

## **NATIONAL ELECTRICITY LAW**

Undertaking to the Australian Energy Regulator given for  
the purposes of section 59A of the National Electricity Law

by

International Power (Australia) Holdings Pty Limited (ACN 105 041 209)

### **Person giving this Undertaking**

1. This Undertaking is given to the Australian Energy Regulator (AER) by International Power (Australia) Holdings Pty Limited (ACN 105 041 209) (IPAH) of Level 33, Rialto South Tower, 525 Collins Street, Melbourne VIC 3000, for the purposes of section 59A of the *National Electricity (South Australia) Law (NEL)*.

### **Background**

2. IPAH is a company registered under the *Corporations Act 2001* (Cth) and is the holding company for the group of entities which comprise ENGIE in Australia. IPAH has the authority to enter into this Undertaking on behalf of Synergen Power Pty Ltd (ACN 092 560 819) (**Synergen Power**).
3. Synergen Power is, and was at all relevant times:
  - a. a subsidiary of IPAH;
  - b. responsible for the Dry Creek Power Station (**DRYCGT**) *generating system* within the National Electricity Market (**NEM**), which is comprised of the *scheduled generating units* registered as DRYCGT1, DRYCGT2 and DRYCGT3 (**DRYCGT scheduled generating units**);
  - c. a *Registered Participant* within the NEM, being registered by the Australian Energy Market Operator (**AEMO**) as a *Generator* for the purposes of clause 2.2 of the National Electricity Rules (**NER**) in relation to DRYCGT; and
  - d. a *Scheduled Generator* for the purposes of clause 2.2.2 of the NER in relation to the DRYCGT *scheduled generating units*.
4. AEMO is responsible for operating the NEM, including maintaining *power system security*, operating a *central dispatch* process and issuing *dispatch instructions* to *Scheduled Generators* and *Market Participants*.
5. Each trading day in the NEM runs for 24 hours and commences at 04:00 am and finishes at 4:00 am the following day. The conduct described herein falls within the 30 November 2016 trading day and 1 December 2016 trading day; for clarity this Undertaking refers to the 1 December 2016 calendar day.

## South Australian market separation from the NEM – 1 December 2016

6. On 1 December 2016 from 00:16 hrs to 05:00 hrs (AEST), South Australia (SA) was synchronously separated from the rest of the NEM (the **separation event**) due to a fault on the transmission network in Victoria which occurred while the Heywood Interconnector was on a single contingency. During the separation event, for a variety of reasons, the power system in the South Australia regional island was not in a secure operating state.
7. Throughout the separation event, AEMO issued a number of *directions* and *clause 4.8.9 instructions* to South Australian participants, including Synergen Power, to manage power system security.

### Relevant Provisions

#### Compliance with dispatch instructions and appropriate personnel

8. Clause 4.9.8(a) of the NER requires 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.
9. Clause 4.9.2(d) of the NER requires that 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.

### AER concerns regarding personnel and compliance with dispatch instructions at DRYCGT

10. The AER considers that Synergen Power did not comply with clauses 4.9.8(a) and 4.9.2(d) of the NER on the 1 December 2016 calendar day.
11. In particular, the AER considers that Synergen Power did not:
  - a. comply with *dispatch instructions* issued by AEMO on the 1 December 2016 calendar day, for the DRYCGT *scheduled generating units* as outlined in Annexure A; and
  - b. ensure that appropriate personnel were available to respond promptly to *dispatch instructions* issued by AEMO to DRYCGT on the 1 December 2016 calendar day.
12. IPAH has advised the AER that the following practices and/or operations contributed to its non-compliance:
  - a. work arrangements for IPAH night shift Spot Traders whilst on night shift;
  - b. the Agreed Procedures with a Third Party for the operation of DRYCGT;

- c. the ability of PPPS staff to remotely operate DRYCGT; and
- d. events on the 1 December 2016 calendar day.

