MinterEllison

LAWYERS

2 April 2014

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Hayley Parkes
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Dear Hayley

A91412 & A91413 – Stanwell Corporation Limited and Diamantina Power Station Pty Ltd

We refer to the ACCC's information request dated 19 March 2014.

We **enclose** a public version and a confidential version of the applicants' joint response to that information request.

Stanwell Corporation Limited (**Stanwell**) requests that the parts of the public version of the submission which are currently redacted be excluded from the public register on the basis that they are confidential.

The two redactions are the quantum of MMG Century's and MIM's average demand from Mica Creek Power Station in 2013 respectively.

Stanwell submits that the information over which confidentiality is claimed is confidential and commercially sensitive as Stanwell has a current supply obligation to both parties. The information is not otherwise within the public domain.

Stanwell confirms that Diamantina Power Station Pty Ltd has not seen the confidential version of this submission.

If you have any questions or require any further information, please do not hesitate to contact us.

Yours faithfully
MINTER ELLISON

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enclosure

Response to ACCC information request - 19 March 2014

Date: 2 April 2014
Public version

1 Glossary

Applicants means Stanwell and DPS Co.

Application means the applications and supporting submission dated 27 February 2014 and annotated Schedule 1 provided under the covering letter of 20 March 2014.

CCA means *Competition and Consumer Act 2010* (Cth).

Dispatch Protocol means the new Dispatch Protocol which includes the Proposed Conduct.

DPS means the Diamantina Power Station.

DPS Co means Diamantina Power Station Pty Ltd.

EEQ means Ergon Energy Queensland Pty Limited.

Ergon means Ergon Energy Corporation Limited.

Existing Dispatch Protocol means the "North West Power System Dispatch Protocol" dated June 1998, the most recent revision of which is dated 29 January 2013.

MCPS means the Mica Creek Power Station.

MIM means Mount Isa Mines Limited, a subsidiary of Glencore.

NEM means the National Electricity Market.

NWPS means the North West Power System.

Participant means Stanwell, DPS Co, Ergon or one of Stanwell's or DPS Co's customer that is or becomes a signatory to the Dispatch Protocol.

Proposed Conduct means the conduct to be authorised as specified in the Application.

Stanwell means Stanwell Corporation Limited.

2 Likely "future with" the proposed conduct

1. Please outline the expected impact of the commissioning of the Diamantina Power Station (DPS) on the Mica Creek Power Station (MCPS), including changes to its expected generation capacity and supply over the next 5 years.

The Applicants submit that the likely future with the conduct is, as set out in section 2.5 of the Submission, that the commissioning of DPS will reduce MCPS' supply to customers for at least the next 5 years.

While MCPS will continue to supply MMG Century Limited, DPS will supply electricity to MIM and EEQ. In 2013 MMG Century's average demand from MCPS was approximately [**CONFIDENTIAL**] MW. MIM's average demand from MCPS (including the Ergon Energy load) was approximately [**CONFIDENTIAL**] MW from MCPS in the same period.

MCPS will also supply MMG Dugald River Pty Limited once it is connected to the NWPS.

The commissioning of DPS will have no immediate impact on MCPS' generation capacity. While it is possible that Stanwell may decide to decommission part of MCPS once DPS is commissioned, no decision has been made at present to do so.

3 Likely "future without" the proposed conduct

2. What do the Applicants consider to be the likely "future without" the proposed conduct? Please also outline other scenarios that could be contemplated as an alternative future without.

3. Please provide evidence that supports the likelihood of each "future without" scenario posed in response to the above question, including reasons why particular scenarios would or would not eventuate in the absence of the proposed conduct.

4. If additional or alternative public benefits or public detriments would arise as a result of any of the "future without" scenarios identified by the Applicants in question 2 above, please identify these.

3.1 Potential counterfactuals

Stanwell and DPS consider that the most likely "future without" the Proposed Conduct that would not require authorisation from the Commission is that:

- while there may be some elements of the Existing Dispatch Protocol which could be retained, it was developed on the basis of there being only one major generator supplying all the customers and so would not be appropriate when there are two major generators on the NWPS each supplying their own customers;
- the new Dispatch Protocol would not be implemented and there would be no arrangements between Stanwell, DPS Co and other NWPS Participants which provides for the co-ordination of dispatch of major generators and load shedding;
- Ergon would, by default, as the network operator, have the responsibility of setting the standards and technical requirements for new load and generation connecting to the NWPS;
- the two major generators, Stanwell and DPS Co, would operate their power stations on a shared grid;
- each of Stanwell and DPS Co would unilaterally operate their power stations to supply the expected load of their customers; and
- each of Stanwell and DPS Co would enter into separate load shedding arrangements with their customers which would involve the installation of new technical solutions and/or customers agree to underwrite new generation capacity to reduce the need for load shedding or enter into back up supply arrangements with the other generator. However, in practice, neither generator could island their generation in the event of major loss of generation without shutting down the other party's customers.

Ergon has no statutory function of co-ordinating the dispatch of load and the Applicants question whether it has the technical capability to do so. As a result, without an agreement between the parties, the system risks being in imbalance. This can create frequency instability, and increase the probability of unit trips, which risks the safe reliable operation of the system.

The consequences of this counterfactual are discussed in section 3.2.

Another possible "future without" the Proposed Conduct that would not require authorisation from the ACCC is that Ergon augments its electricity system in such a way as to enable each

of Stanwell and DPS Co to generate and dispatch directly to their respective customers. This is likely to involve substantial works and could potentially involve duplicating much of the existing electricity transmission system. This scenario is not realistic given the expense involved but is nevertheless considered in section 3.3 given it was discussed in meetings with the Commission.

