

21 June 2019

Energy Security Board  
c/- COAG Energy Council Secretariat  
John Gorton Building  
King Edward Terrace  
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Submitted electronically: [info@esb.org.au](mailto:info@esb.org.au)

### **Energy Security Board Converting the Integrated System Plan into Action Consultation Paper**

Snowy Hydro Limited welcomes the opportunity to comment on matters raised in the Consultation Paper from the Energy Security Board on Converting the Integrated System Plan into Action.

Snowy Hydro Limited is a producer, supplier, trader and retailer of energy in the National Electricity Market (NEM) and a leading provider of risk management financial hedge contracts. We are an integrated energy company with more than 5,500 megawatts (MW) of generating capacity. We are one of Australia's largest renewable generators, the third largest generator by capacity and the fourth largest retailer in the NEM through our award-winning retail energy companies - Red Energy and Lumo Energy.

Snowy Hydro supports a more actionable Integrated System Plan (ISP). The NEM is transforming with numerous base load generators reaching their end of technical life by the mid-2020s with a greater role expected to be played by energy storage generation. The NEM is past the tipping point of firmed renewables being the most economic form of new generation.

The ISP is able to show the economic benefits under all scenarios including the timing of some elements under different assumptions, particularly relating to the rate of change and the progress of proposed major energy storage initiatives. The ISP complements the intentions of market rule and policy changes that have been accepted by the COAG Energy Council as the core foundations of a smooth transition in the NEM. The growing number and types of generator connections will change the dynamics and location of new transmission investments.

The timelines of interconnection for strategic projects is vital as the NEM transforms. Snowy Hydro therefore advocates for strategic, and low regrets projects such as BannabyLink and KerangLink be implemented in a timely manner to support the resilience of the NEM. BannabyLink should be brought forward to 2022 to coincide with the scheduled closure of Liddell Power Station and KerangLink should align with the commissioning of Snowy 2.0 in 2024. This would increase overall system resilience and insure against the risk of exiting coal-fired generation in Victoria and New South Wales. To do otherwise risks leaving idle significant augmentation to system security in the NEM.

Further to this, Snowy Hydro support a Fund to be established to "underwrite" expenditures in critical Group 1 and Group 2 projects that are time critical and increase the resilience of the NEM's transmission system. KerangLink is a Group 2 project and is required to safeguard the risk of early exit of thermal generation in Victoria.

The implementation of an actionable ISP will require changes to the current Rules relating to transmission planning and investment with the regulatory framework for putting the ISP into action ensuring that there are clear statutory powers available, and established clear roles, processes and

accountabilities in the Rules. The ESB has sought feedback on material questions regarding the ISP in the consultation paper. Snowy Hydro believes these questions are appropriate and provides the following comments:

- An actionable ISP requires changes to the current Rules relating to transmission planning and investment.
- The Rules framework should allow AEMO with the flexibility to respond to issues emerging during the ISP development process and consider a number of linkages and interdependencies with other elements of the planning framework, including TNSPs' annual planning reports and the last resort planning power.
- As part of the rules, the COAG Energy Council should be able to provide formal advice to AEMO as part of a regular annual process, in order to make sure that AEMO is able to effectively incorporate government policies into its ISP modelling.
- Support AEMO publishing the ISP at least every two years.
- Transparency is important in determining market confidence with forecasts and modelled assumptions presented in a way that clearly identifies the methodology adopted for the ISP.
- The AER should remain responsible for determining the allowed revenue for ISP projects.
- A thorough and comprehensive ISP consultation process would remove the need for a RIT-T dispute process and AER RIT-T determination process. Although the ISP AEMO planned consultation would reduce the need for disputes, ESB's proposed model that stakeholders may raise disputes in relation to RIT-Ts as per the current arrangements is welcomed.

Snowy Hydro appreciates the opportunity to respond to the Consultation Paper. Any questions about this submission should be addressed to Panos Priftakis, Regulation Manager, by e-mail to [panos.priftakis@snowyhydro.com.au](mailto:panos.priftakis@snowyhydro.com.au).

