



**ENERGY SECURITY BOARD
CONVERTING THE INTEGRATED
SYSTEM PLAN INTO ACTION**

Response to submissions on
consultation paper

November 2019

Contents

Executive Summary	3
1. Introduction	4
2. Summary of issues raised in submissions and ESB’s response	5
2.1 Cost Benefit Analysis Guidelines	5
2.2 Dispute resolution	8
2.3 Public policy	10
2.4 Forecasting Best Practice Guidelines	11
2.5 Timing of the ISP	13
2.6 Governance of ISP	14
2.7 Objectives and principles to guide the ISP	16
2.8 Revenue approval	17
2.9 Last resort planning power	18
2.10 Non-network options	19
2.11 Need for further subordinate documents	20
2.12 Role of ISP	20
2.13 Scope of ISP	23
2.14 Timing of PADRs.....	25
2.15 Transitional arrangements	25
2.16 Other matters	26
C Abbreviations and Technical Terms	27

Executive Summary

- In May 2019, the Energy Security Board (ESB) published a consultation paper that sought stakeholders' views on how to convert the Integrated System Plan (ISP) into action.
- This paper summarises views expressed in submissions to the consultation paper and provides the ESB's response to issues raised.
- Overall stakeholders were generally supportive of the proposed governance framework, the intent of the ISP and the need for whole-of-system assessment. Many stressed the need for robust stakeholder consultation processes and dispute resolution mechanisms.
- Whilst most submissions supported there being consistency between the ISP and the regulatory investment test for transmission (RIT-T) frameworks, there were mixed views about the cost-benefit assessment process that AEMO should adopt. Some submissions argued against any changes to the existing RIT-T framework while others argued that greater flexibility should be required.

1. Introduction

The ESB submitted its ISP Action Plan to the December 2018 COAG Energy Council meeting. Ministers agreed that the ESB should develop measures to operationalise the ISP. To this end, in May 2019 the ESB released a consultation paper on how to convert the ISP into action.¹

Twenty-three submissions were received from a variety of generators, retailers, network companies, consumer groups and peak bodies:

- Generators/retailers: AGL, EnergyAustralia, Engie, Delta, ERM, Hydro Tasmania, Meridian & Powershop, Snowy Hydro
- Peak bodies: Australian Energy Council, Clean Energy Council, Energy Networks Association, Energy Users Association of Australia, Major Energy Users
- Consumer groups: Energy Consumers Australia, Public Interest Advocacy Centre (PIAC), Renew, South Australian Council of Social Services (SACOSS), as well as a joint submission from PIAC, Consumer Action Law Centre, Total Environment Centre, NSW Farmers, SACOSS, Uniting Communities, Renew).
- Networks: Spark Infrastructure, TasNetworks, TransGrid.
- Other: Tesla, Engineers Australia

The submissions are published on the ESB's website.²

They are summarised, together with the ESB's response, in Chapter 2. The ESB, AEMC, AER and AEMO have subsequently worked together to consider issues raised in submissions and develop a set of draft Rules for consultation.

¹ <http://www.coagenergycouncil.gov.au/publications/energy-security-board---converting-integrated-system-plan-action-consultation-paper>

² See above.

2. Summary of issues raised in submissions and ESB's response

2.1 Cost Benefit Analysis Guidelines

Respondents	Comment	ESB response
AEC, AGL, CEC, ENA, Energy Australia	<ul style="list-style-type: none"> The ESB consultation paper should not include draft AER Guidelines as this mixes the roles of the market bodies. 	<ul style="list-style-type: none"> The AER is a member of the ESB and is involved in the preparation of the ESB consultation paper. Going forward the AER will conduct a separate consultation on the Guidelines.
AEC, Delta	<ul style="list-style-type: none"> The CBA Guidelines should not give AEMO broad scope to take a different economic approach to how the TNSPs must justify projects under the RIT-T Application Guidelines. 	<ul style="list-style-type: none"> System planning entails a different approach to the project-by-project approach of the RIT-T. The ESB has designed a framework that will ensure that the ISP and RIT-T are aligned, with the role of the RIT-T to ensure that actionable ISP projects are delivered efficiently. The classes of benefits considered in the ISP will be aligned with the RIT-T.
CEC, PIAC	<ul style="list-style-type: none"> AEMO should have flexibility to consider matters arising as a result of the rapid deployment of renewables. 	<ul style="list-style-type: none"> The draft Rules are designed to support a more flexible, dynamic transmission planning framework.
AGL, CEC, ERM	<ul style="list-style-type: none"> Any flexibilities provided to AEMO or TNSPs in CBA Guidelines should be subject to public consultation and justified in the final report. 	<ul style="list-style-type: none"> ESB agrees that any flexibilities provided to AEMO should be subject to public consultation & transparent reasons.
AGL, ECA, PIAC	<ul style="list-style-type: none"> In principle support for governance framework including two proposed AER Guidelines 	<ul style="list-style-type: none"> The ESB proposes to retain the CBA Guidelines and the Forecasting Best Practice Guidelines.
CEC, ENA	<ul style="list-style-type: none"> Some of the information contained in the draft guidelines presented by the ESB should be contained in the NER 	<ul style="list-style-type: none"> The draft Rules includes principles which are to be addressed by the AER in its Guidelines.
Delta	<ul style="list-style-type: none"> The Guidelines should provide additional clarification of the principles associated with: <ul style="list-style-type: none"> The definition of the base case Precise definitions of what is being measured and costed Quantification of service level and risk of any benefits that AEMO propose are outside the RIT-T guidelines. 	<ul style="list-style-type: none"> The AER is considering these matters as it develops the CBA Guidelines.
ENA	<ul style="list-style-type: none"> The RIT-T Application Guidelines should be updated on the same timeframes to ensure consistency. 	<ul style="list-style-type: none"> The AER is consulting on amendments to the RIT-T guidelines in conjunction with its consultation on the CBA Guidelines.
ECA, ENA, Meridian, Spark Infrastructure, TransGrid	<ul style="list-style-type: none"> There should be consistency between the ISP & RIT-T (ISP assumptions should be considered reasonable (Spark); optimal development pathway in the ISP is to be in the base case for 	<ul style="list-style-type: none"> The ESB agrees.

RIT-Ts undertaken by TNSPs (TransGrid))

- The additional flexibility proposed for AEMO in the ISP should be extended to the RIT-T for ISP projects.

ENA, TransGrid	<ul style="list-style-type: none"> • CBA guideline should be a separate document to the RIT-T application guideline. 	<ul style="list-style-type: none"> • ESB considers that the CBA Guidelines should cover the ISP and RIT-Ts for ISP projects. The current RIT-T and RIT-T application guidelines will remain for non-ISP RIT-Ts.
ENA	<ul style="list-style-type: none"> • ENA supports some flexibility regarding the incorporation of the ISP network development path in the RIT-Ts, especially in relation to Group 3 ISP projects. 	<ul style="list-style-type: none"> • The AER is considering these matters as it develops the CBA Guidelines.
ENA	<ul style="list-style-type: none"> • AER should address when an update to the ISP is required in the CBA Guideline rather than having AEMO prepare a separate guideline. 	<ul style="list-style-type: none"> • The ESB proposes to cover this matter in the Rules in order to consolidate the number of subordinate documents.
EUAA	<ul style="list-style-type: none"> • The full rigour of the RIT-T should be retained. 	<ul style="list-style-type: none"> • The actionable ISP framework is at least as rigorous as the current RIT-T. It includes a two year consultation on the ISP undertaken by a financially independent body (AEMO) as well as a streamlined RIT-T process focussed on cost benefit analysis of detailed technical solutions. • As the ISP will partially replace the RIT-Ts, RIT-Ts for ISP projects can be streamlined. To retain the RIT-T in full would be duplicative.
EUAA	<ul style="list-style-type: none"> • Customers should not continue to be asked to absorb aspects of project risks and costs that they have no control over or be faced with paying “full weight” for underutilised assets. All stakeholders, including generators, should pay their fair share. 	<ul style="list-style-type: none"> • The allocation of costs between different stakeholders in relation to transmission frameworks is being considered in the AEMC’s COGATI review. Risks should be allocated to the party best able to manage them. • In relation to costs, it is important to consider consequences across the supply chain: too much transmission causes increased TUOS; while underinvestment in transmission causes higher wholesale costs for customers.
Delta, ENA, EUAA, ERM, TasNetworks	<ul style="list-style-type: none"> • Support for a binding CBA Guideline that draws on the current RIT-T Guidelines. E.g. TasNetworks suggests guidelines to cover: <ul style="list-style-type: none"> ○ consultation timeframes; ○ risk frameworks; ○ interactions with the RIT-T and the ESB Adjustment Fund; and ○ how projects will be assessed for inclusion as part of ISP core development pathways. 	<ul style="list-style-type: none"> • The ESB proposes that the AER will prepare and maintain a CBA Guidelines that draws on the RIT-T application guidelines and are binding on AEMO in regards to the development of the ISP.