#### **Contributing factors**

- 13. During day and afternoon shift hours, the IPAH Spot Trader operates from the IPAH trading floor where there are multiple computer screens, wallboard displays and phone facilities which facilitate situational awareness, particularly during periods of high power system or market activity.
- 14. During night shift hours, the IPAH Spot Trader operates from their home in stand-by availability mode, with access to their laptop computer screen and market alerts.
- 15. Operational control of the DRYCGT *scheduled generating units* is normally carried out by a Third Party under the terms of a services agreement which requires the IPAH Spot Trader to telephone the Third Party to verify all generating unit start-up, shut-down or load changes at DRYCGT.
- 16. During the early morning of 1 December 2016, these arrangements did not work as contemplated when communication between the Third Party and the IPAH Spot Trader could not be established on a number of occasions.
- 17. There are also arrangements in place so that the DRYCGT *scheduled generating units* can be remotely controlled from the PPPS control room using the PI software system.
- 18. Later in the morning of 1 December 2016, the Third Party advised the IPAH Spot Trader that DRYCGT was non-responsive to load changes. When the IPAH Spot Trader then attempted to control the units' output from the PPPS PI software, this was found to be unable to control the units' output.

#### **Proposed Resolution of Issues**

- 19. IPAH acknowledges the AER's concerns and has co-operated with the AER to resolve the issues described above. In particular, IPAH on behalf of its subsidiary Synergen Power has indicated a willingness to resolve this matter by:
  - a. the provision of this Undertaking to the AER pursuant to section 59A of the NEL to address the concerns described above and future compliance by IPAH and its subsidiaries with the NEL and the NER; and
  - b. the payment of three (3) Infringement Notices totalling \$60,000. The Infringement Notices will be issued by the AER for alleged contraventions of clause 4.9.8(a) of the NER, namely:
    - (i) the failure to follow the *dispatch instructions* issued for DRYCGT1 for all dispatch intervals in the period 04:05 to 04:35 on 1 December 2016 inclusive;

- (ii) the failure to follow the *dispatch instructions* issued for DRYCGT2 for the following *dispatch intervals* on 1 December 2016: 00:45 to 00:50 inclusive and 03:10, 03:15, 04:10, 04:15, 05:00 and 05:05; and
- (iii) the failure to follow the *dispatch instructions* issued for DRYCGT3 for the following *dispatch intervals* on 1 December 2016: 00:40 to 00:55 inclusive and 03:10 to 03:40 and 04:10 to 04:35 inclusive.

#### **Commencement of Undertaking**

- 20. This Undertaking comes into effect when:
  - a. the Undertaking is executed by IPAH; and
  - b. the AER accepts the Undertaking so executed (the **Commencement Date**).
- 21. Upon the Commencement Date of this Undertaking, IPAH undertakes to assume the obligations set out below.
- 22. Subject to clauses 23, 24 and 25, this Undertaking expires two (2) years after the Commencement Date.
- 23. IPAH may withdraw or vary this Undertaking at any time, but this Undertaking will only be taken to be withdrawn or varied on the date on which the AER consents to such withdrawal or variation in accordance with section 59A of the NEL.
- 24. The AER may revoke its acceptance of this Undertaking if the AER becomes aware that any information provided to it was incorrect, inaccurate or misleading in any material respect.
- 25. The AER may, at any time, expressly waive in writing any of the obligations contained in this Undertaking or amend the date by which any such obligation is to be satisfied.

#### **Undertaking by IPAH**

##### Revised practices and procedures

- 26. During the period of this Undertaking, IPAH undertakes to maintain arrangements such that:
  - a. IPAH Spot Traders have a computer monitor at their home in addition to the monitor attached to their laptop computer. This is to improve the ability of the on-call IPAH Spot Trader to maintain awareness of market activities, and therefore, their obligations under relevant provisions of the NER; and
  - b. alert messages are sent to IPAH Spot Traders via short message service and email when any new 'start' or 'shutdown' Dispatch Target is sent by AEMO in respect of a DRYCGT scheduled generating unit.