In discussion, the Commission raised the potential for Ergon or a third party to assume the role of Generation Co-ordinator instead of DPS Co as currently envisaged under the Dispatch Protocol.[1] However, even if Ergon or a third party were to become the Generation Co-ordinator, the Applicants would still require authorisation from the Commission to engage in the Proposed Conduct. The issues with Ergon or a third party becoming the Generation Co-ordinator are discussed further in Section 3.4.

3.2 No co-ordination of generation or load shedding

As described above, the mostly likely "future without" the Proposed Conduct that would not require authorisation from the Commission would involve no arrangement between Stanwell, DPS Co and other Participants relating to the co-ordination of dispatch of generators and for load shedding.

As compared to the Proposed Conduct, this counterfactual does not give rise to any additional or alternative public benefits.

However, this counterfactual is likely to give rise to a number of additional public detriments. In effect, the counterfactual removes a number of the public benefits which would arise from the Proposed Conduct.

First, it is likely to result in lower quality and reliability of supply, including a higher likelihood of power surges and brown outs. This is because there would be no entity co-ordinating the dispatch of electricity and managing the alignment of demand and supply to maintain system frequency, voltage and reactive power flows and time error control for the NWPS.[2]

Second, as compared to the Proposed Conduct, this counterfactual is likely to result in lower system security, higher instances of system failure, higher risks and impacts for customers in relation to a system wide disruption, and a more significant impact of any disruption that does occur to customers because there would be:

- no agreed isolation and load shedding procedures,[3] which are required to ensure portions of the network are quickly isolated or loads quickly curtailed to avoid system instability;
- no agreed automatic load shedding priorities covering the whole of the NWPS,[4] which are required to ensure that the risks to customers of a system wide disruptive event and collapse are minimised;
- no co-ordination of ramp up of generation and reconnection of load following a load shed event,[5] which is required to minimise the impact of any disruption which does occur and to ensure the system is returned to a steady operating state as soon as possible; and

1 Clause 1 'Generation Co-ordinator' definition and clause 2.13, Dispatch Protocol.

2 Clause 6, Dispatch Protocol.

3 Clauses 8 and 9.3 and schedule 7, Dispatch Protocol.

4 Clause 8.8 and schedules 7 and 8, Dispatch Protocol.

5 Clauses 8.9 and 8.10 and schedule 8, Dispatch Protocol.

- no agreed restrictions and procedures on connections of large loads as between all Participants,[6] which is required to ensure system stability when such a connection is made.

Third, this counterfactual, as compared to the Proposed Conduct, also increases safety risks. This is because, for the reasons outlined above, the counterfactual is likely to result in higher system instability and supply interruptions, which could have significant safety implications given electricity in the NWPS is mainly used for mining and industrial applications.

Fourth, this counterfactual is likely to involve increased costs for customers due to the need to:

- pay for generator specific load shedding schemes; and/or
- contract and pay for back up supply from the other generator in the absence of relying on co-ordinated system wide load shedding to remove the need for significant reserve generation; and/or
- fund additional reserve generation.

Further, even if Stanwell and DPS Co build additional reserve generation capacity in place of reliance on co-ordinated load shedding, there would still likely be lower quality and reliability of supply, lower system security and an adverse impact on safety, as compared to the Proposed Conduct due to the inability to coordinate generation dispatch.

Consequently, as compared to this counterfactual, the Proposed Conduct is likely to result in the public benefits of increased quality and reliability of supply, increased system security and increased safety. These are outlined in further detail in Section 5 of the submission in support of the application for authorisation.

The Proposed Conduct is also likely to result in the public benefit of higher efficiency and lower costs to users, as compared to this counterfactual by removing the need to provide alternative supply mechanisms.

3.3 Electricity transmission augmentation

The need for the Proposed Conduct arises because there will be two major generators which are separately owned utilising a shared grid. If each generator had their own transmission path to their customers, then the need for generation co-ordination and load shedding would not be required as there would in effect be two separate electricity networks. Theoretically, the Participants could engage Ergon to undertake transmission augmentation to achieve this. However, it is not a practical solution and therefore is not a realistic counterfactual for the following reasons.

First, the level of augmentation to remove the need for the Proposed Conduct is likely to be significant. DPS Co and Stanwell's customers are located at various points on Ergon's grids and the supply from the generators (DPS, Leichhardt Power Station and the various MCPS units) utilise shared switchyards, transformers and transmission lines to supply the customers. It is not an easily separable system. Therefore, it is likely that Ergon would need to undertake significant works involving substantial duplication of existing assets.

Second, this solution would involve significant cost which would ultimately need to be borne by customers. Assuming even a moderate level of duplication, the costs would be substantial. Given one electricity transmission system is sufficient to meet the requirements of the NWPS, the construction of a duplicate electricity transmission system would result in inefficiency and ultimately higher costs to customers, as compared to the Proposed Conduct.

[6] Clauses 6.3, 6.4 & 6.5, Dispatch Protocol. Customers could give their own generation counterparty notice of connection of a large load but the Dispatch Protocol provides for notice to be given to the Generation Co-ordinator to ensure that the aggregate generation on the system is managed to take into account that event.

Consequently, as compared to this unlikely counterfactual, the Proposed Conduct is likely to result in the public benefits of higher efficiency and lower costs to users.

3.4 Ergon or a third party to become the Generation Co-ordinator

It is possible in theory for Ergon or a third party to be appointed as Generation Co-ordinator instead of DPS Co. This would address, on a "structural" basis, one potential issue arising out of the Proposed Conduct relating to DPS Co, as the Generation Co-ordinator, favouring its own customers. However, this is only a partial solution and has a number of practical hurdles.