EUAA, ERM, MEU	<ul style="list-style-type: none"> In developing the ISP, AEMO must consult rigorously with stakeholders. 	<ul style="list-style-type: none"> The actionable ISP framework includes an extensive consultation process, including an additional stage of consultation on the inputs, assumptions and scenarios that feed into the ISP.
HydroTas, ENA, Tesla	<ul style="list-style-type: none"> AEMO should be allowed additional flexibility to have regard to the resilience of the power system. This flexibility must be balanced against the need for transparency. 	<ul style="list-style-type: none"> The draft Rules provide additional flexibility via a transparent process, which is described in the CBA Guidelines.
PIAC Tesla (DER in particular)	<ul style="list-style-type: none"> ISP should consider networks – transmission, sub-transmission, and distribution at a high level – generation, storage & DER including demand response & VPPs. 	<ul style="list-style-type: none"> This is consistent with the proposed scope of the ISP.
Meridian	<ul style="list-style-type: none"> AEMO should continue to apply the Rules, the RIT-T and the RIT-T Application Guidelines where possible. 	<ul style="list-style-type: none"> The ESB proposes that the AER will prepare and maintain a CBA Guidelines that draws on the RIT-T application guidelines. Both AEMO and TNSPs will be required to comply with the CBA Guidelines.
MEU	<ul style="list-style-type: none"> The robust cost benefit analysis under the current RIT-T should not be compromised. ISP decisions should still be subject to a cost benefit analysis. 	<ul style="list-style-type: none"> The actionable ISP framework is at least as rigorous as the current RIT-T. It includes a two year consultation on the ISP undertaken by an independent body as well as a targeted RIT-T process focussed on detailed technical solutions.
PIAC	<ul style="list-style-type: none"> PIAC supports the direction suggested by the draft Cost Benefit Analysis guideline proposed in the ESB's consultation paper. Flexibility to consider matters beyond current RIT-T. PIAC recommends that AEMO assume that the energy system of the future is characterised by the rapid deployment of renewables, in line with the ISP's original policy intent and as a key input into managing risks for consumers. 	<ul style="list-style-type: none"> The draft Rules are designed to support a more flexible, dynamic transmission planning framework that gives effect to whole of system planning. The ISP will be designed to identify an optimal development path that meets power system needs using transparent scenarios that are designed to encompass the full range of plausible market outcomes, including different rates of uptake of utility scale and distributed renewable energy.
SACOSS	<ul style="list-style-type: none"> Notes the importance of processes such as the RIT-T in protecting consumers from inefficient Investment. Endorses the positioning taken by PIAC in its joint submission around the need for a framework which supports whole-of-system outcomes. 	<ul style="list-style-type: none"> The actionable ISP framework is at least as rigorous as the current RIT-T. It includes a two year consultation on the ISP undertaken by an independent body as well as a targeted RIT-T process focussed on detailed technical solutions.
Snowy Hydro	<ul style="list-style-type: none"> The Rules framework should provide AEMO with the flexibility to consider a number of linkages and interdependencies with other elements of the planning framework. 	<ul style="list-style-type: none"> The joint planning framework is a key element of the actionable ISP framework as it permits the system-wide plan to be developed having regard to regional issues and vice versa.

Spark Infrastructure	<ul style="list-style-type: none"> ISP should incorporate an assessment of investability and the NEO utilising a transparent and objective assessment framework. Difficulty raising capital to undertake the investment could lead to delays, and the requirement for government support or higher cost just-in-time investment. 	<ul style="list-style-type: none"> Linkages between the ISP, ESOO and TAPRs have been considered in the development of the ISP framework. AEMO's modelling incorporates sensitivities to test the assumptions around generator entry and exit in the short-medium term. To the extent investability issues relate to shared transmission infrastructure, this matter is more appropriately dealt with via the economic regulation of networks.
TransGrid	<ul style="list-style-type: none"> The information presented in the draft guidelines in the ESB's consultation paper should be located in the NER since the AER has previously rejected some elements of the ESB's draft guidelines 	<ul style="list-style-type: none"> The ESB has sought to take a balanced approach in the level of detail in the Rules vs the Guidelines.

2.2 Dispute resolution

Respondents	Comments	ESB response
AGL, Engie +ERM, PIAC:	<ul style="list-style-type: none"> Dispute resolution mechanism is unlikely to work in practice since stakeholders will not be able to access the underlying data/information/methodology until after the final ISP has been published. Mechanisms should be designed such that the underpinning assumptions/inputs at an ISP key decision point can be suitably challenged <ul style="list-style-type: none"> Engie: suggest disputes can be raised at all stages of the ISP process ERM: suggest disputes can be triggered following the release by AEMO of the list of network development options to be included in the finalisation of the ISP Where AEMO receives a dispute, it should consult with industry and publish a statement on its website justifying its final position. A similar process could then be implemented by the AER under its escalated disputes resolution mechanism AGL suggest: To ensure process is not abused or used to unnecessarily derail an ISP process, the ESB could consider limiting its access to Industry Associations or disputes with support from multiple industry stakeholders. 	<ul style="list-style-type: none"> The ESB has revised its proposed model such that the window for dispute resolution occurs after the publication of the final ISP. This change is intended to give stakeholders visibility of the whole process before deciding whether to raise a dispute. The ESB has considered issues raised by stakeholders, including the need for accountability and the need for a timely decision making process, and considers that an appropriate balance is struck by a dispute mechanism which is limited to matters of process. The ESB also proposes to include criteria that encourage stakeholders to identify and debate their concerns as part of the ISP consultation process, rather than using the dispute resolution framework as a substitute for engaging in the consultation process.
CEC, ENA	<ul style="list-style-type: none"> The proposed dispute resolution mechanism may lead to significant delays if a dispute is raised based on methodology or inputs (i.e. at each stage of the development of the ISP). 	<ul style="list-style-type: none"> The ESB has revised its proposed model such that the window for disputes occurs after the publication of the final ISP. This change is

