



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

Recommendation for
National Electricity Amendment (Integrated
System Planning) Rule 2020
Decision Paper
March 2020

Energy Security Board

Recommendation under section 90F of the National Electricity Law for the making of the *National Electricity Amendment (Integrated System Planning) Rule 2020*

Pursuant to section 90F of the *National Electricity Law*, the Energy Security Board unanimously recommends the making of the *National Electricity Amendment (Integrated System Planning) Rule 2020* (recommended ISP Rules) to the Council of Australian Governments Energy Council, sitting as the Ministerial Council on Energy (MCE).

As required by section 90F(4) of the *National Electricity Law*, the Energy Security Board makes the recommendation, being satisfied that:

- a) the recommended ISP Rules are in connection with energy security and reliability of the NEM or long-term planning for the NEM; and
- b) the recommended ISP Rules are consistent with the National Electricity Objective (see Chapter 4 of the Decision Paper); and
- c) consultation has been undertaken by the Board in accordance with the requirements determined by the MCE in the “MCE Approved Rule Recommendation Process Guide” [See Attachment 2 Summary of submissions and ESB’s response].

Agreed

Dr Kerry Schott, Chair

David Swift, Deputy Chair

John Pierce, Chair, AEMC

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Executive Summary

The Energy Security Board (ESB) has developed a set of changes to the National Electricity Rules (Rules) to convert the Integrated System Plan (ISP) into action. The ESB recommends to the Council of Australian Government (COAG) Energy Council the making of the *National Electricity Amendment (Integrated System Planning) Rule 2020* (hereafter “ISP Rules”). If the COAG Energy Council approves the making of the recommended ISP Rules, the scheduled commencement date is 1 July 2020.

The ISP Rules are intended to streamline the regulatory processes for key projects identified in the ISP whilst retaining a rigorous cost benefit assessment.

Under the recommended ISP Rules, AEMO will conduct an extensive and transparent consultation process in order to publish an ISP at least every two years. The ISP modelling would be designed to meet a set of defined power system needs, and also public policies that meet specified criteria. When selecting the optimal development path for the power system, AEMO would adopt a methodology that manages risk and uncertainty in the long-term interests of customers. AEMO will publish the net present value of market benefits of different options under a range of scenarios and explain which development path it considers to be optimal and why.

In response to stakeholder feedback, the ESB has introduced two new checks and balances since the Consultation Draft ISP Rules:

- an expert ISP consumer panel to advise AEMO during the development of the ISP and
- an AER transparency review at key points in the ISP process.

Stakeholders may raise disputes in relation to the ISP, however there are strict criteria that confine disputes to matters of process, rather than re-litigating technical matters or outcomes. Where new information becomes available to AEMO that may materially change the outcome of a RIT-T that is already underway, AEMO can publish an update to the ISP.

The ISP will provide the overarching cost benefit analysis and risk assessment that specifies the identified need and one or more credible options to be considered in the RIT-T. The role of the RIT-Ts is to undertake a cost benefit analysis focussing on different technical solutions by looking in detail at engineering aspects, refining costs, considering alternate options, and staging.

The ISP replaces the Project Specification Consultation Report (PSCR), identifying the need that the transmission network investment should meet, together with a recommended project (called an ISP candidate option) that should be considered by the RIT-T. TNSPs will be required to publish a Project Assessment Draft Report (PADR) by the date set out in the ISP (not less than 6 months after the publication of the final ISP), unless the AER approves a request for an extension.

An ISP project that has passed a RIT-T can commence a revised contingent project process that enables the AER to consider the revenue required for the ISP project.

Figure 1 provides indicative examples of an actionable ISP process for a project that should commence in the short term and one that is expected to be required after the next ISP.

The recommended ISP Rules include the following key changes to the National Electricity Rules:

- Converting the requirement for AEMO to prepare the National Transmission Network Development Plan (NTNDP) each year into a new regime for AEMO to prepare an ISP at least every two years including a draft stage allowing consultation.
- Integrating the ISP with existing planning processes conducted under the NER by TNSPs, such as the production of Transmission Annual Planning Reports.

- Changing the RIT-T rules for ISP projects to streamline the process to recognise the work that would already have been done for the ISP and avoid duplication of planning and modelling by the TNSPs.
- Enabling actionable ISP projects that have passed the RIT-T to be able to commence a revised contingent project process.
- Rules to deal with transitional issues, including recognition of the 2020 ISP as meeting the new rules and the application of the new rules to RIT-Ts currently underway.