First, it is a partial solution because even if Ergon or a third party were to become the Generation Co-ordinator, the Applicants would still require authorisation from the Commission to engage in the Proposed Conduct. The only difference would be the identity of the Generation Co-ordinator. For the reasons discussed in Section 5.3 below, the appointment of DPS Co as the Generation Co-ordinator would not give DPS Co (as the Generation Co-ordinator) the ability or the incentive to discriminate against particular customers or groups of customers and would not be likely to result in any public detriments.

Second, in practice, there would be difficulty in appointing Ergon or a third party as the Generation Co-ordinator for the following reasons.

- The Applicants do not believe Ergon would be willing to undertake the functions of the Generation Co-ordinator role.

- The role involves altering the operation of DPS Co's and Stanwell's generation either directly or indirectly to match load and system requirements. This is why the Generation Co-ordinator role is generally assigned to the largest generator on the system as it has the direct control and responsibility of the plant able to best manage system and load changes. While DPS Co, as Generation Co-ordinator, will not have control over Stanwell's plant, it is locally based and able to liaise with Stanwell in real time to deal with issues.

- In contrast, Ergon's expertise primarily relates to network operation rather than generation dispatch and it would need to obtain additional technical skills and experience to understand and instruct DPS Co and Stanwell on how their generators should respond in particular circumstances. Further, Ergon's control room is located in Townsville. While these issues could be dealt with by additional physical systems, automated processes and operational procedures, this would involve substantial additional cost and time when compared to a party that is ideally placed to undertake the role and has the support of all Participants in the NWPS to do so.

- These same issues arise with a third party but are magnified as Ergon has at least some of the supporting infrastructure and experience of the NWPS to take on the role. Further, Stanwell and DPS Co are not aware of any third party service provider that clearly has the ability and expertise to undertake the functions of the Generation Co-ordinator for the NWPS.

- Finally, even if Ergon or a third party were able to, and wanted to be appointed as the Generation Co-ordinator, Stanwell and DPS Co would have to pay Ergon or the third party to undertake these functions and customers would need to agree to bear this additional cost. By contrast, DPS Co will not be paid to be the Generation Co-ordinator,[7] which would result in cost savings.

Accordingly, this is an expensive and complicated solution to address one theoretical issue arising from the Proposed Conduct which does not necessarily remove the need for authorisation. Consequently, there is a net public benefit from DPS Co being appointed the Generation Co-ordinator (as opposed to Ergon or a third party).

[7] Clause 2.13(m), Dispatch Protocol.

4 Public benefits

5. Please provide evidence which substantiates the key public benefits listed in the Applicants' submission in support of authorisation. This should include:

a. Cross-references to the parts of the proposed arrangements (e.g. to any specific provisions in proposed principles in Schedule 1 or the Dispatch Protocols) that provide for the key public benefits, such as increased quality and reliability of supply, system security and safe operation of the electricity system.

b. Where relevant, any evidence that the proposed arrangements represent industry best practice for these types of generation systems. In doing so, please reference any similarly isolated generation systems that have implemented such arrangements or protocols, and any comparable arrangements or protocols in the National Electricity Market.

6. Please outline how the proposed arrangements ensure security of electricity supply to residents, including outlining how load shedding and other capacity management tools will be applied in respect of Ergon Energy Queensland (or any other retailer who may provide services over the period of authorisation).

4.1 Introduction

In section 5 of the Submission, the Applicants identified three key public benefits associated with the arrangements including the Proposed Conduct:

(a) quality and reliability of supply;

(b) system security; and

(c) safety.

The Applicants provide evidence of the key public benefits below.

4.2 Background: the need for Standards

All electricity systems depend on the creation of a common operating platform and therefore must prescribe standards for connection to, supply to, and taking electricity from, the system.

Accordingly, every electricity system which involves multiple generators and customers contains mandatory standards. Of course, operational differences between each system exist and, as a result, there is no 'industry wide' standard for these types of arrangements. However, where practical, standards utilised should conform with those which apply elsewhere in Australia.

The Applicants submit that, to the extent possible, the technical and operational restrictions proposed by the arrangements are broadly consistent with those used throughout the industry, and hence have an associated public benefit.

In particular, the Applicants submit the arrangements represent industry best practice for an isolated generating system of the same kind as the NWPS and are consistent with and no more onerous than arrangements in the Network Technical Code and Network Planning Criteria (**NT Code**) in the Northern Territory[8] and the National Electricity Rules (**NER**) which

[8] As the Commission is aware, the Northern Territory's electricity network is not connected to the National Electricity Market and operates in a similar way to the proposed arrangements in NWPS. Part 2 of the *Electricity Networks (Third Party Access) Act 2000* (NT) establishes the Network Access Code which sets out terms and conditions of access to the electricity network. The Network Access Code require the network provider, PowerWater, to prepare a Network Technical Code and Network Planning Criteria. All network users must comply with this Code and Criteria regarding connection to and use of the electricity network.

govern the National Electricity Market (**NEM**). The Applicants have referenced relevant arrangements in the NT Code and the NER as appropriate below.

The Applicants sought to compare arrangements in the NWPS with those in the North West Interconnected System but the operating protocols are only available to authorised personnel from the participating companies in the NWIS and accordingly the Applicants have been unable to do so.

4.3 Quality and reliability of supply

The Applicants submit that it is in the public interest for the NWPS to meet the highest quality and reliability of supply for its customers.