	<ul style="list-style-type: none"> ○ ENA, TransGrid: suggest only raise disputes following publication of ISP 	intended to give stakeholders visibility of the whole process before deciding whether to raise a dispute.
ECA	<ul style="list-style-type: none"> • The best protection against the consequence of disputable input decisions is to increase the flexibility in modelling and to increase the range of sensitivity analyses undertaken. Hard work to select the 'right' values of input parameters is wasted if the sensitivity of the outcomes to the values chosen are not recognised • Stakeholders should have ability to dispute the ISP process if they consider that the AER's guidelines are not being followed. 	<ul style="list-style-type: none"> • The proposed Rules framework includes obligations on AEMO to undertake sensitivities and to consult thoroughly when selecting input values. • The ESB agrees that disputes on process are appropriate.
ENA	<ul style="list-style-type: none"> • The NER should be amended to prevent issues that are covered at the ISP being disputed at the RIT-T stage. • The NER should allow for the impact of an ISP dispute on the timing of the publication of the PADR. For instance, the PADRs should not be published until after any ISP dispute is resolved. 	<ul style="list-style-type: none"> • The ESB agrees that matters determined as part of the ISP process should not be re-prosecuted as part of the RIT-T dispute process. • PADRs should be prepared concurrently with any dispute process. If the result of the dispute is that it is necessary to amend the ISP, then the ISP update should include revised deadlines for any affected PADRs.
Energy Australia +Meridian	<ul style="list-style-type: none"> • There should be an avenue for stakeholder to raise any concerns about AEMO's assumptions and process early (there should be clear timeframes for raising a concern). • The AER should outline a materiality threshold for disputes. 	<ul style="list-style-type: none"> • The Inputs and Assumptions consultation process, together with the ISP consultation process provide several opportunities for stakeholders to raise any concerns about AEMO's assumptions and process. • The ESB considers that a dispute mechanism focussed on AEMO's process, together with a set of criteria that put the onus on stakeholders to engage via the consultation process prior to raising a dispute, strike an appropriate balance between accountability and timely decision making. • The ESB has not included a materiality threshold because it entails an assessment of the outcomes rather than the process.
EUAA	<ul style="list-style-type: none"> • The existing dispute resolution mechanism should be retained in its current form. • The AER should sign off on the ISP in a similar way to the AER's role in relation to AEMO's declaration of a reliability gap under the RRO. 	<ul style="list-style-type: none"> • The ESB has considered issues raised by stakeholders, including the need for accountability and the need for a timely decision making process, and considers that an appropriate balance is struck by a mechanism which

		<p>is limited to matters of process.</p> <ul style="list-style-type: none"> The ESB considers that an AER sign off process would be unwieldy given the extensive checks and balances (including dispute resolution, consultation, and transparency requirements) associated with the proposed process.
MEU	<ul style="list-style-type: none"> The process undertaken by AEMO must be subject to wide consultation and cost benefit analysis. 	<ul style="list-style-type: none"> The ESB agrees.
PIAC	<ul style="list-style-type: none"> PIAC does not support the approach of limiting grounds for dispute only to matters previously identified in submissions to AEMO (or an NSP) by the disputing party. This may limit the ability of customers to participate. Rather than specifying eligibility criteria for disputes in the Rules or a similar regulatory guideline, maintaining the AER's existing discretion as an expert regulator to assess each dispute on its merits and deal with accordingly 	<ul style="list-style-type: none"> The ESB considers that stakeholders should identify and debate their concerns as part of the ISP consultation process, rather than using the dispute resolution framework as a substitute for engaging in the consultation process. The AER will have discretion to determine the dispute in accordance with the framework set out in the Rules.
+MEU:		
TasNetworks	<ul style="list-style-type: none"> Concerns over individual elements of the ISP are best addressed as part of the ISP rather than separately in the RIT-T process. Given the potential for delay to the entire ISP, the threshold for lodging a dispute must be sufficiently high to discourage methodological 'tyre-kicking'. 	<ul style="list-style-type: none"> The ESB agrees that matters determined as part of the ISP process should not be re-prosecuted as part of the RIT-T dispute process. The ESB agrees that the framework should be designed to be applied only in limited circumstances.
+TransGrid, Spark Infrastructure:	<ul style="list-style-type: none"> Parties should not be able to dispute a RIT-T if it is consistent with the ISP (subject to the exception of a material change in circumstances). Further, where a dispute has been raised in the ISP process, a similar dispute should not be able to be raised within the RIT-T process. 	

2.3 Public policy

Respondents	Comment	ESB response
AGL, Delta, EUAA, Engie	<ul style="list-style-type: none"> Concern regarding the inclusion of public policy as an objective to be met by the ISP. 	<ul style="list-style-type: none"> If governments have implemented policies, ignoring these policies has the potential to result in inefficient and/or perverse outcomes. The ESB's criteria for including public policy in the ISP is designed to include only substantive policies that are enacted and/or funded.
ENA, Snowy Hydro, TransGrid	<ul style="list-style-type: none"> Public policies should be limited to those that directly impact the electricity sector (eg policies around the uptake of 	<ul style="list-style-type: none"> The draft Rules limit public policies to be considered in the ISP to those with a clear articulation of when and how it impacts the power system.

	<p>EVs should be included, but not regional employment policies).</p> <ul style="list-style-type: none"> • Governments should advise AEMO of policy needs via a formal COAG process (Snowy recommends an annual process). This notification process should also incorporate the level of resilience that should be paid for by customers. 	<ul style="list-style-type: none"> • A formal COAG process is one mechanism for including public policy in the ISP. This could potentially include resilience.
PIAC	<ul style="list-style-type: none"> • In preparing the ISP, AEMO should develop scenarios both with and without the inclusion of government schemes (such as the Snowy 2.0 scheme), so that market bodies and stakeholders can access guidance on whole-of-system optimisation under either outcome. • A range of potential reforms could be treated as sensitivities to this base case modelling. AEMO would use its judgement and be informed by public consultation as to which reforms it should incorporate into these scenarios 	<ul style="list-style-type: none"> • The ESB's criteria for including public policy in the ISP is designed to include only substantive policies that are enacted and/or funded. • The draft Rules also envisage that AEMO could undertake a sensitivity to assess the impact of a proposed policy at the request of a jurisdiction. However, the ESB considers that public policy is a matter for governments.

2.4 Forecasting Best Practice Guidelines

Respondents	Comment	ESB response
AEC, ENA, HydroTas, TasNetworks	<ul style="list-style-type: none"> • It would be more sensible to have one AER guideline to cover all AEMO's forecasting functions, including both the RRO and the ISP. 	<ul style="list-style-type: none"> • The Forecasting Best Practice Guidelines apply to both the ISP and RRO forecasts.
+EUAA:	<ul style="list-style-type: none"> • Support for forecasting guidelines similar to the RRO Best Practice Guidelines. 	
Energy Australia	<ul style="list-style-type: none"> • Large load closures and connections should be explicitly included. • There should be explicit consideration of impact on the contract market in AEMO's modelling as this is a key driver of generation investment decisions. The current ISP is primarily an engineering optimisation that doesn't consider the whole system. • There should be a defined approach for assessing closure economics that considers the financial viability of generation assets. • Asset operators should be actively consulted by AEMO to discuss asset operation and fuel supply assumptions. 	<ul style="list-style-type: none"> • The draft Rules require AEMO to consider increases and decreases in load as part of its ISP modelling. • The current ISP is an optimisation that identifies the least cost system design (taking into account risk and uncertainty and net market benefits). Wealth transfers are not currently included as this would make the ISP significantly more complex and subjective. • In the first instance, the ESB would prefer to address the source of the market failure, rather than require the ISP to design a higher cost system. • The ISP modelling will have regard to information provided by generators when estimating asset closures and will include sensitivities that explore the consequences of alternative closure dates.

