.2 Submissions received during consultation period**

The public submission period was between 9 January 2012 and 6 February 2012. During this time System Management received one submission from Landfill Gas & Power (LGP).

In its submission LGP noted that it did not support the Procedure Change Proposal with respect to either the PSOP: Communications and Control Systems or PSOP: Dispatch. LGPs reasoning for not supporting the replacement PSOP: Communications and Control Systems was as follows:

- Step 3.2 stated to the effect that all Balancing Facilities excluded from the Balancing Facility Requirements must either possess voice, SMS and email communications or otherwise have an Operational Control Agreement with System Management. While the procedure was otherwise silent on the Operational Control Agreement, step 4.1 referred to “Participants with Scheduled or Non-Scheduled Generators operated remotely by System Management under an agreement between the Market Participant and System Management [MR7.8]”. Similarly step 4.3 referred to “an operating agreement for remote operation and control”.

LGP submitted that these provisions needed to be clarified and integrated with the new Market Procedure for Balancing Facility Requirements. In particular, LGP considered that it was unclear whether these provisions referred to the Generator-Control service offered by System Management to Market Generators in general, or whether it was the subject of the reference in clause 2.1.1 of the new Market Procedure for Balancing Facility Requirements. LGP regretted that the ambiguity and lack of detail in this respect rendered the proposal incapable of unqualified support.

LGP noted the following additional concerns with respect to the PSOP: Communications and Control Systems (though noting these issues were not considered to be material):

- Step 5.1 provided for the situation in which communication is lost, including Automatic Generator Control. While LGP supported this, it sought clarification that this was in



compliance with the Technical Rules, which LGP understood to require that a Market Generator is tripped in the event of SCADA being lost for more than 7 seconds.

- The document could benefit from an editorial read-through. For example:
  - Each material part of the document should have a consistent unique clause number or other identifier (for example, the nomenclature of page 4 seemed to be stand-alone);
  - AGC was defined three times; and
  - Step 2 on page 5 should be integrated with “related documents” of page 4, and the duplication should be removed.

LGP also suggested that the two procedures would preferably have been the subject of individual Procedure Change Proposals.

### **3.3 Submissions received during the further consultation period**

System Management provided interested parties with a further consultation period which was between 19 March 2012 and 29 March 2012. During this time System Management received submissions from Alinta Energy, the IMO, LGP and Synergy.

A full copy of each of the submissions received during the further consultation period is available on the Market Web Site.

#### ***Alinta Energy***

Alinta Energy raised a number of concerns in its submission around the intended processes for issuing and confirming Dispatch Instructions given that under the new market every change in facility generation levels will be in response only to a Dispatch Instruction issued by System Management. In particular, the changes would require Market Generators, including Alinta to make significant changes to existing processes and systems.

In particular, Alinta Energy noted that given the short timeframe until market start, System Management’s intention to rely on existing information/communication systems, specifically its web portal SMMITS, for issuing and confirming Dispatch Instructions appears necessary. However, and while providing a Dispatch Instruction alert via email and SMS will be beneficial, the requirement to manually confirm Dispatch Instructions via the web portal will effectively require generation facilities to revert to manual control. This is because under the new Balancing Market arrangements Market Generators cannot pre-empt the Dispatch Instructions that System Management are likely to issue (based on the last Forecast Balancing Merit Order), but must instead manually confirm a Dispatch Instruction via the web portal before being able to adjust a facility’s generation level.

Alinta Energy considered that reliance on a manual confirmation process via System Management's web portal to receive and confirm Dispatch Instructions close to real time (as little as 120 seconds prior to plant movement), combined with an increase in the frequency of Dispatch Instructions, created a significant compliance risk for Market Generators. Alinta Energy considered that it would appear the only real way these risks could be adequately managed was through a return to a fully automated system for issuing and confirming Dispatch Instructions. Alinta Energy understood that this is intended to be available for 5 December 2012, although no specifications are available as yet of the proposed SMARTS B2B system.

Without certainty around the timing of when the detailed SMARTS B2B specification will be available, Alinta Energy considered it is difficult for a Market Generator to make an informed assessment of the scope of work for automating the receipt and confirmation of Dispatch Instructions. As a result, it was unreasonable to assume that a Market Generator will be able to scope, procure, implement and test the necessary systems and/or system and process changes prior to 5 December 2012. Thus the ability of Market Generators to participate in the Balancing Market would be uncertain from 5 December 2012 if the PSOP was to preclude them from continuing to use the manual dispatch confirmation process via System Management's web portal from that time. Alinta Energy suggested that given the web portal is to be retained in any event, and that it does not change a Market Generator's compliance obligations, no participant should be precluded from relying on it to participate in the Balancing Market.