The arrangements seek to ensure that the NWPS meets these standards by:

- imposing technical requirements for generation and connection.[9]

  The technical requirements include requirements in relation to voltage at the point of connection, voltage fluctuations, voltage control and reactive power capability, voltage impulse withstand level, power factor, harmonic current distortion, voltage unbalance, frequency, earthing of equipment and protection/control facilities and systems and switching procedures. The Applicants submit that these requirements promote a safe and reliable means of generating and transporting electricity, reducing the risk of a system wide disruption and minimising the impact of any disruption.

  As recognised by the Commission in its authorisation of the original National Electricity Code,[10] identification and prescription of technical standards protects the interests of new entrants as they are given certainty about the standards at which the power system is to be operated and their obligations for maintaining system security. The Applicants submit that prescription of technical standards provides clarity to potential new entrants about the technical operating characteristics of the NWPS to enable them to make informed decisions about potential new entry and provides certainty to existing users and new entrants on either side of the demand/supply equation in relation to the standard and security of supply of electricity in the NWPS.

  The Applicants accept that the technical standards may represent an up front cost to potential new entrants. However they submit that that cost:

  - is necessary and reasonable as it requires no more than that required to comply with industry standards and good engineering and operating practice;
  - is required to be incurred by all Participants in the NWPS on a non-discriminatory basis (subject to some limited grandfathering exceptions);
  - ensure an adequate level of power system security and adequacy of supply; and
  - minimises the risk of overloading the system and involuntary load shedding.

  Both the NT Code and the NER prescribe technical requirements for connection of new load, network extensions and new generation capacity.

  Chapter 3 of the NT Code requires new load, network extensions and new generation to comply with prescribed technical requirements. It also requires a new user or new generation unit to commission a system study identifying the impact on the

[9] Clauses 2.10(b), 2.10(o), 2.10(q), 3.4, 4.8, 5.3, Dispatch Protocol.

[10] Applications for Authorisation A40074-A40076, National Electricity Code, 10 December 1997, p 112.

performance of the power system of user's facilities or new generation prior to connection.[11]

Chapter 4 of the NER sets out technical requirements to ensure the safe and reliable supply of electricity. Participants are required to meet certain technical and procedural obligations to assist the system operator to fulfil its responsibilities and obligations with regard to power system security. Chapter 5 of the NER and its schedules also prescribe default technical standards for equipment connected to the NEM (including generation and load), and performance and quality of supply standards. All NEM registered participants are required to maintain and operate equipment that is connected to the network in accordance with relevant laws, the NER and good industry practice. [12]

- appointing a Generation Co-ordinator

  The Applicants submit that aligning demand and supply to a central function[13] will permit frequency, voltage and system connection requirements to be proactively monitored and managed thereby ensuring quality and reliability of supply to the greatest extent possible.

  Both the NT Code and the NER provide for central control of dispatch of electricity to maintain system frequency, voltage and reactive power flows.

  Pursuant to Chapter 4 of the NT Code, the power system controller has responsibility for control of the day-to-day dispatch of generators and for maintaining power system security.[14] Chapter 4 of the NER provides the framework for achieving and maintaining a secure power system and includes processes to enable the system operator to plan and conduct operations within the power system to achieve and maintain power system security. These processes include processes to co-ordinate dispatch of plant.

- minimising shortages of supply

  The proposed arrangements will require the major generators to have in service sufficient capacity to supply all the loads contracted and forecast by their respective offtakers and customers and spinning reserve capacity and reserve plant margin as required under agreements with their respective offtakers.[15] The Applicants submit that these arrangements will assist in minimising shortage of supply as each generator should be in a position at any time to meet the electricity requirements of its offtakers. This will assist in ensuring the NWPS delivers the agreed quality and reliability of supply from time to time.

  Neither the NT Code nor the NER require generators to have in service sufficient capacity to supply all loads contracted. These arrangements are unnecessary in those systems; the government owns the large majority of generation capacity in the NT (615MW) and the NEM is a large interconnected dynamic market.

- permitting energy balancing

  The Applicants submit that considerable public benefits will arise through the energy balancing arrangements by providing more reliable electricity supply. The existence of these arrangements will mean that, for smaller interruptions, a major generator may have a limited ability to provide the other generator small amounts of power from in service plant for short periods.

[11] Clauses 3.2.9, 3.3, NT Code.

[12] Clause 5.2.1, NER.

[13] Clauses 2.10(h), 2.13(b), 4.2, Dispatch Protocol.

[14] Clauses 4.2.3, 4.3.3, 4.4.1, 4.4.2(a), 4.5.1(e), 4.6.1, NT Code

[15] Clauses 2.10(i), 4.5, Dispatch Protocol.

There is no distortion of incentives in the electricity supply market as generators are only required to have capacity equal to that required in their agreements with offtakers.[16]

- managing safety issues

  It is undisputed that interruptions to electricity supply particularly for mining and industrial applications may have safety implications. The Applicants submit that the arrangements which have the purpose and likely effect of minimising these interruptions give rise to a clear public benefit.

4.4 System security

The Commission has previously accepted that arrangements for maintaining power system security are in the public interest as long as they are efficient.[17] The proposed arrangements contain two key mechanisms for maintaining power system security:

- load shedding;[18] and
- restrictions on connection of large loads.

The Applicants submit that these arrangements enable Participants in the NWPS to avoid the need for the construction of excess redundancy in the generation and transmission systems and do no more than is necessary within that context to ensure security. The Commission has previously recognised that economic benefits can be derived for both producers and consumers from the deferral of new plant investment through reduced total capital requirements.[19]

Load shedding

The Participants contemplate that any load shedding which occurs will be infrequent[20] and will be used as a last resort and only in a way which seeks to maintain overall system integrity and minimise the impact of the contingency event. Agreed automatic load shedding procedures,[21] including a priority load shedding schedule, are vital to ensure that, if the NWPS cannot be operated in a secure operating state, the risks of a system wide disruption and collapse are minimised. In a similar way, arrangements to co-ordinate ramp up of generation and reconnection of load following a load shed event[22] will minimise the impact of any disruption which does occur and ensure the system is returned to a steady operating state as soon as possible.