27. IPAH undertakes, within six months of the Commencement Date of this Undertaking, to:
- a. review and where reasonably appropriate, update the following IPAH operational procedures to provide additional emphasis on compliance with Dispatch Targets:
    - i. procedure entitled "Rebidding Compliance Guidelines of the National Electricity Law" (issued 23 September 2016); and
    - ii. procedure entitled "Dispatch Instructions and Non-Conformance Management" (issued 23 September 2016); and
    - iii. procedure entitled "Synergen Remote Start Communication Procedure" (issued 23 September 2016); and
  - b. review and where reasonably appropriate, update IPAH's Spot Trader roster procedure and on-call arrangements to facilitate the on-call IPAH Spot Trader being able to call upon back up support outside of normal business hours.
28. During the period of this Undertaking, where IPAH updates procedures or arrangements under either clause 27(a) or 27(b) above, IPAH undertakes to provide suitable training updates for all directors, officers, employees, representatives and agents of IPAH and its subsidiaries whose duties would be impacted by the update.

#### Changes to Synergen Power remote control

29. During the period of this Undertaking, IPAH undertakes to maintain arrangements such that the PI software, which is used to remotely control the DRYCGT scheduled generating units from PPPS, is installed and maintained on a dedicated computer.
30. IPAH undertakes, within three months of the Commencement Date of this Undertaking, to document and implement IT escalation procedures to ensure that in the event of a failure of the PI software system, the IPAH IT Support Desk and the responsible IPAH Spot Trader will be notified promptly.

#### Agreed Procedures with Third Party

31. IPAH undertakes, within three months of the Commencement Date of this Undertaking, to use its best endeavours to amend the Agreed Procedures so that the Third Party is able to act on dispatch instructions for DRYCGT without waiting to receive verbal confirmation from an IPAH Spot Trader.

#### Use and maintenance of arrangements

32. IPAH undertakes to implement and/or maintain (as applicable) the arrangements specified in paragraphs 26 to 31 inclusive for the duration of the Undertaking.

33. IPAH undertakes that, in the event that it becomes aware of non-compliance with the arrangements specified in paragraphs 26 to 31 inclusive, it will provide the AER with a written report setting out the reasons for non-compliance within five (5) business days.

Independent review of Guidelines, Procedures and other documentation

34. IPAH undertakes to engage, within three months from the Commencement Date of this Undertaking, at its own expense, a suitably qualified independent compliance expert (**Expert**) acceptable to the AER.

- a. Prior to engagement, IPAH will seek the AER's written confirmation of the suitability of the Expert proposed.

35. IPAH undertakes that the Expert will be engaged to assess the accuracy, and amend if necessary, all current material internal Documents relating to compliance by IPAH and its subsidiaries with clauses 4.9.8 and 4.9.2(d) of the NER, so that those internal Documents accurately reflect the obligations to comply with those clauses and IPAH must:

- a. with the assistance of the Expert, identify all material internal Documents, processes and systems relating to compliance by IPAH and its subsidiaries with clauses 4.9.8 and 4.9.2(d) of the NER;
- b. provide the material internal Documents and details of process and systems identified under subparagraph a. above to the Expert;
- c. provide the Expert with any assistance that the Expert reasonably requires to assess and amend the material internal Documents;
- d. amend the material internal Documents itself as required by the Expert; and
- e. within eleven (11) months of the Commencement Date of this Undertaking, provide a written report signed by the Expert and the General Counsel and Company Secretary of IPAH to the AER:
- i. describing the expertise of the Expert and confirming his or her independence;
- ii. stating precisely how each of the steps in subparagraphs a. to d. inclusive above have been completed; and
- iii. confirming that the material internal Documents accurately reflect the obligations of IPAH and its subsidiaries.

