COAG
Energy Council

ENERGY SECURITY BOARD

CONVERTING THE INTEGRATED SYSTEM PLAN INTO ACTION

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1. Introduction and next steps

At the COAG Energy Council on 10 August 2018 the Integrated System Plan (ISP) was presented by Ms Audrey Zibelman, Chief Executive Officer, AEMO. The ISP meets a key recommendation of the Finkel Review and provides an outlook to 2040 on the expected future needs of the National Electricity Market (NEM), including recommended transmission investments to support the delivery of secure, reliable and affordable energy as the mix of generation in the NEM changes.

The Energy Council requested the Energy Security Board report in December 2018 on the following matters:

- how the Group 1 Projects identified in the ISP can be implemented and delivered as soon as practicable and with efficient outcomes for customers;
- how the Group 2 Projects identified in the ISP will be reviewed and progressed; and
- what modifications may be needed to existing processes for these projects to be delivered.

Ministers also asked that in addition to the consultation on the current ISP that is underway, the ESB identify a work program (including possible changes to the RIT-T) and convert the ISP into an actionable strategic plan. The ESB Chair will take the lead on the delivery of this work and report back to the December 2018 Energy Council meeting. The Energy Council noted that all market bodies will be closely involved in this work.

The sections below set out the process the ESB will adopt to complete this work and report back to Energy Council by December 2018.

2. ESB Focus Area 1: ISP Group 1 and Group 2 Projects

The COAG Energy Council requested that the ESB report on how the Group 1 projects identified in the ISP can be implemented and delivered as soon as practicable and with efficient outcomes for customers. The ESB will also report on how the Group 2 projects will be reviewed and progressed. Any modifications that may be needed to existing processes for these projects to be delivered will be clearly identified and a way forward recommended.

AEMO and AER are currently coordinating to provide a regular status update to the ESB on each Group 1 and Group 2 project including where they are up to in the planning and regulatory processes.

The ESB will review the entire process of progressing Group 1 and Group 2 projects, assisted by AEMO and working with stakeholders to explore opportunities to expedite the process while ensuring customers are protected from inefficient investment. The ESB is also considering ways to speed up the process that may sit outside the National Electricity Rules framework for example, looking at jurisdictional land use planning and environmental approval processes, both of which can have significant implications for the time and cost in which transmission infrastructure is delivered.

3. ESB Focus Area 2: RIT-T and ISP as an actionable strategic plan

The AEMC (in consultation with the ESB, AER and AEMO) has articulated some potential options for making the ISP actionable by strengthening the links between it and the transmission planning and investment decision making processes.

The options considered range from the ISP simply identifying system needs to the ISP identifying system needs, determining credible options to meet those needs, assessing the costs and benefits of options and determining the best options to meet system needs (essentially subsuming the current RIT-T process). Depending on the option, AEMO could then direct TNSPs to do the detailed costing and planning of the investment (or do it themselves) prior to the TNSP implementing it.

The spectrum of options for how the ISP could be made “actionable” addresses key features of the current RIT-T that are designed to protect consumers. Arguably, at least some of the steps in the RIT-T process could be subsumed into the ISP for projects identified through that process.

The ESB will be very interested in stakeholder feedback to the AEMC on these options and related issues (as detailed in section 4.1).

The ESB will also undertake international research into transmission planning and investment to inform its December 2018 advice to Energy Council.

4. Consultation

ESB consideration of these transmission issues complements individual consultation processes currently underway in each of the market bodies.

Stakeholders are strongly encouraged to provide feedback to each of the market bodies on these documents copied to info@esb.org.au. These submissions will be shared with all members of the Energy Security Board.

In order to assist in receiving feedback on these matters, the ESB will also host two public forums:

- 1.30pm – 4.30pm on Tuesday 9 October in Sydney
- 9.30am – 12.30pm on Thursday 11 October in Melbourne

Further information is available on the AEMC's website where stakeholders can also register participation in these forums.

The ESB looks forward to your feedback through these processes.

4.1 AEMC's Coordination of Generation and Transmission Review

In 2016 the COAG Energy Council asked the AEMC to implement a biennial reporting regime on a set of drivers that could impact on future transmission and generation investment.

The intention was that the work would help governments and industry participants consider when future conditions might arise where net benefits would be derived from adopting a transmission framework that would provide for better coordination of investment between the transmission and generation sectors.

Stage 1 of the review concluded in July 2017. The Commission recommended that the review progress to stage 2.

In April 2018 a discussion paper was published which covered topics such as the scale and potential cost of congestion in the NEM, the treatment of storage, and how renewable energy zones could fit within the current transmission framework.

On 21 September 2018 (attached to this paper), the AEMC published an options paper which:

- provides analysis of the regulatory implications of the ISP and explores options to strengthen the link between the ISP and the individual investment decisions of TNSPs, including how such a plan could be made actionable
- examines the RIT-T framework and how that might need to change in light of the ISP
- provides a further analysis of REZs in light of the publication of the ISP
- examines whether the scale of congestion that the NEM is facing may necessitate reconsidering the existing access arrangements and

- considers further the treatment of large-scale storage units, specifically how they register in the NEM and whether or not they pay transmission charges.