The NT Code provides for two measures to be applied to arrest the fall in frequency following the loss of generation – utilisation of available spinning reserve under the direction of the power system controller and disconnection of system load manually or by means of automatic protection.[23] It also expressly permits load shedding following a generation shortfall, whether caused by a demand or supply side issue.[24]

The NT Code has a centralised approach to reconnection/recommencement of supply to offtakers following a load shed event. Specifically, the NT Code permits the power system controller to direct as necessary users to take action necessary to ensure, maintain or restore

[16] Clauses 2.10(i), 4.5, Dispatch Protocol.

[17] Applications for Authorisation A40074-A40076, National Electricity Code, 10 December 1997, p xiv.

[18] Clauses 2.10(l), 8.8, Dispatch Protocol.

[19] Authorisation of original electricity code, p x.

[20] Clause 8.4(f) , Dispatch Protocol.

[21] Clauses 2.10(l), 8.8, Dispatch Protocol.

[22] Clause 8.10, Dispatch Protocol.

[23] Clause 2.2.2, NT Code

[24] Clauses 2.2.2, 3.8.2, 4.2.3, 4.3.3(n), 4.3.4, 4.7.5, 4.7.6, 4.7.7, NT Code.

the power system to a satisfactory operating state and to co-ordinate and direct any rotation of widespread interruption of demand in the event of a major supply shortfall or disruption.[25]

The NER contains a mechanism for determining the rules for shedding loads. In essence, Chapter 4 provides for each jurisdiction to determine load shedding procedures, and then gives AEMO the right to interrupt supply in accordance with those procedures.

In the absence of express provisions permitting load shedding, the NER does not have express provisions dealing with reconnection of load. However, to the extent that the system operator was required to direct a participant to shed load, Chapter 4 requires the direction to be revoked as soon as it is no longer required, thereby permitting the relevant participant to recommence generation or reconnect load as appropriate.

Restrictions on connection of large loads

One feature unique to the isolated NWPS is that individual customers' power demands are relatively large in comparison to available capacity.[26] This means that it is necessary to coordinate connection of these loads to ensure system security is maintained.

The proposed arrangements involve limited restrictions on connection of individual loads rated greater than 3MW, or loads with an instantaneous apparent power demand during starting which is greater than 10MVA, to ensure system stability when such a connection or start is made. [27]

These measures are particular to the NWPS but are required because of the unique nature of the system.

4.5 Safe Operation

In the Applicants' submission, safe operation of the electricity generation and transmission system is the most important public benefit of the proposed arrangements.

It is necessary in order to achieve a safe, reliable and stable system for the generators to co-ordinate certain activities of Participants in the NWPS. These activities include technical restrictions on new generation,[28] new load and network extensions,[29] load shedding procedures[30] and procedures to ramp up generation and reconnect load following a load shed event.[31]

The proposed arrangements can only be effective if they bind all generators and offtakers in the NWPS including proposed new generators or offtakers. Compliance by all Participants, particularly with technical requirements, load shedding and restrictions on connection of large individual loads, is vital to preserve the integrity of the power system and ensure public safety.[32]

Both the NT Code and the NER require all generators and offtakers to comply with the jurisdiction's respective rules as amended from time to time.

[25] Clause 4.3.3, NT Code.

[26] Clause 8.4(a) , Dispatch Protocol.

[27] Clause 6.3, Dispatch Protocol.

[28] Clauses 2.10(b), 2.10(o), 3.4, 4.8, Dispatch Protocol.

[29] Clauses 2.10(b), 2.10(q), 3.4, 5.3, Dispatch Protocol.

[30] Clauses 2.10(l), 8.8, Dispatch Protocol.

[31] Clause 8.10, Dispatch Protocol.

[32] Clauses 2.12, 3.4, Dispatch Protocol.

4.6 Security of electricity supply to residents

The proposed arrangements ensure security of electricity supply to residents to the greatest extent possible by allowing the Applicants and DPS' other customers to agree that EEQ's load is to be given priority of dispatch from DPS generation.[33]

This means that EEQ will be the last load shed from DPS should a load shedding event occur. In effect this means that EEQ load will only be shed in extreme circumstances.

EEQ is presently the one agreed exception to the non-discriminatory principle included in the Dispatch Protocol, although the Applicants anticipate that, should another retailer replace or supplement EEQ's provision of retail services in the NWPS, the Applicants and other Participants would support the same arrangements being adopted for that retailer in respect of its residential load.

5 Public detriments

7. Please provide evidence which substantiates why the following public detriments will not arise as a result of the proposed arrangements:

a. a reduction in service quality or the variability of the non-price terms offered by the Applicants to customers, or an increase in the price paid by customers, as a result of coordination between the parties relating to output, restrictions in the Dispatch Protocols regarding offers that may be made to customers and the sharing of information;

b. an increase in the barriers to entry for new entrant generators, electricity retailers or other service providers; and

c. discrimination by the Generation Coordinator in favour of its own customers and to the detriment of the customers of the other Major Generator or any other generator that may join the system.

In your response, in addition to cross-referencing to the proposed principles in Schedule 1, please also explain how the relevant economic incentives or market dynamics would prevent the detriment arising.

8. Please explain the process by which a new generator could commence generating electricity in the NWPS. In your response, please explain how the requirements will be made transparent to prospective new entrants, and the anticipated time frame for admission of a new entrant.