EUAA	<ul style="list-style-type: none"> • AEMO should make use of a range of existing analysis in areas such as the Reliability Standard and VCR and not seek to replicate or dilute these important, independent inputs to the ISP. 	<ul style="list-style-type: none"> • AEMO's consultation on the Inputs & Assumptions will develop inputs that are used in a range of publications including the ES00. • The ISP modelling will adopt the VCR values determined by the AER.
Engie, HydroTas, PIAC	<ul style="list-style-type: none"> • AEMO's approach to developing scenarios should be adapted to better deal with high levels of uncertainty which is greater in the ISP (including in communications relating to the ISP, e.g. at a 'headline messaging' level) due to the time horizon and system-wide nature of the outcomes predicted, e.g. potential for rapid rates of change and the potential for capacity to exit at a faster rate than had previously been assumed • Engie notes the McKinsey Framework, Shell approach as best practice techniques. 	<ul style="list-style-type: none"> • The ISP modelling will have regard to information provided by generators when estimating asset closures and will include sensitivities that explore the consequences of alternative closure dates. • The ISP will be designed to identify an optimal development path that meets power system needs using transparent scenarios that are designed to encompass the full range of plausible market outcomes. • The Forecasting Best Practice Guidelines require AEMO to report on its forecast accuracy and actions undertaken to improve the forecasts.
HydroTas, Snowy Hydro	<ul style="list-style-type: none"> • Support for greater transparency over the inputs and assumptions used by AEMO to inform ISP modelling and methodology adopted. 	<ul style="list-style-type: none"> • The draft Rules and Guidelines require AEMO to be transparent regarding its input, assumptions and methodology.
PIAC	<ul style="list-style-type: none"> • PIAC considers there is merit in further exploring AEMO's access to information as an input to the ISP and other forecasting processes. • PIAC recommends the guidelines explicitly recognise the role of scenario development as a risk-management tool. • There is merit in developing guidelines for how the probabilistic nature of scenario development should be represented in public communications. Where a particular forecast result or input comprises a range of values rather than a single value, visual representation and commentary on that information should seek to depict the distribution of that range rather than (or at least in addition to) extracting a single instance. Depicting a single case risks conveying the erroneous impression that a one definitive outcome has been predicted. 	<ul style="list-style-type: none"> • The draft Rules specify that the preparation of the ISP is a National Transmission Planner function for the purposes of the National Electricity Law, which means that AEMO's information gathering powers apply. • The AER is consulting on the content of its CBA Guidelines and Forecasting Best Practice Guidelines.
TransGrid	<ul style="list-style-type: none"> • The information presented in the draft guidelines in the ESB's consultation paper should be located in the NER rather than in an AER guideline. • TransGrid supports the development of an ISP methodology by AEMO in consultation 	<ul style="list-style-type: none"> • The draft Rules establish a framework where the AER prepares guidelines that align with the principles set out in the Rules. • The AER is consulting on the content of its CBA Guidelines

- with stakeholders which should include AEMO’s approach to forecasting.
- The status of the “draft” guidelines in the ESB’s consultation paper is unclear given that responsibility for developing the guidelines lies with the AER.
- and Forecasting Best Practice Guidelines.
- AEMO will consult on its ISP methodology as part of its preliminary consultation.
- AEMO is also required to consult on and publish a Forecasting Methodology in accordance with the Forecasting Best Practice Guidelines. This document is used across a range of publications.

2.5 Timing of the ISP

Respondents	Comment	ESB response
AEC, Delta, ECA, ENA, PIAC	<ul style="list-style-type: none"> It is helpful if there is an expectation regarding the time at which the ISP will be published, but it doesn’t need to be mandated in the NER. <ul style="list-style-type: none"> PIAC suggest anything mandated should be high level with detail in the guidelines It is sufficient to require AEMO to publish every two years and ensure the key consultation milestones are well known: <ul style="list-style-type: none"> Delta supports Rules specifying the maximum timeframes between ISPs. PIAC suggest frequency be reviewed in 2025 	<ul style="list-style-type: none"> The Rules will specify that AEMO should publish an ISP at least every two years by 30 June. More detailed elements of the consultation process will be published in the ISP timetable. Under the ISP updates framework, AEMO may publish an update to the ISP when new information becomes available that may change the outcome of an in-flight RIT-T.
AGL, CEC, EUAA, ERM, TransGrid + ENA:	<ul style="list-style-type: none"> Key milestones and publication dates should be drafted into the NER to provide market participants with certainty. <ul style="list-style-type: none"> EUAA & ERM suggest where AEMO is afforded some flexibility in complying with the provisions of the Rules with regards to the ISP, suitable transparency provisions must be in place Further consideration should also be given to building an optional annual (shortened) ISP report into the NER (to outline notable changes at the midway point of the two-year publication process – CEC). 	<ul style="list-style-type: none"> The Rules will specify that AEMO should publish an ISP at least every two years by 30 June. More detailed elements of the consultation process will be published in the ISP timetable Under the ISP updates framework, AEMO may publish an update to the ISP when new information becomes available that changes the outcome of an in-flight RIT-T.
ERM, Energy Australia, Meridian, Snowy Hydro, TasNetworks	<ul style="list-style-type: none"> Support publication of the ISP every two years <ul style="list-style-type: none"> EA: Maximum two years Meridian: option to bring it forward 	<ul style="list-style-type: none"> The Rules will specify that AEMO should publish an ISP at least every two years by 30 June.
ENA	<ul style="list-style-type: none"> The flexibility in relation to the ISP timeframe should be mirrored in the timeframe allowed for PADR assessments given it is important to allow sufficient time for the PADR process to “get it right”. 	<ul style="list-style-type: none"> The timing of PADR’s will be tailored according to the timing of the identified need. The ESB agrees that TNSPs should have sufficient time for the PADR process, however the urgency of the project is

		another relevant consideration.
Energy Australia, Meridian	<ul style="list-style-type: none"> The publication timeframe needs to balance having sufficient time to complete a thorough analysis against the relevance of assumptions and conclusions at the time of publication – maximum of 2 years (option to bring it forward – Meridian) If an update is triggered, the market should be notified as soon as possible after AEMO becomes aware of the need to issue an update. 	<ul style="list-style-type: none"> The ESB agrees.
Snowy Hydro, TasNetworks	<ul style="list-style-type: none"> The Rules framework should give AEMO flexibility to respond to issues emerging during the ISP development process (e.g. interdependent elements of the planning framework such as TAPRs). The level of prescription in the rules should be left with the appropriate regulatory bodies to decide. <ul style="list-style-type: none"> Principles for updating the ISP should be set out in the NER to provide transparency and predictability to stakeholders (TasNetworks) 	<ul style="list-style-type: none"> The ESB agrees.

2.6 Governance of ISP

Respondents	Comment	ESB response
AGL + CEC	<ul style="list-style-type: none"> Broadly support the ESB’s proposal across the range of governance issues covered, including the development of the two proposed Guidelines. AER should develop these guidelines internally from the start and not use the preconstructed drafts provided by the ESB. Some of the information contained in the draft guidelines presented by the ESB should be contained in the NER – the current RIT-T guidelines provide sufficient scope for consultation and should be used as the basis for the ISP so that differing guidelines do not lead to conflicting inputs and outcomes between the ISP/RIT-T. 	<ul style="list-style-type: none"> The ESB’s governance model is a refined version of the model set out in the consultation paper. The AER is conducting a separate consultation on the content of the Forecasting Best Practice Guidelines. The draft Rules establish a framework where the AER prepares guidelines that align with the principles set out in the Rules.
Marsden Jacob Associates (for Delta)	<ul style="list-style-type: none"> Increased role for ISP must be matched by commensurate rigour, transparency & review. 2018 ISP did not adequately describe the methodology used. For instance, no 	<ul style="list-style-type: none"> The actionable ISP framework is at least as rigorous as the current RIT-T. It includes a two year consultation on the ISP undertaken by an independent body as well as a targeted RIT-T process focussed on detailed technical solutions.