Training of IPAH's staff and others

36. IPAH undertakes that:
- a. it will ensure that it provides regular and practical training (at least once per year) for all directors, officers, employees, representatives and agents of IPAH

and its subsidiaries whose duties could result in them being concerned with conduct that could contravene clauses 4.9.8 and 4.9.2(d) of the NER;

- b. the training referred to in subparagraph a. above is conducted by a suitably experienced professional with sound knowledge of compliance with the relevant provisions of NEL and the NER;
- c. the training referred to in subparagraph a. includes a requirement that awareness of compliance with the relevant provisions of the NEL and NER forms part of the induction of all new directors, officers, employees, representatives and agents whose duties could result in them being concerned with conduct that could contravene clauses 4.9.8 and 4.9.2(d) of the NER; and
- d. it will seek to provide those Third Party staff whose duties could result in them being concerned with the dispatch of DRYCGT with practical training regarding compliance with relevant provisions of the NEL and NER.

#### Report by IPAH relating to Revised Practices and Procedures

37. IPAH undertakes that:

- a. no later than three (3) month prior to the expiration of this Undertaking, IPAH will prepare a written report detailing all of the changes IPAH and its subsidiaries have made to their practices and procedures occasioned by and/or implemented as a result of this Undertaking, and will also include any proposed amendments to their practices and procedures yet to be occasioned by and/or implemented as a result of this Undertaking; and
- b. within seven (7) days of such report being completed, it will provide the report to the AER.

#### **Acknowledgments**

38. IPAH acknowledges that:

- a. the AER will make this undertaking publicly available including by publishing it on the AER website;
- b. the AER will, from time to time, make public reference to the Undertaking including in news media statements and in AER publications; and
- c. this Undertaking in no way derogates from the rights and remedies available to any other person arising from the alleged conduct.

**Executed by**

International Power (Australia) Holdings Pty Limited (ACN 105 041 209) by its authorised officers pursuant to section 127(1) of the *Corporations Act 2001* (Cth).

  
.....  
Secretary/Director

  
.....  
Director

This 29 day of JUNE 2018

**ACCEPTED BY THE AUSTRALIAN ENERGY REGULATOR PURSUANT TO SECTION 59A OF THE NATIONAL ELECTRICITY (SOUTH AUSTRALIA) LAW.**

  
.....  
Chair

This 9 day of July 2018

(Commencement Date)



## Glossary

All italicised words or phrases in this Undertaking shall be taken to have the same meaning as described in Chapter 10 of the NER.

**'1 December 2016 calendar day'** means the 24 hour period commencing at midnight and finishing at midnight the following day.

**'AEST'** means Australian Eastern Standard Time.

**'Agreed Procedures'** means the written procedures pursuant to the Services Agreement as agreed between Synergen Power and a Third Party with regards to the remote dispatch of Synergen Power generating units by the Third Party on Synergen Power's behalf.

**'Document'** means any document in the possession, power or control of IPAH and its subsidiary, Synergen Power, which may include, without limitation:

- (a) memoranda, notes, reports, contracts, agreements, training materials for controllers and/or traders;
- (b) electronic records stored on back-up tapes, hard disks, CD-Rom, DVD, computer hard-drive, or other fixed or removable electronic storage device or media which are capable of being reproduced;
- (c) a book, plan, paper, parchment or other material on which there is writing or printing, or on which there are marks, symbols or perforations, having a meaning for persons qualified to interpret them; and
- (d) a disc, tape, paper or other device from which sounds or messages are capable of being reproduced.

**'Dispatch Target'** means the level of power (or energy) that AEMO instructs a scheduled generating unit to provide during the relevant dispatch interval.

**'IPAH'** has the meaning given in clause 1 of this Undertaking.

**'IPAH Spot Trader'** means personnel of IPAH or its related bodies corporate who are responsible for scheduled generator bids and responding to dispatch instructions from AEMO.

**'IT Support Desk'** means personnel of IPAH or its related bodies corporate who are responsible for assisting IPAH and its related bodies corporate with IT issues related to the PI software.

**'MW'** means megawatt.

**'PPPS'** means Pelican Point Power Station which is owned and operated by Pelican Point Power Limited, a subsidiary of IPAH.

**'Services Agreement'** means the services agreement between Synergen Power and a Third Party with respect to Synergen Power generating units.