Yours sincerely,

A handwritten signature in black ink, appearing to read 'K Ly', with a long horizontal stroke extending to the right.

Kevin Ly  
Head of Wholesale Regulation  
Snowy Hydro

## DETAILED SUBMISSION

### Actionable ISP

The NEM is experiencing unprecedented and transformational changes as we reach an inflexion point that will shape the future of the NEM, being a once-in-a-generation opportunity to secure an orderly transition to truly interconnected, reliable, and lower emission intensive NEM. Failure to commit to appropriate infrastructure now will hinder the transition which places greater importance on the connection of strategic projects. Strategic transmission projects identified in the ISP cannot afford further delay and need to become actionable.

The increase in variable and intermittent renewable electricity generation is forcing the exit of coal, by placing pressure on those assets physically and economically, and introducing system reliability and stability issues. This firming and de-risking of renewables will provide certainty to support further investment in new renewable generation and supply the energy needs of the NEM at the lowest cost.

Strengthening interconnection will improve resource sharing across the NEM and deliver fuel cost savings along with facilitating connection of new renewable energy zones. The challenge for long-term efficiency in transmission lines stems from the fact that transmission assets take a long time to site and build, are very long-lived and economically disruptive investments.

Snowy Hydro is proposing to build and operate the Snowy 2.0 pumped hydro-electric storage facility ('Snowy 2.0'). Snowy 2.0 will increase the pumped hydro-electric capacity within the existing Snowy Scheme by 2,000MW and 350,000MWh by linking the Tantangara and Talbingo reservoirs with tunnels feeding a new underground power station. When combined with appropriate augmentation of the transmission networks, Snowy 2.0 will underpin the transition to a low emissions future by both physically and financially firming and de-risking new variable and variable intermittent renewable generation coming online across the NEM.

The transmission augmentation required to complement Snowy 2.0 has been identified by AEMO in its Integrated System Plan (ISP) as being part of a set of transmission investments which can best unlock the value of existing and new resources in the system, at the lowest cost, while also delivering energy reliably to consumers. Specifically, the ISP includes the following project:

- A link between Tumut, Wagga and Bannaby as a "Group 2" Project ('BannabyLink' or 'HumeLink'); and
- Strengthening interconnection between NSW and Victoria as a "Group 3" Project ('KerangLink'). Snowy Hydro is advocating for Keranglink to be recognised as a Group 2 project.

The RIT-T process is unsuitable for delivering timely strategic transmission projects unless it includes a more actionable ISP. The current RIT-T process is:

- unduly lengthy, and possibly exceeding 18 months after publication of a project specification consultation report;
- creates a "chicken and egg" dilemma, in which major generation projects require certainty regarding transmission investment in order to proceed, but transmission investment is delayed by the RIT-T, and may be dependent on the major generation project first being committed;

- does not consider strategic benefits valued by consumers under the RIT-T which is limited and broader risks such as political, regulatory, and social risks are not adequately captured for low probability but high impact events;
- favours incremental development in generation and transmission, which can be more expensive for consumers in the long run; and
- delayed by individual interests through the disputes process.

Snowy Hydro agrees with the ESB that implementation of an actionable ISP requires changes to the current Rules relating to transmission planning and investment. The ESB correctly notes that *“the regulatory framework for putting the integrated system plan into action should ensure that there are clear statutory powers available, and establish clear roles, processes and accountabilities in the Rules.”*<sup>1</sup> The extent to which ISP deadlines are prescribed in the Rules and what level of prescription in the Rules is appropriate for the ISP process should be left with the appropriate regulatory bodies to decide. The Rules framework should allow AEMO with the flexibility to respond to issues emerging during the ISP development process and consider a number of linkages and interdependencies with other elements of the planning framework, including TNSPs’ annual planning reports and the last resort planning power.