	<p>evidence was provided that the requirement for system reliability was met.</p> <ul style="list-style-type: none"> • AEMO should provide a level of transparency that allows verification of the modelling by independent parties. • As a matter of principle, AEMO should not be the body that undertakes the modelling. 	<ul style="list-style-type: none"> • Under the draft Rules, the ISP is designed to meet the power system needs, which includes the system reliability standard. • The draft Rules require AEMO to publish sufficient information to enable an understanding of how the forecasts were developed. • The ESB considers that AEMO is best placed to undertake the ISP modelling given its role as an independent expert market body.
ECA	<ul style="list-style-type: none"> • Consideration should be given to establishing a panel within AEMO – akin to the Reliability Panel – to manage the ISP process. 	<ul style="list-style-type: none"> • AEMO has agreed that for future ISPs, it will establish an ISP Panel to help it to engage with stakeholders, in particular customers, during the ISP development process. However, the Panel is not mandated under the draft Rules.
+ ERM	<ul style="list-style-type: none"> • The ISP Panel should be supported by: <ul style="list-style-type: none"> ○ Appropriate governance arrangements and ○ Provide a formal mechanism for consumer participation in the development of the ISP to ensure that additional expenditure on behalf of consumers only occurs where it is clearly demonstrated as warranted 	<ul style="list-style-type: none"> • The Panel would have an advisory role rather than a decision-making role. The ESB considers that decisions in relation to the content of ISP should lie with the accountable market body.
ENA	<ul style="list-style-type: none"> • Key principles to guide the ISP analysis & governing the interlinkages between the ISP and subsequent RIT-T process should be set out in the NER. These principles should include many of the matters presented in the draft CBA & forecasting guidelines. • Core focus should be on open and effective stakeholder consultation in the preparation of the ISP & RIT-Ts. • NER should cover matters similar to those currently covered in NER 5.20.1-5.20.6 (relating to the preparation of the NTNDP). 	<ul style="list-style-type: none"> • The draft Rules establish a framework where the AER prepares guidelines that align with the principles set out in the Rules. The CBA Guidelines apply to both the ISP, and the RIT-Ts for ISP projects. • The draft Rules require AEMO to conduct an extensive consultation process including consultation on the Inputs, Assumptions & Methodology, and a consultation on the draft ISP. • The draft Rules cover matters similar to those currently set out in NER 5.20.
Meridian	<ul style="list-style-type: none"> • There should be an ISP Panel (similar to the Reliability Panel) that contains no more than ten members, representing as many varied stakeholder groups as possible. The panel would act as a reference group that reviews the ISP at each step of the consultation process, to ensure industry stakeholder views are 	<ul style="list-style-type: none"> • AEMO has agreed that for future ISPs, it will establish an ISP Panel to help it to engage with stakeholders, in particular customers, during the ISP development process. • The Panel would have an advisory role rather than a decision-making role. The ESB considers that decisions in relation to the content of ISP should lie with the accountable market body.

incorporated into the development of the ISP.

<p>PIAC, TransGrid</p>	<ul style="list-style-type: none"> • Support for a two-stage public consultation process as proposed in the draft guidelines. • Recommend a complementary process be applied to collaboration between the AER and AEMO: <ul style="list-style-type: none"> ○ The AER should play a review role in the early stages of the ISP, specifically to validate the reasonableness of key data inputs and assumptions, and suitability of any new or altered modelling and analysis approaches. ○ TransGrid go further and propose AER's involvement is essential at all stages of the ISP and RIT-T processes 	<ul style="list-style-type: none"> • The draft Rules retain the consultation process outlined in the consultation paper. • The ESB considers that an AER sign off process would be unwieldy given the extensive checks and balances (including dispute resolution, consultation, and transparency requirements) associated with the proposed process.
------------------------	---	---

2.7 Objectives and principles to guide the ISP

Respondents	Comment	ESB response
CEC	<ul style="list-style-type: none"> • The NER should set out the objectives, principles and requirements to guide AEMO and TNSPs in the delivery of the ISP and RIT-Ts consistent with the current RIT-T framework. • More detailed requirements should be set out in AER Guidelines. 	<ul style="list-style-type: none"> • The objectives, principles & requirements set out in the draft Rules are similar to those that apply under the current RIT-T framework, however they have been adapted to give effect to whole of system planning and to recognise the benefits of flexibility in the face of uncertainty. • The draft Rules establish a framework where the AER prepares guidelines that align with the principles set out in the Rules.
PIAC	<ul style="list-style-type: none"> • The objectives of the system planning framework should be to: (1) identify the most efficient solution (2) deliver the solution in the most timely and efficient way (3) recover costs for the delivered solution in the fairest and most equitable way. • It is essential to confirm the role and purpose of the ISP. PIAC considers the goal of the ISP is to optimise whole-of-system outcomes, in the long term interests of energy users, with respect to the trilemma: price, reliability/security and emissions reduction. Market and regulatory bodies should use the ISP as 	<ul style="list-style-type: none"> • The ESB agrees the system planning framework should identify the most efficient solution on a whole of system basis, taking into account risk and uncertainty. PIAC's objectives (2) and (3) go beyond the scope of a planning framework, however the RIT process has been streamlined so that it is completed more quickly. • The draft Rules include a purpose of the ISP which is broadly consistent with the matters outlined by PIAC (see 5.22.2).

a guide for policy and rulemaking, sending signals to other participants such as industry to respond in a way that promotes system-wide efficiency.

TransGrid	<ul style="list-style-type: none"> • TransGrid supports the ESB's objectives and principles for integrated system planning. 	<ul style="list-style-type: none"> • The draft Rules incorporate a refined version of the objectives and principles from the consultation paper.
-----------	--	---

2.8 Revenue approval

Respondents	Comment	ESB response
AEC	<ul style="list-style-type: none"> • AEC supports retention of a deadline for AER to conduct its assessment, but suggest a trigger mechanism could be included in the Rules to cater for unexpected events. 	<ul style="list-style-type: none"> • The draft Rules require the AER to conduct its contingent project assessment on the same timeframe as at present.
CEC, ENA, Meridian, TasNetworks, TransGrid	<ul style="list-style-type: none"> • The contingent project process is different to the preferred options assessment and hence the removal of the preferred option assessment should not create a need to extend the AER's time to consider contingent projects. • The ESB should consider Rules amendments to: <ul style="list-style-type: none"> ○ Allow the costs associated with early work undertaken by a TNSP to be recovered via a cost pass-through or alternative mechanism. Reliance on government underwriting for projects indicates a failure in the regulatory framework (CEC) ○ Explicitly prohibit preferred option assessments as a form of contingent project trigger (ENA, TransGrid) 	<ul style="list-style-type: none"> • The draft Rules require the AER to conduct its contingent project assessment on the same timeframe as at present. • In accordance with the 2018 COGATI review, the ESB proposes to remove the preferred options assessments (clause 5.16.6 NER) from the Rules. • The draft Rules do not include pass through of costs incurred prior to the completion of a RIT-T on grounds that these costs should be recovered via the TNSPs revenue determination.
Marsden Jacob Associates (for Delta), ECA + PIAC	<ul style="list-style-type: none"> • It would appear reasonable to allow the AER with additional time so long as this can be reconciled with the driver for improved process efficiency. <ul style="list-style-type: none"> ○ ECA suggest extending time at or near the start of the process • Agreement with the ESB that the current, strict Rules obligations regarding the timeframe for assessing contingent project applications may be problematic for ISP projects and recommend a holistic review of the contingent project mechanism, potentially as part of the ENERF process 	<ul style="list-style-type: none"> • In light of the need for improved process efficiency, the draft Rules require the AER to conduct its contingent project assessment on the same timeframe as at present.
ENA, TransGrid	<ul style="list-style-type: none"> • Generally supportive of the automatic trigger approach, however it requires careful consideration to ensure that customers are not exposed to unnecessary risks. 	<ul style="list-style-type: none"> • The ESB considers that the extensive preceding ISP and RIT-T process, together with the feedback loop whereby AEMO confirms that the RIT-T preferred

	<ul style="list-style-type: none"> • ENA: TNSPs would not support an approach where they submit a contingent project application before detailed costing is complete due to cost risk. 	<ul style="list-style-type: none"> • option forms part of the optimal development path, will ensure that customers are not exposed to unnecessary risks. • The draft Rules do not specify a timeline for TNSPs to submit their contingent project application, however the ESB expects TNSPs to progress ISP projects in a timely fashion having regard to the urgency of the identified need.
ERM, EUAA	<ul style="list-style-type: none"> • Does not support the removal of clause 5.16.6 from the Rules. 	<ul style="list-style-type: none"> • The ESB considers that the extensive preceding ISP and RIT-T process, together with the feedback loop whereby AEMO confirms that the RIT-T preferred option forms part of the optimal development path, means that NER 5.16.6 has been superseded and to retain it would be unduly cumbersome.
Snowy Hydro	<ul style="list-style-type: none"> • The AER should remain responsible for determining the allowed revenue for ISP projects. 	<ul style="list-style-type: none"> • The ESB agrees.