Alinta Energy considered it would not be reasonable to commercially penalise a Market Generator that was unable to implement the B2B solution for 5 December 2012 by imposing restrictions on the manner in which it may participate in the Balancing Market, simply because insufficient information was available in a timeframe to support such an implementation. Alinta Energy further stated that given the absence of any detailed specifications on System Management's proposed B2B system architecture, it did not appear reasonable at the time to preclude Market Generators from continuing to rely on a manual confirmation process via the web portal after 5 December 2012. There was simply not sufficient time to scope, procure, implement and test the necessary systems and/or system and process changes.

Alinta Energy also, with respect to the requirements for duplicated 24x7 monitored voice communications (step 2.1), queried whether System Management could consider clarifying the wording and/or intent of this clause. Alinta Energy understood that this clause simply referred to having two contact numbers that will be answered 24x7, (i.e. as opposed to simply an office number that would ordinarily only be answered during business hours).

### ***The IMO***

In its submission the IMO provided support for System Management's decision to undertake a further round of consultation on the replacement PSOPs. The IMO attached a copy of its questions and suggestions on all the relevant PSOPs that were provided for further consultation to its submission. These included the issues that were raised during the RDIWG's discussion on

22 March 2012. An overview of the relevant issues raised in the log relating to the Communications and Control Systems PSOP is presented below:

- General - Consistency of language, for example MPI, portal, market system.
- Balancing Facility Communications (Section 2.1) – Concern over requirement for B2B/SCADA (was previously preferential) and particularly the timeframe to implement being December 5 2012 with very limited information presently available.
- Balancing Facilities with special conditions (Section 2.2) – Wording is confusing.
- DSPs (Section 2.5) – Requirement for dedicated 24x7 monitored (i.e. someone will answer) telephone contacts seems excessive when the DSPs only have to operate during business hours.
- Generators operated by System Management (Section 3.0) – What is an Operating Agreement? Template and/or definition needed.

#### **LGP**

In its further submission LGP welcomed the revision of the original document. However, LGP continued to not support the revised document as it considered clause 2.2 (Balancing Facilities with special conditions imposed) was confusing and ambiguous.

LGP noted that section 2.2.1 referenced step 2.1 and 2.2 of the Market Procedure: Balancing Facility Requirements, which clauses pertain to Balancing Facilities in general. LGP did not understand the intent of the reference in the section dealing with “Balancing Facilities subject to special conditions”. Further the step appeared to specify clause 7A.1.8 of the Market Rules as the source of the special conditions.

LGP noted that section 2.2.2 then went on to state that step 2.2.1 does not apply to any Balancing Facility that is subject to special conditions under step 3.1.1 of the Market Procedure: Balancing Facility Requirements. Step 3.1.1 also referenced clause 7A.1.8 as being the source of the special conditions.

LGP suggested that the reference to clause 7A.1.8 in both steps should actually be to clause 7A.1.11.

LGP suggested that this issue be remedied by succinctly stating the obligations placed on a Balancing Facility upon which Special Conditions have been imposed.

#### **Synergy**

Synergy noted that its primary concerns related to the obligations on DSPs with respect to communications requirements. In particular, Synergy noted that while they recognised that

System Management must feel comfortable with communication arrangements, that they are both efficient and effective, in this case Synergy believed that the new communication requirement for Market Customers with a DSP to maintain duplicated 24x7 monitored telephone contacts imposes a level of costs which is difficult to justify given the obligations of DSPs under the Market Rules.

Synergy noted the fact that the DSP dispatch window is from 12 PM to 8 PM on Business Days, with a maximum lead time of 4 hours. In this context it was difficult to understand why a 24x7 monitoring requirement was required as the earliest a Dispatch Instruction can take effect is 8 AM on a Business Day for load to be dropped from 12 PM. Given the position of DSPs in the merit order, it is very unlikely a Dispatch Instruction would be issued at 10 PM on Friday night to take effect from 12 PM on the following Monday.

Synergy considered that imposing such requirements adds costs for little if any real benefit and weakens the overall costs efficiency of dispatch arrangements.

Synergy suggested the following revised obligation: *“A Market Customer who operates a Demand Side Programme must provide duplicated monitored telephone contracts during business days from the period commencing 7AM to the earlier of 6PM or 7PM less the number of hours representing the minimum dispatch lead time of any of its DSPs.”*

Synergy noted the following points with respect to this suggestion:

- Since DSPs can only be dispatched on Business Days and they are typically the last capacity to be dispatched, we believe being available to receive Dispatch Instructions at 7AM on a Business Day is reasonable and provides sufficient time for Dispatch Instructions to be issued by System Management; and
- Similarly, as the last hour for dispatch commences at 7 PM, based on a minimum lead time of 1 hour while also recognising that typically most DSPs have a four hour lead times, Synergy believes a reasonable end time for monitored communications is the earlier of 6 PM (i.e. allows a Dispatch Instruction to be issued for load to be dropped at 7 PM for a DSP with a one hour lead time) or 7 PM less the minimum number of lead time hours of any of the Market Customer’s DSPs (i.e. must maintain monitored communications taking into account the shortest DSP lead time to effect a dispatch at 7 PM).