9. Please outline the measures that will ensure that:

a. coordination between the participants in the NWPS will be limited to the conduct for which authorisation is sought, and

b. sensitive information is not shared between participants, other than to the extent necessary for the operation of the Dispatch Protocol (such as confidential information relating to price and non-price terms, customers, production capability, information relating to activities beyond the North West Power System etc.).

In your response, please cross-reference the relevant principles in Schedule 1 that provide this assurance.

[33] Clauses 2.10(j), 8.8(c), Schedule 8 (7) , Dispatch Protocol.

The Proposed Conduct, at worst, involves technical breaches of the per se provisions of the CCA. The need to co-ordinate dispatch arises out of the physical realities of operating two generators on a single transmission system, The need to co-ordinate load shed arises because of the potential disruption that can be caused if there are no rules that regulate load shedding. New entrants are welcome on the generation and load side subject to meeting technical and physical requirements. The conduct does not give rise to significant public detriments (if any), including the kind identified in the Commission's question 7.

Given there is overlap in the issues raised, the Applicants have found it easiest to answer questions 7 to 9 collectively.

5.1 No reduction in competition between the parties

The Proposed Conduct and the Dispatch Protocol will not lead to any reduction in competition between the NWPS participants because it relates only to the technical and operational aspects of the dispatch and supply of electricity for which competition has already occurred, i.e. at the time of selecting an electricity supplier and negotiating the supply contract.[34] The Proposed Conduct does not affect the quantity or price of contracted supplies and does not limit or constrain competition by the generators for future contracts with customers.

The Proposed Conduct facilitates generators meeting their contracted supply obligations – it does not affect the terms and prices on which those supplies are contracted

The Proposed Conduct for which authorisation is sought primarily relates to the co-ordination of dispatch of electricity,[35] requirements imposed on the major generators in respect of having sufficient generation capacity,[36] the circumstances when new loads or network extensions or additional generation capacity is permitted,[37] procedures for permitting the connection of large loads,[38] load shedding,[39] reconnection of loads following a load shed event,[40] and the requirement that EEQ be given priority of dispatch from DPS generation.[41]

This conduct is not an area of competition between DPS Co and Stanwell. Rather, it relates to the technical and operational aspects of ensuring that the generators and the power system are capable of maintaining the quality of the supply obligations to all customers (which each generator has independently negotiated with its respective customers outside of the Dispatch Protocol).

The Applicants each have Power Purchase Agreements (**PPAs**) with their respective customers, under which the applicable generator and customer have agreed the price and non-price terms of the supply of electricity. The Proposed Conduct does not affect or relate to the negotiation of these PPAs and will have no impact on the price and non-price terms that the Applicants and their respective customers agree under their PPAs.

While the Proposed Conduct does involve the Generation Co-ordinator co-ordinating the dispatch of electricity, this is to enable the delivery of the necessary generation and to maintain system frequency, voltage and time error control for the NWPS. It does not relate to any co-ordination of the volume of electricity that each Applicant contracts to provide to their respective customers and does not affect the competition between the Applicants for the supply of electricity to customers.

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34 Clauses 2.7 & 2.8, Dispatch Protocol.

35 Clause 6, Dispatch Protocol.

36 Clauses 4.2 & 4.5, Dispatch Protocol.

37 Clauses 4.8 & 5.3, Dispatch Protocol.

38 Clauses 6.3, 6.4 & 6.5, Dispatch Protocol.

39 Clause 8.8 & schedule 7, Dispatch Protocol.

40 Clauses 8.9 & 8.10 and schedule 8, Dispatch Protocol.

41 Clause 2.10(j) , Dispatch Protocol.

The Commission's question refers to the Dispatch Protocol containing restrictions regarding offers which can be made to customers by generators. If this is a reference to technical restrictions on connecting new loads, then this is dealt with below. Otherwise, the only restrictions relating to the way customers connect or manage their load are clearly linked to the technical requirements, namely, the procedures relating to the connection of large loads,[42] load shedding,[43] and reconnection of loads following a load shed event.[44] These restrictions are only activated in limited circumstances to ensure stability of the system and to ensure that the load shedding can occur in a fast, safe and co-ordinated way to avoid system instability or failure. Again, the co-ordination of connection of large loads, load shedding and reconnection of loads does not affect the volume of electricity that each Applicant has contracted to provide to their respective customers or the competition between the Applicants for the supply of electricity to customers – the restrictions merely manage the way that load is brought on to the system and would apply irrespective of which generator the customer has contracted for supply.

Restriction on use of shared information

The Dispatch Protocol will involve some sharing of information, including:

- each customer submitting to the Generation Co-ordinator and its respective major generator its energy forecasts;[45]
- Participants notifying the Generation Co-ordinator of their planned shut downs each quarter for the next 12 months;[46] and
- information being provided to Participants about the status and output of generating units, the status and load information for key sections of the supply network, customer loads and income circuit breakers, and the status of embedded power stations.[47]

This information is shared to allow the Generation Co-ordinator and the major generators to plan to meet the requirements of their respective customers.

To the extent this information is confidential, NWPS Participants are limited to using confidential information received as a consequence of their membership of the Working Committee (which consists of a representative from each NWPS participant) solely for tasks necessary to implement requirements of the Dispatch Protocol.

Dispatch Protocol restrictions to ensure competition maintained

It is important to understand that the Dispatch Protocol by its very nature does not involve substantive anti-competitive conduct. However, it recognises that it is an agreement between competing suppliers and buyers in a limited system and therefore provides clear boundaries as to what conduct is not to occur. The Applicants submit that this recognition further reduces the potential for any public detriment. The Applicants and other Participants expressly agree in the Dispatch Protocol that the Participants will not discuss or disclose:

- the pricing under PPAs or energy supply agreements;[48]
- information which will prevent, restrict or limit the Participants' production capability or capacity to supply electricity;[49]

[42] Clauses 6.3, 6.4 and 6.5, Dispatch Protocol.