2.9 Last resort planning power

Respondents	Comment	ESB response
CEC, ENA, ECA, Meridian, TransGrid	<ul style="list-style-type: none"> • The existing LRP provides a suitable safety net and sufficient assurance that the RIT-T process will occur in a timely fashion across all investments. 	<ul style="list-style-type: none"> • Given that the draft Rules already includes a requirement on TNSPs to undertake a RIT-T, the ESB considers that the LRPP is redundant.
ERM, EUAA	<ul style="list-style-type: none"> • The list of trigger events described in NER 5.22(f) is too narrow and should include for a participant or consumer representative body to refer a specific project to the AEMC for consideration based on an identified need. 	<ul style="list-style-type: none"> • Given that the draft Rules already includes a requirement on TNSPs to undertake a RIT-T, the ESB considers that the LRPP is redundant. • Market participants and consumers may identify projects and/or needs to AEMO during the ISP development process.
MEU	<ul style="list-style-type: none"> • The AEMC, in its planner of last resort function, should also be subject to having its decision making subject to wide consultation and review by an independent body (e.g. the AER). 	<ul style="list-style-type: none"> • Given that the draft Rules already includes a requirement on TNSPs to undertake a RIT-T, the ESB considers that the LRPP is redundant.
TasNetworks	<ul style="list-style-type: none"> • The proposed ESB model already includes a requirement on TNSPs to undertake a PADR post ISP publication. In this sense, it would seem that the Last Resort Planning function is redundant. 	<ul style="list-style-type: none"> • The ESB agrees.

2.10 Non-network options

Respondents	Comment	ESB response
CEC, Energy Australia, PIAC, TransGrid	<ul style="list-style-type: none"> Thorough consulting with stakeholders and information provision during the ISP and RIT-T process on non-network options is required as non-network options may present following the ISP process 	<ul style="list-style-type: none"> The draft Rules establish an iterative process for consideration of non-network options. Stakeholders will have the opportunity to submit non-network options in response to the draft ISP. Non-network options submitted in response to the draft ISP in will be considered in the RIT-T (so long as the option meets the identified need).
ENA	<ul style="list-style-type: none"> TNSPs will need to work closely with AEMO to model the requirements for NNOs in order to issue a meaningful request for proposals for NNOs. TNSPs should not be obliged to consider NNOs if AEMO has previously concluded that they are not credible. The timeframe for publication of PADRs will need to be adjusted to allow for consideration of NNOs where relevant. 	<ul style="list-style-type: none"> The ESB agrees. AEMO will determine a timeframe for each actionable RIT-T having regard to the urgency of the identified need and the need to give TNSPs enough time to undertake meaningful analysis.
Tesla	<ul style="list-style-type: none"> Additional consideration should be given to the integration and participation of utility scale energy storage in the NEM. Clear targets for the level of dispatchable capacity required would provide industry certainty. The ESB should assess existing barriers imposed by the RIT-T that may challenge non-network solutions from demonstrating the full extent of their market and grid benefits. Relevant classes of benefit include economies of scale, system strength benefits, and benefits that are shared between participants. California's Transmission Economic Assessment Methodology is a successful alternative model. 	<ul style="list-style-type: none"> The ISP is an optimisation between network solutions, supply side, storage and demand side solutions. The optimal development path comprises both actionable ISP projects (which relate to transmission) and ISP development opportunities, which relate to other parts of the electricity supply chain. The draft Rules also establish a framework for the consideration of non-network alternatives as a substitute for transmission investment.
TransGrid	<ul style="list-style-type: none"> TransGrid supports changes to the economic regulation of transmission networks to provide a positive financial incentive for TNSPs to adopt non-network solutions and undertake research and development to develop efficient long term non-network solutions. 	<ul style="list-style-type: none"> This issue is beyond the scope of the actionable ISP draft Rule change package.

2.11 Need for further subordinate documents

Respondents	Comment	ESB response
AEC, Energy Australia	<ul style="list-style-type: none"> AEMO should be obliged to develop, in consultation with stakeholders, public documents setting out its inputs, assumptions, methodologies, system limits, and other relevant matters, but the extent of such documents does not need prescription. 	<ul style="list-style-type: none"> AEMO will be required to publish an ISP methodology that explains how it does the ISP modelling. This document will form part of the material that AEMO consults on as part of the ISP development process.
CEC, ECA, Meridian	<ul style="list-style-type: none"> Do not consider any other subordinate guidelines or documents (including ISP methodology) are required. 	<ul style="list-style-type: none"> The ESB proposes to adopt the same framework proposed in the consultation document. There would be two guidelines: Forecasting Best Practice Guidelines (which AEMO must also comply with in the context of the RRO) and Cost Benefit Analysis Guidelines which apply to both the ISP and RIT-Ts for ISP projects.
ENA, ERM, TasNetworks + ECA	<ul style="list-style-type: none"> AEMO should prepare an ISP methodology - this would be more helpful than a forecasting best practice guideline. AEMO should provide more clarity/statement on its framework for: <ul style="list-style-type: none"> Identifying and prioritising REZs (ENA); Compliance with the Rules and other Guidelines in the development of the ISP (ERM & ECA) A proposed timeline (TasNetworks) 	<ul style="list-style-type: none"> AEMO will be required to publish an ISP methodology that explains how it does the ISP modelling. This document will form part of the material that AEMO consults on as part of the ISP development process. AEMO will also be required to publish an ISP timetable.
EUAA, ERM	<ul style="list-style-type: none"> Support for the development of a planning best practice guideline by the AER. 	<ul style="list-style-type: none"> The ESB proposes to adopt the same framework proposed in the consultation document including Forecasting Best Practice Guidelines.
PIAC	<ul style="list-style-type: none"> There may be merit in providing additional transparency or guidance around how the AER may approach assessing disputes under a DR mechanism with broad scope for stakeholders to raise a dispute. 	<ul style="list-style-type: none"> The AER is considering whether to include this information in the Cost Benefit Analysis Guidelines.

2.12 Role of ISP

Respondents	Comment	ESB response
AEC, CEC	<ul style="list-style-type: none"> TNSPs should continue to use RIT-T to rigorously demonstrate individual net benefits terms (retaining the role of undertaking detailed assessment of individual projects). TNSPs should be able to make use of work already performed to prepare the 	<ul style="list-style-type: none"> The ISP is a whole of system plan comprising a range of inter-related projects; the benefits relate to the optimal development path as a whole. During the RIT-T process, TNSPs will assess net market benefits with and

ISP, but ultimately they need to take ownership of their projects, and justify them on their own, including the ability to adjust plans as input information changes.