The attached AEMC paper articulates five key options for how the ISP could be made actionable. The options can be described as follows:

- Option 1 – TNSP decides on transmission investments but is required to consider ISP-identified investment needs in transmission annual planning reports and regulatory proposals
- Option 2 – TNSP decides on transmission investments but is required to conduct RIT-Ts on ISP-identified investment needs and options
- Option 3 – In addition to the ISP identifying investment needs and options, AEMO determines the "best" option for transmission investment but the TNSP is still able to determine how to most efficiently meet that option e.g. to take into account local conditions
- Option 4 – AEMO determines the "best" option for transmission investment and directs a TNSP to proceed with the "best" option, although the TNSP can still choose the functional specification of that option
- Option 5 – AEMO determines what transmission investment is necessary, including the functional specification, and directs a TNSP to implement that investment.

The ESB is particularly interested in stakeholder feedback to the AEMC on the following general questions:

- What do stakeholders think an "actionable strategic plan" is?
- What do stakeholders think of the options to make the ISP an actionable strategic plan?
- Are there any other options that should be considered?
- What are the implications of each or any of the options for the existing regulatory frameworks (specifically the RIT-T and how the AER sets network revenues)?
- What changes may need to be made to the ISP process to effectively deliver each or any of the options?

The ESB is also interested in stakeholder views on how the RIT-T process could be streamlined with the ISP process, including any changes that may be required to either the ISP itself or the RIT-T to accommodate this.

Submissions are due with the AEMC on 19 October 2018.

4.2 AEMO's Integrated System Plan

Currently, under the NER, AEMO is required to publish a National Transmission Network Development Plan (NTNDP) by 31 December each year, the purpose of which is to provide a strategic transmission planning assessment for the NEM, with a 20 year outlook. This serves as an input for TNSPs own planning for inclusion in their annual

planning reports. However, the final report of the Finkel Review recommended an alternative approach – the preparation of an integrated grid plan for the NEM.

In July 2018, AEMO published the inaugural ISP. As an integrated system plan rather than an integrated grid plan reflects that over time, the ISP will by necessity consider a wide spectrum of interconnected infrastructure and energy developments including transmission, generation, gas pipelines and distributed energy resources. The ISP is a cost-based engineering optimisation plan that forecasts the overall transmission system requirements for the NEM over the next 20 years.

The ISP presents specific transmission investments for the NEM that AEMO has assessed are necessary over the short, medium and long term. The ISP breaks the modelled investments into three categories:

- Group 1 projects, which AEMO consider are needed in the near-term to maximise economic use of existing resources
- Group 2 projects, which AEMO consider need to be developed in the medium-term to enhance trade between regions, provide access to storage, and support extensive development of renewable energy zones
- Group 3 projects, which AEMO consider need to be developed in the longer-term to support renewable energy zones as well as system reliability and security.

AEMO has held a webinar on the ISP since its publication on 17 July 2018 to answer stakeholder questions.

AEMO would welcome any further stakeholder feedback on the choice of assumptions or scenarios for the ISP that may assist in the development of future ISPs.

4.3 AER's Review of the application guidelines for the regulatory investment tests

The COAG Energy Council undertook a review of the RIT-T that was concluded in February 2017. The AER is currently undertaking a large-scale review of the application guidelines for the regulatory investment tests (RITs) used by networks, consistent with the recommendations from the COAG Energy Council during its RIT-T review. The AER initiated the review in December 2017.

The RITs are cost-benefit analyses that network businesses must perform and consult on before making major investments or replacements in their networks. The application guidelines for RITs provide guidance to networks on how to apply the RITs to potential investments that must be subject to these tests. Under the National Electricity Rules, when undertaking RITs, network businesses must give due consideration to all possible options before identifying the best way to meet the demands on their networks.

The NEM currently has separate RITs for transmission and distribution networks- the 'RIT-T' and 'RIT-D'. Each RIT has its own application guidelines to guide network businesses on how to apply the RITs consistently and transparently.

As part of its review, in July 2018, the AER published draft revisions to the RIT-T and RIT-D application guidelines and sought stakeholder views on these. The AER is exploring improvements that:

- the COAG Energy Council identified in its 2016 RIT-T review
- has arisen out of the replacement expenditure planning arrangements rule change
- have been identified from ongoing applications of the RITs
- stakeholders identify.

The draft revisions include guidance on how RIT-T proponents might incorporate aspects of the ISP into a RIT-T, and the AER stated that it may be necessary to further update the RIT application guidelines once the ISP framework is formalised.

A stakeholder forum was held on the draft guidelines on 28 August 2017 and submissions to that process closed 7 September 2018. The written submissions that were provided to the AER on the draft guidelines will also be an input into the ESB's process.