One recommendation Snowy Hydro suggests in addressing any uncertainty with the ISP would be for the COAG Energy Council to provide formal advice to AEMO as part of a regular annual process, in order to make sure that AEMO is able to effectively incorporate government policies into its ISP modelling. Transmission will largely be driven by public policy established by state and federal laws or regulation requiring firm generation to be connected to the NEM. Unlike the AER’s RIT-T process a mechanism is required for local and regional transmission planning processes to consider transmission needs driven by public policy requirements established by state and federal laws or regulation. With public policy requiring firm generation to be connected to the NEM, this inclusion in the rule may be appropriate and timely.

### **Extent to which ISP deadlines are prescribed in the Rules**

AEMO have done a comprehensive job with the inaugural ISP. As noted above, Snowy Hydro considers it appropriate that the ISP should focus on identifying transmission projects which are strategic and nationally significant investments. The transmission developments identified in the inaugural ISP has met this criteria.

Snowy Hydro advocates for strategic, and low regrets projects such as BannabyLink and KerangLink be implemented in parallel with the current RIT-T process. Snowy Hydro supports a Fund to be established to “underwrite” expenditures in critical Group 1 and Group 2 projects that are time critical and increase the resilience of the NEM’s transmission system. KerangLink is a Group 2 project and is required to safeguard the risk of early exit of thermal generation in Victoria.

The ISP requires a significant amount of forecasting and consulting with stakeholders which makes AEMO publishing the ISP at least every two years appropriate. In addition we support the ESB option to extend the coverage of the guidelines that are currently being developed by the ESB in the context of the Retailer Reliability Objective (RRO) to AEMO’s ISP process. Using the RRO Forecasting Best Practice Guidelines (or potentially the Forecasting and Planning Best Practice Guidelines) would help to avoid a proliferation of guidelines and promote consistency. This proposal would allow AEMO to identify the ISP development path with some consultative scrutiny and should it be

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<sup>1</sup> Energy Security Board, 2019, “Converting the Integrated System Plan into Action Consultation Paper”, pp5

necessary for AEMO to use confidential data as an input to the ISP, AEMO would be required to release indicative data in such a way that does not compromise confidentiality.

### **Governance of ISP**

In considering the level of oversight appropriate for the methodology adopted by AEMO in preparing the ISP Snowy Hydro believes transparency is vital. Transparency is important in determining market confidence with forecasts and modelled assumptions presented in a way that clearly identifies the methodology adopted for the ISP.

Snowy Hydro agrees with the ESB that notes *“If the ISP results flow through into the RIT-Ts and thereby TNSP investment decisions, the mechanics of the calculations used to develop the ISP should be transparent and robust.”*<sup>2</sup> In addition any guidelines that are formed to assist the ISP methodologies should recognise and accommodate the fundamental differences between the purposes of the ISP versus RIT-Ts, including in particular the need to give AEMO flexibility to manage uncertainty, risk, and to incorporate public policy. Snowy Hydro agrees that it would be helpful for the AER to provide guidance to AEMO.

Expanding transmission capacity requires good planning. As renewable generation continues to be added to the grid, with the inevitable economic pressure on other existing resources, economic benefits preparation should be part of future industry discussions on these issues with the ISP updating the documentation of its current economic study methodologies, which will need to be transparent and aligned with public policy, reliability and least cost overall outcomes for consumers.

### **AER revenue approval**

The Consultation Paper notes that the COGATI final report recommended the removal of the preferred option assessment that the AER undertakes after the completion of a RIT-T to streamline and remove duplication from the regulatory process for all transmission projects. Snowy Hydro however supports the AER being responsible for determining the allowed revenue for ISP projects.

### **Dispute resolution**

The RIT-T can be delayed by individual interests through the disputes process as under the RIT-T participants can delay or remove beneficial projects, particularly where there is uncertainty. It is therefore important where possible to not duplicate and repeat analysis and consultations which had already been undertaken by the ISP. A thorough and comprehensive ISP consultation process would minimise the need for a RIT-T dispute process. Snowy Hydro however supports the ESB's proposed model that stakeholders may raise disputes in relation to RIT-Ts as per the current arrangements.

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<sup>2</sup> Energy Security Board, 2019, “Converting the Integrated System Plan into Action Consultation Paper”, pp11