- ISP should not be treated as a “gold standard”, and the AER should continue to have responsibility for the assessment of transmission projects using the framework set out in the RIT-T Application Guidelines.

without the ISP project under assessment, and will explore detailed technical solutions to give effect to the identified need set out in the ISP.

- TNSPs will have the ability to adjust their plans as input information changes (subject to an obligation to demonstrate why this is necessary), plus there will also be a framework to enable AEMO to issue updates to the ISP if new information becomes available that is likely to change to outcome of in flight RIT-Ts.
- The AER will continue to assess the revenue required to give effect to the project, however, the ESB considers that the preferred option assessment is no longer required. The AER will be closely involved in both the ISP development and the RIT-Ts, via their role in setting guidelines, considering disputes as well as their broader responsibility for monitoring and enforcing Rules compliance.

Delta

- New process should not compromise the integrity of the existing RIT-T.
- AER should have close oversight of the ISP process & be responsible for engaging a peer reviewer where appropriate.

- The actionable ISP framework is at least as rigorous as the current RIT-T. It includes a two year consultation on the ISP undertaken by an independent body as well as a targeted RIT-T process focussed on detailed technical solutions.
- As the ISP will partially replace the RIT-Ts, RIT-Ts for ISP projects can be streamlined. To retain the RIT-T in full would be duplicative and lead to a continuation of current problems.
- The AER will be closely involved in both the ISP development and the RIT-Ts, via their role in setting guidelines, considering disputes as well as their broader responsibility for monitoring and enforcing Rules compliance.

Engie

- It is not clear that large interconnectors will be sufficiently utilised to deliver benefits to customers over their asset life. The probability is high that as part of actioning the ISP, “large bets early” will be made, which deliver uneconomic investments and increase costs to consumers without commensurate benefits.
- The COGATI approach is considered a more economically effective instrument and only lacks the attraction of centralised planning which has regained appeal more recently in some quarters.

- The draft Rules establish a framework that is designed to capture the spread of potential future worlds and the value that having flexibility in the system can bring for consumers. In this context, flexibility means the ability to respond flexibly to future developments without being locked into a specific path.
- There are some challenges associated with a framework that relies on generator-led transmission investment, which has prompted the AEMC to change this aspect of their COGATI proposals. The COGATI proposals rely on this enhanced transmission planning process set

<p>Engineers Australia</p>	<ul style="list-style-type: none"> • Australia’s electricity system has systematically become weaker over the last two decades as good engineering and operational practices have been compromised by conflicting market based methodology. • Engineering practice and operation should determine the policies in place in the electricity system to ensure system security and reliability for the consumers. 	<p>out in the actionable ISP rules to determine network capacity.</p> <ul style="list-style-type: none"> • In developing the ISP, AEMO will be required to develop a plan that seeks to achieve power system needs including security and reliability. They will also be required to have regard to good electricity industry practice.
<p>Energy Australia</p>	<ul style="list-style-type: none"> • EA heeds caution over the extent to which the ISP modelling is used to make investment decisions. It is not appropriate for a RIT-T assessment to include future speculative investments, that are suggested in the ISP, as a base case scenario. • The ISP development path should be considered one of several scenarios against which a RIT-T project is assessed. It may be appropriate to weight this scenario more highly than others, given its status as the base case in the ISP, but a RIT-T project should demonstrate that it delivers net benefits under a range of scenarios. • If the ISP is to be used as a proxy central planning document, there should be more explicit consideration of other market services (such as system strength services) that will be required and their estimated costs when determining the development plan. 	<ul style="list-style-type: none"> • The ESB considers that for the ISP to become “actionable” in accordance with the COAG terms of reference, the ISP modelling should be able to flow through into the RIT-T assessment, unless there are reasons why the TNSP considers that this is not appropriate. The AER is consulting on this issue as part of their work on guidelines. • To obtain the benefits of a whole of system plan, it is necessary for the ISP and RIT-T processes to be aligned. • The AER’s consultation on the CBA Guidelines discusses how ISP parameters and scenarios should be applied in the RIT-Ts. • In developing the ISP, AEMO will be required to develop a plan that seeks to achieve power system needs including security (which includes system strength) and reliability. AEMO is working to enhance the ISP’s consideration of system security.
<p>MEU</p>	<ul style="list-style-type: none"> • The MEU is concerned that the changes contemplated for actioning the ISP may result in consumers providing assets which should rightly be the province of generators (i.e. shared connection assets). • MEU of the view that there may not be sufficient controls in place to avoid consumer funded assets that should rightly be a cost to generation. There needs to be a strong consultation requirement and appeal provision built into the ISP to prevent this occurring. 	<ul style="list-style-type: none"> • The ESB does not propose to change the allocation of costs between customers and generators as part of the actionable ISP process. • The draft Rules establish a robust governance framework.
<p>PIAC, Joint Consumer Orgs</p>	<ul style="list-style-type: none"> • The ISP should avoid inefficient, and costly, duplication of functions between the ISP and other policy mechanisms (for example, multiple overlaid reliability instruments). • PIAC recommends the ISP act as a guide, setting out infrastructure 	<ul style="list-style-type: none"> • In developing the ISP, AEMO will be required to develop a plan that seeks to achieve power system needs including security and reliability. The ISP must seek to achieve both the system reliability standard and the relevant transmission reliability standards.

requirements for an optimal whole-of-system outcome for energy, particularly with respect to co-ordinating generation and transmission.

- Where overlap exists between the ISP and other processes, rules and policy mechanisms, AEMO and other market bodies seek to avoid unnecessary and costly duplication.
- Where there are market barriers to the deploying otherwise technically and economically viable demand response options - such as the current inability for aggregators to access the energy market independently of retailers - the ISP should identify what changes need to be made to remove these barriers.
- AEMO could conduct 'base' ISP modelling premised on what AEMO gauges as the most likely regulatory and policy environment.
- PIAC recommends that the ESB considers the interaction of different processes that share the objective of the reliability standard, and recommend how they can be best coordinated and co-optimised. The scope of the ISP could be expanded to include recommending market price settings, and as a result responsibility for recommending market price settings would be transferred from the Reliability Panel to AEMO. While a substantive change in responsibilities, in PIAC's view this appears to be the only option that permits co-optimisation of physical infrastructure and market price settings to provide the lowest-cost option for achieving the reliability standard
- The ISP is an optimisation between network solutions, supply side, storage and demand side solutions. The optimal development path comprises both actionable ISP projects (which relate to transmission) and ISP development opportunities, which relate to other parts of the electricity supply chain.
- The draft Rules seek to streamline the current planning framework.
- The ESB considers that the focus of the ISP should be on setting out a whole of system plan. However, the ISP will be a useful tool for policy makers in identifying barriers to delivering a least cost power system.
- While the detail of how AEMO develops its scenarios will be set out in the AER's CBA Guidelines, the ESB notes that AEMO's central case in the previous and current ISP is premised on what AEMO gauges as the most likely regulatory and policy environment.
- The ESB considers that changes to the process for establishing the reliability settings is beyond the scope of the actionable ISP reforms. However, the ESB notes that the information made available as part of the ISP process could help to illuminate the costs associated with different reliability settings.

Renew	<ul style="list-style-type: none"> • Increasing levels of VRE penetration may present a trade off with price. The ISP should therefore present several trajectories for renewable uptake terminating between 50% and 100%, along with an assessment of the generation, storage and transmission assets required. 	<ul style="list-style-type: none"> • The ISP will be designed to identify an optimal development path that meets power system needs using transparent scenarios that are designed to encompass the full range of plausible market outcomes, including different rates of uptake of utility scale and distributed renewable energy.
-------	---	---

2.13 Scope of ISP

Respondents	Comment	ESB response
ENA	<ul style="list-style-type: none"> • Concern that the language in the Consultation paper is vague and represents a potential increase in the scope of matters to be covered by the ISP. 	<ul style="list-style-type: none"> • The scope of ISP would reflect AEMO's National Transmission Planner functions under the National Electricity Law.