1. Introduction

Key points

- This Decision Paper and the final recommended *National Electricity Amendment (Integrated System Planning) Rule 2020* recommends changes to convert the Integrated System Plan into action.
- The ESB has developed the Rule change package in accordance with section 90F of the National Electricity Law (NEL). Under this process the ESB recommends Rule changes to the COAG Energy Council (sitting as the Ministerial Council on Energy (MCE)), which can then recommend to the South Australian Minister that the amending Rule be made.
- The COAG Energy Council is scheduled to consider the ESB's recommendations on 20 March 2020.

1.1 Purpose & context

The purpose of this document is to describe amendments in the *National Electricity Amendment (Integrated System Planning) Rule 2020* to give effect to the Energy Security Board's (ESB's) proposed reforms to convert the Integrated System Plan (ISP) into action.

In August 2018, the COAG Energy Council asked the ESB to report on how the ISP would be converted into an actionable strategic plan. At the December 2018 COAG Energy Council meeting, the ESB submitted its ISP Action Plan, which outlined 12 recommendations on how to convert the ISP into action. Ministers agreed that the ESB should develop measures to operationalise the ISP. To this end, the ESB published a consultation paper¹ in May 2019 and draft ISP Rules in November 2019.² The recommendations outlined in this document and included in the recommended final ISP Rule take into account submissions to the ESB's consultation on the draft Rules.

The ESB received non-confidential submissions from twenty organisations, including from industry groups, generators, network and customer groups.³ Submissions are summarised, together with the ESB's response, in an accompanying document. The ESB has subsequently considered issues raised in submissions and developed a set of final recommendations for COAG Energy Council. This paper summarises the ESB's recommendations, including a description of changes made to the Consultation draft ISP Rules.

1.2 Legislative basis

The ESB has undertaken this Rule change process in accordance with section 90F of the National Electricity Law (NEL). The ESB may recommend rules to the COAG Energy Council (as MCE) if the following requirements are satisfied:

- the Rules are in connection with energy security and reliability of the NEM or long-term planning for the NEM;
- the Rules are consistent with the national electricity objective; and
- there has been consultation on the Rules in accordance with any requirements determined by the COAG Energy Council.

¹ <http://www.coagenergycouncil.gov.au/publications/consultation-draft-isp-rules>.

² Energy Security Board, *Converting the ISP into action - Consultation on Draft Rules*, November 2019. Available at: <http://www.coagenergycouncil.gov.au/publications/consultation-draft-isp-rules>.

³ As above.

Any final Rules will be made by the South Australian Minister for Energy on the recommendation of the COAG Energy Council. The COAG Energy Council has approved an “ESB Rule Recommendation Process Guide”. The release both of the Consultation Paper and the Draft ISP Rules was carried out in accordance with that guidance, which includes public consultation and responses to submissions.

If the COAG Energy Council approves the making of the ESB’s recommended amending Rules (the *National Electricity Amendment (Integrated System Planning) Rule 2020*), the scheduled commencement date is 1 July 2020. The ESB does not intend for the ISP rules to apply in the Northern Territory.