**'Third Party'** means [REDACTED]

In this Undertaking, a reference to a party using, or an obligation on a party to use, best endeavours or similar expressions does not oblige that party to:

- (a) pay money:
  - (i) in the form of an inducement or consideration to a third party to procure something (other than the payment of reasonable expenses or costs, including costs of advisers, to procure the relevant thing); or
  - (ii) in circumstances that are materially onerous or unreasonable;
- (b) provide other consideration of a material value to or for the benefit of any person that is materially onerous or unreasonable; or
- (c) agree to materially onerous or unreasonable conditions, or act in breach of its legal duties.

## Annexure A

**Table A1: Non-compliance with dispatch instructions by unit and dispatch interval**

Calendar day and dispatch interval (AEST)	Scheduled generating unit	Dispatch Instruction (MW)	Measured Output (MW)	Difference (MW)
1/12/2016 00:40	DRYCGT3	20.00	0.00	-20.00
1/12/2016 00:45	DRYCGT2	42.61	33.33	-9.28
	DRYCGT3	25.00	14.19	-10.81
1/12/2016 00:50	DRYCGT2	46.00	36.41	-9.51
	DRYCGT3	39.19	15.22	-23.97
1/12/2016 00:55	DRYCGT3	40.22	32.99	-7.23
1/12/2016 01:55	DRYCGT2	35.26	43.93	8.67
1/12/2016 02:00	DRYCGT2	20.00	45.64	25.64
	DRYCGT3	31.63	45.81	14.18
1/12/2016 02:45	DRYCGT1	0.00	20.34	20.34
	DRYCGT2	20.64	43.93	23.29
	DRYCGT3	20.47	44.95	24.48
1/12/2016 02:50	DRYCGT2	18.93	45.29	26.36
	DRYCGT3	19.95	44.61	24.66
1/12/2016 03:10	DRYCGT2	19.61	44.10	24.49
	DRYCGT3	20.12	44.44	24.32
1/12/2016 03:15	DRYCGT2	19.10	42.90	23.80
	DRYCGT3	19.44	46.15	26.71
1/12/2016 03:20	DRYCGT3	36.27	44.61	8.34
1/12/2016 03:25	DRYCGT3	36.88	44.95	8.07
1/12/2016 03:30	DRYCGT2	34.19	46.15	11.96
	DRYCGT3	34.19	45.47	11.28
1/12/2016 03:35	DRYCGT2	21.15	44.27	23.12
	DRYCGT3	20.47	41.88	21.41
1/12/2016 03:40	DRYCGT3	41.88	22.74	-19.41
1/12/2016 03:45	DRYCGT1	15.00	26.32	11.32
	DRYCGT2	5.00	26.67	21.67
1/12/2016 04:05	DRYCGT1	43.31	36.75	-6.56
1/12/2016 04:10	DRYCGT1	46.00	35.89	-10.11
	DRYCGT2	46.00	35.89	-10.11
	DRYCGT3	46.00	36.07	-9.93
1/12/2016 04:15	DRYCGT1	46.00	36.24	-9.76
	DRYCGT2	46.00	35.89	-10.11

Calendar day and dispatch interval (AEST)	Scheduled generating unit	Dispatch Instruction (MW)	Measured Output (MW)	Difference (MW)
	DRYCGT3	46.00	36.07	-9.93
1/12/2016 04:20	DRYCGT1	46.00	35.55	-10.45
	DRYCGT3	46.00	37.09	-8.91
1/12/2016 04:25	DRYCGT1	46.00	36.24	-9.76
	DRYCGT3	46.00	36.58	-9.42
1/12/2016 04:30	DRYCGT1	46.00	35.89	-10.11
	DRYCGT3	46.00	36.75	-9.25
1/12/2016 04:35	DRYCGT1	10.89	35.04	24.15
	DRYCGT2	30.50	45.29	14.79
	DRYCGT3	46.00	36.07	-9.93
1/12/2016 05:00	DRYCGT2	30.98	45.81	14.83
1/12/2016 05:05	DRYCGT1	10.38	23.25	12.87
	DRYCGT2	20.81	33.67	12.86
	DRYCGT3	11.75	22.56	10.81