<p>+ PIAC, TransGrid</p>	<ul style="list-style-type: none"> Supportive of PIAC’s definition of strategic projects “projects where significant benefits accrue across multiple NEM regions, such as those involving major upgrades to interconnectors or national transmission flow paths”. 	<ul style="list-style-type: none"> In order for the ISP to identify the optimal development path on a whole of system basis, the draft Rules do not preclude AEMO from identifying projects that arise wholly within a region. AEMO will need to work with TNSPs to identify system needs and potential credible options via the joint planning process. TNSPs would retain the ability to conduct RIT-Ts outside the ISP framework using the current Rules.
<p>EUAA, TransGrid</p>	<ul style="list-style-type: none"> It is critical that the scope and purpose of the ISP be clearly defined within the Rules. TransGrid: the scope should be aligned to AEMO’s current planning functions in the NEL and may also need to include the identification of priority energy zones by AEMO. 	<ul style="list-style-type: none"> The scope of the ISP reflects AEMO’s National Transmission Planner functions under the National Electricity Law. The purpose and content of the ISP, and the matters that AEMO must have regard to where developing the ISP, are set out in the draft Rules and related guidelines.
<p>PIAC</p>	<ul style="list-style-type: none"> PIAC recommends that the ISP be used as an opportunity to fill the whole of system planning/optimisation role currently lacking in the NEM. AEMO, in consultation with stakeholders, should use the ISP to set out a guide for what an optimal (or more optimal) state of the physical system would look like. Market and regulatory bodies, such as the AEMC and AER, should use guidance from the ISP as an input to creating rules, and an overarching regulatory framework that aligns private incentives with system-wide optimisation. 	<ul style="list-style-type: none"> The ESB agrees that the ISP should be used to establish a whole of system plan. It is an assessment designed to identify the least cost combination of resources and investment that meets power system needs (taking into account risk and uncertainty) considering market benefits. There is scope for the ISP process to generate information that is illuminating for the purposes of policy development.
<p>TasNetworks</p>	<ul style="list-style-type: none"> The scope of the ISP potentially extends far beyond the NEO and RIT-T. Further consideration should be given to the ISP scope definition and its relationship with other elements of the regulatory planning framework. 	<ul style="list-style-type: none"> The scope of the ISP is limited by the NEO and AEMO’s National Transmission Planner functions under the NEL. The scope of the ISP is broader than the RIT-T because it is a whole of system plan rather than the project specific approach of the RIT-T. The draft Rules establish a cohesive framework where the RIT-Ts assess the best solution to meet the power system need identified in the RIT-T, and the outcome of the RIT-T process is validated via a feedback loop.

2.14 Timing of PADRs

Respondents	Comment	ESB response
ENA, TasNetworks + TransGrid	<ul style="list-style-type: none"> Does not support a fixed deadline (rather 'sufficient time' should be granted) for publication of PADR following publication of ISP given the need for flexibility for efficient transmission investment. Does not support the reduction in the timeframe for RIT-T assessments from 12 to 9 months. 	<ul style="list-style-type: none"> The draft Rules establish a framework where the time available to prepare a PADR will reflect the urgency of the project (a PADR cannot be required earlier than six months after a final ISP is published). An extension will be available from the AER. As TNSPs will be able to adopt the identified need and parameters from the ISP, the modelling exercise for the PADR will be much simpler under the revised framework.
Energy Australia	<ul style="list-style-type: none"> AEMO should identify when the RIT-T process for each identified project should commence. 	<ul style="list-style-type: none"> The draft Rules establish a framework where the time available to prepare a PADR will reflect the urgency of the project. TNSPs will have at least 6 months to prepare a PADR, with the timeframe depending on the priority and lead time of the project.
ERM	<ul style="list-style-type: none"> Where the ISP may identify the potential for beneficial network development over the longer term, the RIT-T process for a specified network development should only commence on the basis of the projected timing of the forecast future need identified in the ISP. The date of the commencement of the PADR could potentially be set by the AER. 	<ul style="list-style-type: none"> The draft Rules establish a framework where the time available to prepare a PADR will reflect the urgency of the project. TNSPs will have at least 6 months to prepare a PADR, with the timeframe depending on the priority and lead time of the project. The AER will have a role in approving requests for an extension to the deadline for publishing a PADR.

2.15 Transitional arrangements

Respondents	Comment	ESB response
CEC	<ul style="list-style-type: none"> Any new provisions established through this consultation process apply to projects that are already under construction and subsequently identified through the 2020 ISP. 	<ul style="list-style-type: none"> The draft Rules include transitional arrangements that enable the new framework to apply to projects identified in the 2020 ISP, including projects that have already commenced their RIT-T.
ENA	<ul style="list-style-type: none"> For the purposes on the 2020 ISP, transitional provisions in the NER should "deem" AEMO to have complied with the AER guidelines. 	<ul style="list-style-type: none"> The ESB agrees.
TransGrid	<ul style="list-style-type: none"> TNSPs should have the opportunity to apply new provisions to projects that are identified in the 2020 ISP as priority projects but have already commenced under the existing RIT-T process where 	<ul style="list-style-type: none"> The ESB agrees.

this could result in more timely and efficient outcomes for consumers.

2.16 Other matters

Respondents	Comment	ESB response
PIAC	<ul style="list-style-type: none"> PIAC's submission proposes a model for allocating the costs associated with strategic transmission projects. 	<ul style="list-style-type: none"> The ESB has shared PIAC's submission with the AEMC, so it can be considered in the context of COGATI. The actionable ISP review is focussed on how to give effect to system-wide planning and it does not encompass cost allocation.
Snowy Hydro	<ul style="list-style-type: none"> 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. These should include KerangLink & Bannaby Link. 	<ul style="list-style-type: none"> The NSW and Federal governments recently announced early works funding for QNI. Going forward, the actionable ISP framework is expected to expedite the regulatory approvals process.
Spark Infrastructure	<ul style="list-style-type: none"> Although we disagree with the need to underwrite private investment in principle, we acknowledge that in the current environment of investor uncertainty, this has become necessary if these projects are to proceed. The regulatory risk associated with delivering the projects identified in the ISP should not be underestimated. These risks include the ability to attract capital, ex ante & ex post regulatory risk. Construction companies who take on these risks on a regular basis demand returns at least 3-4 times the current regulated return. 	<ul style="list-style-type: none"> The NSW and Federal governments recently announced early works funding for QNI. Going forward, the actionable ISP framework is expected to expedite the regulatory approvals process.

C Abbreviations and Technical Terms

AEC	Australian Energy Council
AEMC	Australian Energy Market Commission
AEMO	Australian Energy Market Operator
AER	Australian Energy Regulator
CBA	Cost Benefit Analysis
CEC	Clean Energy Council
COAG EC	Council of Australian Governments Energy Council
ECA	Energy Consumers Australia
ENA	Energy Networks Association
ESB	Energy Security Board
EUAA	Energy Users Association of Australia
MEU	Major Energy Users
NEL	National Electricity Law
NEM	National Electricity Market
NER	National Electricity Rules
NSCAS	Network Support and Control Ancillary Services
NTNDP	National Transmission Network Develop Plan
PIAC	Public Interest Advocacy Centre
RIT-T	Regulatory Investment Test for Transmission
REZ	Renewable Energy Zone
SACOSS	South Australian Council of Social Services
TNSP	Transmission Network Service Providers

Contact details:
Energy Security Board
E: info@esb.org.au
W: <http://www.coagenergycouncil.gov.au/energy-security-board>