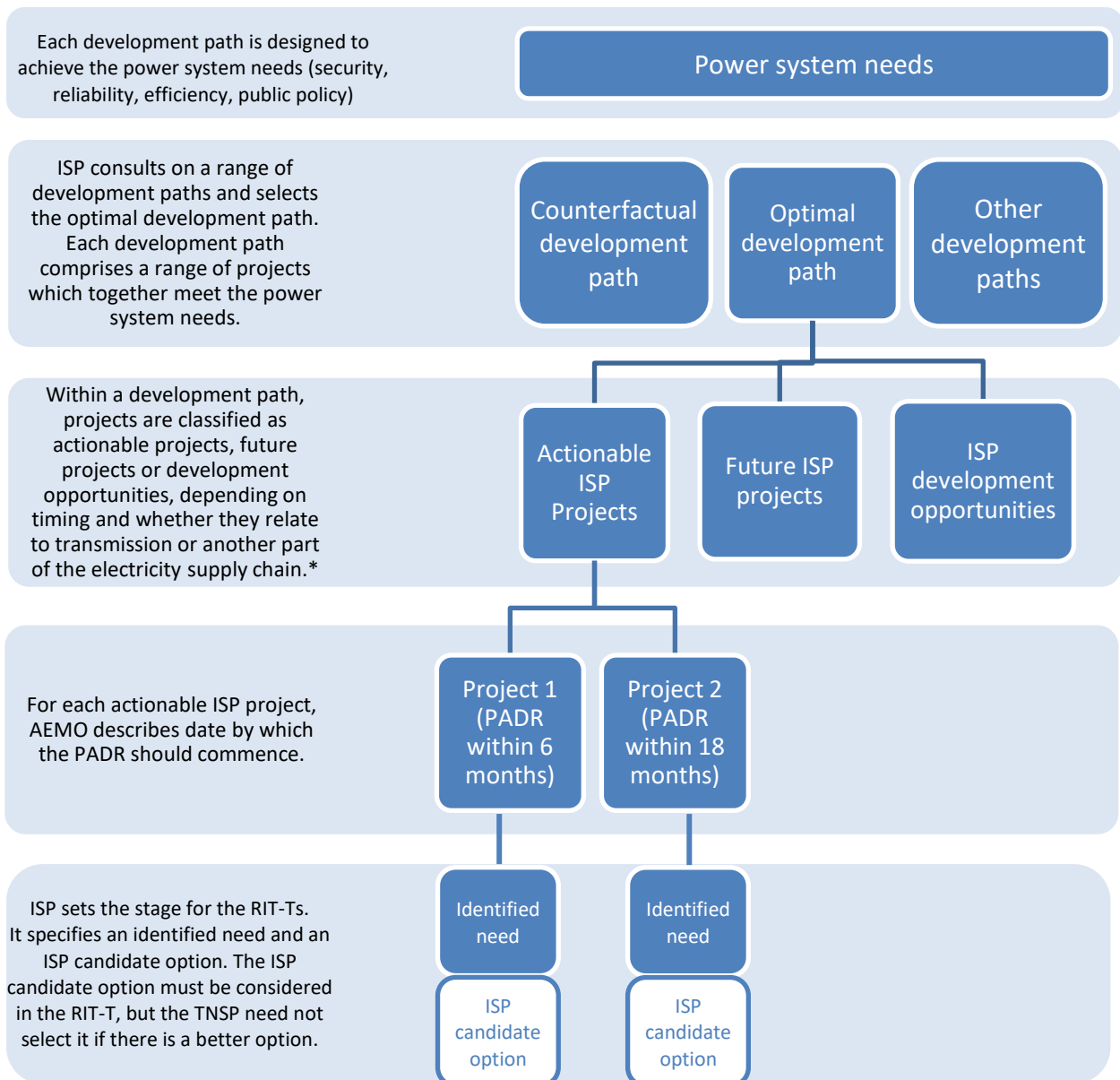
2. Recommendations

This Chapter 2 provides an overview of the framework recommended by the ESB. Chapter 3 details where key elements of the proposed framework constitute modifications to the Consultation Draft ISP Rules. This chapter summarises the key steps proposed for:

- developing an ISP
- implementing the ISP
- transitional arrangements.

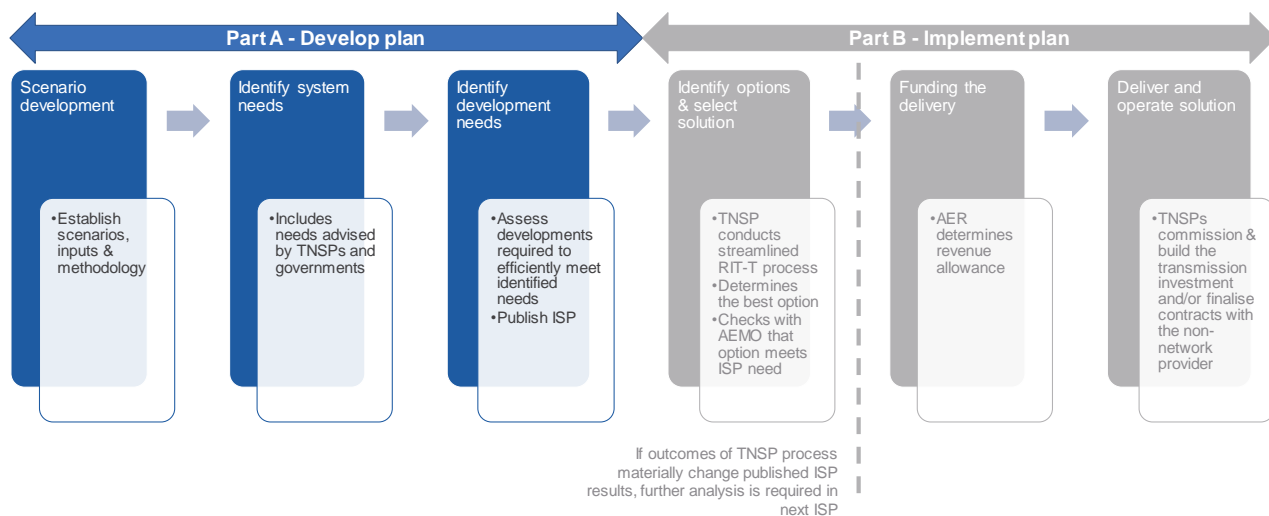
Figure 1 provides an overview of the key concepts underpinning the actionable ISP framework.