[43] Clause 8.8 and schedule 7, Dispatch Protocol.

[44] Clauses 8.9 & 8.10 and schedule 8, Dispatch Protocol.

[45] Clauses 6.2(a)-(f), Dispatch Protocol.

[46] Clause 6.2(g), Dispatch Protocol.

[47] Clause 7.1, Dispatch Protocol.

[48] Clause 10(a)(i), Dispatch Protocol.

[49] Clause 10(a)(ii), Dispatch Protocol.

- confidential information relating to each of the Participants, unless its disclosure is not prohibited by a PPA, energy supply agreement, or a connection and access agreement (as the case may be) and is required for the operation of the Dispatch Protocol;[50] and

- any other matter which may be in breach of the CCA.[51]

5.2 No creation of barriers to entry for new entrants

The Proposed Conduct and the Dispatch Protocol will not create barriers to entry for any new entrants who may wish to sell or provide electricity to the NWPS (either as a retailer, major generator or smaller operations where electricity is a by-product of other operations).

Terms of the Dispatch Protocol

Under the proposed Dispatch Protocol:

- the Working Committee[52] will admit a new entrant who may wish to provide electricity to the NWPS if:
    - its facilities comply with the technical standards for the NWPS outlined in the Dispatch Protocol;[53] and
    - it becomes a signatory to the Dispatch Protocol;[54] and
- a Participant which is a generator or network operator must not undertake or allow the addition of generation capacity to the NWPS unless the following conditions are met:
    - compliance with the technical standards for the NWPS outlined in the Dispatch Protocol;[55] and
    - approval from the Working Committee, which must not be withheld if:
        - the full set of system studies including stability studies has been completed as per the technical requirements outlined in the Dispatch Protocol;[56] and
        - the results of the system studies show that the proposed generation will not adversely affect the safety, reliability and quality of electricity supply in the NWPS and of its Participants;[57] or
        - the studies identify an adverse impact on the safety, reliability and quality of electricity supply, and the entity addresses those issues to the satisfaction of the Working Committee acting honestly and reasonably before connecting.[58]

[50] Clause 10(a)(iii), Dispatch Protocol.
[51] Clause 10(a)(iv), Dispatch Protocol
[52] Clause 2.12, Dispatch Protocol.
[53] Clause 3.4(a), Dispatch Protocol.
[54] Clause 3.4(b), Dispatch Protocol.
[55] Clause 4.8(a), Dispatch Protocol.
[56] Clause 4.8(b)(i), Dispatch Protocol.
[57] Clause 4.8(b)(ii), Dispatch Protocol.
[58] Clause 4.8(b)(iii), Dispatch Protocol.

- consultation with all customers will also be required to ensure that current fault ratings within the customers' own systems are not exceeded because of the connection of new generation.[59]

In addition, under the Dispatch Protocol, provided a new entrant has agreed to be bound to the Dispatch Protocol, if a dispute arises between a new entrant and the Working Committee in relation to the above provisions, then the new entrant can seek to have the Working Committee's decision reviewed by an independent expert, whose determination will be binding.[60]

These provisions are not intended to create any barriers to entry. Rather, the purpose of these provisions of the Dispatch Protocol is to ensure the ability of the network to provide the quality of service required by users and to give certainty in relation to the standard and security of supply for new entrants. The key criteria are that the addition of the generation capacity will not adversely affect the safety, reliability and quality of electricity supply in the NWPS.[61] The requirements are no more onerous than those which would apply to a generator or major customer seeking a load anywhere.

The requirements for new entrants to satisfy minimum technical requirements for generation and connection do no more than set a minimum standard of technical competence, consistent with good operating practice, relevant Australian standards, the Electricity Industry Code (Queensland) and recognised codes of practice.[62] These minimum technical requirements do not impose any unnecessary barriers to entry as they do not impose any requirements beyond those necessary to ensure an adequate level of power system security and adequacy of supply, and minimise the risk of overloading the system and involuntary load shedding. These minimum technical requirements are also not onerous to satisfy for a generator and are not unusual and the requirements and processes are generally consistent to those in the NEM. The requirements ensure that the installed generation equipment is capable of complying with the necessary controls and protections to ensure that control of system voltage, reactive power, frequency and equipment defects are managed to a necessary standard for reliable electricity supply.

Transparency of requirements

The Dispatch Protocol was written for the operation and management of the NWPS and is kept secured. The Dispatch Protocol will be available free of charge to potential new entrants and genuinely interested parties by contacting the Generation Co-ordinator.

These arrangements are consistent with arrangements in place in the North West Interconnected System.

Time frame for admission of new entrants

Admission of a new entrant will involve that person obtaining a copy of, and signing up to, the Dispatch Protocol and satisfying the Working Committee that its facilities comply with the technical standards for the NWPS outlined in the protocol as set out above. If the prospective new entrant is not satisfied with the Working Committee's decision, it can have the Committee's decision reviewed by an independent expert, whose determination will be binding.

It is difficult to predict time frames as it will depend on the nature, size and operating characteristics of the new load or generation and will likely require the new entrant to also enter into a range of contracts, eg connection agreement with Ergon and electricity supply agreements. The Dispatch Protocol does not include set time frames for steps given the variation between potential projects. However, the Working Committee meets at least quarterly and therefore is in a position to provide timely feedback and approvals.

[59] Clause 4.8, Dispatch Protocol.