#### **4. THE IMO’S ASSESSMENT**

The IMO is required under clause 2.10.14 of the Market Rules to make a decision whether to approve a proposed PSOP, or amendment to or replacement for a PSOP, prepared by System Management.<sup>3</sup> The IMO has undertaken an assessment of the proposed amendments in light of

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the requirements outlined clause 2.9.3(a) of the Market Rules which requires that Market Procedures must be:

- developed, amended or replaced in accordance with the process in the Market Rules;
- consistent with the Wholesale Market Objectives; and
- consistent with the Market Rules, the Electricity Industry Act and Regulations.

The IMO has also reviewed the commencement date proposed by System Management to ensure that it will allow sufficient time after the date of publication of the Procedure Change Report for Rule Participants to implement the changes required by it (clause 2.10.15(c)).

The IMO's assessment of System Management's proposed replacement PSOP: Communications and Control Systems is outlined in the following sections.

#### **4.1 System Management consideration of issues raised during consultation**

The IMO notes that System Management has addressed the issues raised by submissions received during the consultation period and further consultation period and by the RDIWG during its 22 March 2012 meeting.

The IMO notes the inclusion of revised step 2.1.2 to clarify that prior to the later of 5 December 2012 or six months after the publication of the B2B gateway specification, internet access via System Management's portal will be deemed to meet the communication requirement specified in step 2.1.1(a) around revising and acknowledging Dispatch Instructions, Dispatch Orders and Operating Instructions. The IMO considers that this addresses the concerns raised at the RDIWG and reflected in both Alinta and the IMO's further submissions that a degree of leniency was going to be required.

The IMO also considers that the clarifications to explicitly specify the communication requirements for both Balancing Facilities and Balancing Facilities with special conditions imposed will ensure that Market Participants are aware of their obligations.

#### **4.2 Wholesale Market Objectives**

The IMO considers that the proposed replacement PSOP: Communications and Control Systems is drafted in a way that does not change the operation or objectives of the Market Rules, as amended by RC\_2011\_10. As a result, the IMO considers that the proposed replacement PSOP: Communications and Control Systems is, as a whole, consistent with the Wholesale Market Objectives.

#### **4.3 Market Rules, the Electricity Industry Act and Regulations**

The IMO considers that the proposed replacement PSOP: Communications and Control Systems is consistent with:

- the Market Rules,
- the Electricity Industry Act; and
- Regulations.

The IMO also considers that the proposed replacement PSOP: Communications and Control Systems is consistent with all other Market Procedures.

#### **4.4 Implementation of the replacement Power System Operation Procedure**

In its Procedure Change Report, System Management does not identify any operational considerations that need to be taken into account when determining the implementation date for the replacement Communications and Control Systems PSOP and recommends that the replacement PSOP commence on the Balancing Market Commencement Day. The IMO also notes that the submissions received during the public consultation process did not provide any evidence to suggest that Market Participants would be not able to implement the revised processes in the replacement PSOP by the Balancing Market Commencement Day.

The implementation of the replacement Market Procedures constitutes part of the overall implementation of the new Balancing and LFAS Markets. The IMO considers that the proposed replacement PSOP will support the operation of the new markets and will not require the IMO or System Management to implement any procedure or system amendments in addition to those already being incurred as part of the overall implementation of the new markets.

The IMO considers that System Management's proposed commencement date at 8.00 AM on the Balancing Market Commencement Day should allow sufficient time from the date of publication of System Management's Procedure Change Report to ensure compliance with the replacement PSOP.

## **5. THE IMO'S DECISION**

The IMO's decision is to approve the replacement PSOP: Communications and Control Systems as proposed by System Management in its Procedure Change Report.

### **5.1 Reasons for the decision**

The IMO's decision is based on its assessment that the replacement PSOP: Communications and Control Systems:

- will enable the operation of, and facilitate participation in the new Balancing and Load Following Markets and thereby support the achievement of the Wholesale Market Objectives;

- is consistent with the Market Rules, the Electricity Industry Act and Regulations; and
- requires no additional system changes to implement.

Additional detail outlining the analysis behind the IMO's reasons is outlined in section 4 of this report.

## **6. THE REPLACEMENT POWER SYSTEM OPERATION PROCEDURES**

### **6.1 Commencement**

The replacement PSOP: Communications and Control Systems will commence at **8:00 AM** on the **Balancing Market Commencement Day**.

### **6.2 The Replacement Power System Operation Procedure**

The wording of the approved replacement PSOP: Communications and Control Systems is available on the IMO's website.