[60] Clause 13, Dispatch Protocol.

[61] Clause 4.8, Dispatch Protocol.

[62] Clauses 2.9(a) and 3.1 and schedule 2, Dispatch Protocol.

5.3 No discrimination against particular customers or groups of customers

The Proposed Conduct will not result in discrimination against particular customers or groups of customers.

It is proposed that DPS Co will be the Generation Co-ordinator. In exercising its functions as the Generation Co-ordinator, DPS Co would not have the ability or incentive to discriminate against Stanwell's or any other generator's customers for the following reasons.

- DPS Co must comply with the obligations imposed on the Generation Co-ordinator under the Dispatch Protocol, including the obligation to act impartially in all dealings relating to the NWPS.[63]
- The decisions of the Generation Co-ordinator can be reviewed by the Working Committee at any time at a meeting of the Working Committee, and the Working Committee will provide opportunities for Participants to provide feedback and concerns to the Generation Co-ordinator.[64]
- The performance of the Generation Co-ordinator will be reviewed by the Working Committee at least annually and the Working Committee can seek to reallocate the position of Generation Co-ordinator if there is a major change in the roles of major generators in the NWPS or if the Generation Co-ordinator is not carrying out its functions under the Dispatch Protocol to the majority of the Working Committee's satisfaction.[65]
- The Generation Co-ordinator is exposed to liability to a Participant for acts or omissions to the extent it has acted in bad faith.[66]

The Applicants note that the Dispatch Protocol has been prepared pursuant to discussions between the Applicants and each of their respective customers, who are motivated to ensure there will not be any discrimination towards themselves or, in the case of the Applicants, their respective customers.

There is one agreed exception to the non-discriminatory principles included in the Dispatch Protocols. EEQ (Ergon's retail business) is to be given priority of dispatch from DPS generation and will be load shed last.[67] This priority ensures that domestic customers of Ergon in Mt Isa are given priority and has been agreed to by DPS Co's other customers.

6 Additional information

10. Please provide a copy of the Energy Balance Agreement, referred to in the draft of the Dispatch Protocol.

DPS Co and Stanwell are still negotiating the Energy Balance Agreement and a draft is in the process of being prepared.

The instantaneous dispatch of electricity from a major generator cannot physically match the instantaneous electrical demand of that major generator's customers and the inability to match supply and demand on an instantaneous basis requires a mechanism for dealing with the imbalances that arise. The purpose of the Energy Balance Agreement is to manage those electricity imbalances between DPS Co and Stanwell as explained below.

[63] Clause 2.13(a), Dispatch Protocol.

[64] Clause 2.14, Dispatch Protocol.

[65] Clause 2.15(b), Dispatch Protocol.

[66] Clause 15(b), Dispatch Protocol.

[67] Clause 2.10(j), Dispatch Protocol.

- Under the Dispatch Protocol, each customer (who is a participant) on the NWPS is required to submit to the Generation Co-ordinator and its respective contracted generator its forecast energy on an annual, monthly, weekly and daily basis. These forecasts allow the Generation Co-ordinator and the major generators to plan to meet their requirements of their customers.[68]

- However, load forecasts will rarely be perfectly accurate and customers' actual consumption on a day will vary from that notified.

- Also, generation output may not perfectly match load requirements due to normal operational variations including from ramping up and down, start ups and fuel efficiency.

- During the day of operation, DPS Co and Stanwell do not get real time metering data and so do not know at any given time on the day what will be the exact load of their customers.

- At the end of the day, once the metering data has been obtained and processed, it is likely that, while aggregate demand has been satisfied, each of DPS Co and Stanwell will not have perfectly matched their generation output to the actual load of the customers and an imbalance as between the generators will arise. On a daily basis, this is not expected to be large.[69]

- Under the Energy Balance Agreement, DPS Co and Stanwell are required to minimise imbalances and true them up on a rolling basis. For example, it would be expected that usually a generator who has a negative imbalance on a day would be scheduled to generate that quantity of generation on the next day to correct the imbalance.

- If a generator repeatedly fails to correct its imbalance and its cumulative imbalance exceeds a defined threshold, then that generator may be required to compensate the other generator. This is not expected to occur in practice.

The Energy Balance Agreement is for a limited purpose. It does not require one generator to supply the customers of the other in circumstances where that second generator has an unplanned outage, i.e. it does not override the load shedding scheme. It does not constitute a stand by capacity arrangement. Balancing only occurs after an imbalance occurs due to the ordinary day to day operation of the power stations. The arrangement does not prevent either party from contracting with existing or new customers or otherwise regulate their output. The purpose is not to limit production, but to adjust between the parties after the fact on the occasions when incorrect dispatch occurs.

The agreement will not refer to, or require disclosure of, commercially sensitive information – such as, disclosure of a generator's production costs or the pricing under its contracts with customers.. Although the Generation Co-ordinator will obtain potentially commercially sensitive and confidential information under the Dispatch Protocol (for example, the other major generator's dispatch figures and its customers' demand figures). to the extent that this information is confidential, the Generation Co-ordinator is limited to using information received as a consequence of its position as the Generation Coordinator solely for tasks necessary to implement requirements of the Energy Balance Agreement.

Finally, other than for the purpose of correcting an imbalance, there is no obligation to generate or not generate and it does not affect the customers receiving their contracted supply.

The Applicants are prepared to consider providing a copy of the agreement to the Commission once commercial terms are agreed should the Commission still require it.

[68] Clause 6.2, Dispatch Protocol

[69] Customers must also notify the Generation Co-ordinator and its contracted generator on the day in the event of unplanned outages, clause 6.2(f), Dispatch Protocol.