Figure 1 Overview of actionable ISP key concepts



* Transmission projects may include non-network options, as per the current RIT-T framework.

2.1 Developing the ISP



Key points:

Under the recommended ISP Rules:

- AEMO will publish an ISP every two years no later than 30 June.
- The purpose of the ISP is to identify the optimal development path, which is the suite of power system developments that efficiently meets a defined set of power system needs and public policy needs.
- The ISP will specify actionable transmission projects (termed 'actionable ISP projects'). For other types of projects (termed 'ISP development opportunities'), such as new generation developments, the role of the ISP will be to inform market participants and policy makers.
- AEMO will conduct a comprehensive stakeholder engagement process for the development of the ISP, including a consultation on the inputs, assumptions and methodology that underpin the ISP, followed by a consultation on the draft ISP results.
- AEMO will be required to establish an ISP consumer panel to provide expert technical input from a consumer perspective.
- The AER will be responsible for making two sets of guidelines that govern how AEMO develops the ISP and how TNSPs carry out RIT-Ts in relation to actionable ISP projects: Best Practice Forecasting Guidelines and Cost Benefit Analysis Guidelines.
- The AER will also review and publish a report on the Inputs and Assumptions Report and draft ISP to ensure that AEMO has transparently explained its key inputs and assumptions and modelling results.
- The ISP optimal development path will be required to have a positive net benefit for the central case, but it need not have the highest net benefit in the central case. AEMO will have some flexibility in its approach to scenarios, modelling and therefore choice of optimal development path.
- For transmission projects, the ISP will specify the identified need, an ISP candidate option and the date by which a PADR for that identified need is required to be published by the relevant TNSP.
- Proponents of non-network options will have the opportunity to submit their proposals in response to the draft ISP.
- Stakeholders will have the opportunity to raise disputes in relation to the ISP process.
- Where new information becomes available, AEMO may publish an update to the ISP that highlights the new information and the impact on the ISP development path.
- In recognition of the interactions between the ISP process and the TNSP's annual planning process, the ESB proposes to change the annual deadline for the Transmission Annual Planning Reports to 31 October.

2.1.1 Scope of ISP

Location in ISP Rules: clauses 5.22.2 and 5.22.13

The scope of the ISP reflects AEMO's National Transmission Planner functions under the National Electricity Law. TNSPs retain the ability to conduct RIT-Ts outside the ISP framework. The recommended ISP Rules specify that the ISP is a National Transmission Planner function, which also has the effect that AEMO's National Electricity Law information gathering powers apply.

2.1.2 Stages in developing the ISP

ISP purpose

Location in ISP Rules: clause 5.22.2

The purpose of the ISP is to establish a whole of system plan for the efficient development of the power system that achieves power system needs for a planning horizon of at least 20 years for the long-term interests of the consumers of electricity.

The ISP identifies the optimal development path, which is the suite of projects that efficiently meets a defined set of power system needs. The ESB proposes that power system needs are:

- the market reliability standard⁴
- relevant transmission reliability standards
- power system security.

These needs must be achieved having regard to economic efficiency, public policy and good electricity industry practice. With respect to public policy, AEMO may incorporate State and Federal government environmental and energy policies into the ISP's central case where there is a current policy commitment with clear articulation of when and how it impacts the power system, and one of the following sets of criteria are met:

1. commitment has been made in an international agreement;
2. the policy has been enacted in legislation;
3. there is a regulatory obligation in relation to a policy;
4. there is material funding allocated in a State or Federal government budget;
5. the COAG Energy Council, or the SCO has advised AEMO to incorporate the policy.

In addition, AEMO may prepare sensitivities showing the impact of State and Federal government environmental and energy policies where a participating jurisdiction has advised AEMO to model the policy.

⁴ Under NER 3.9.3C, the reliability standard for generation and inter-regional transmission elements in the national electricity market is a maximum expected unserved energy (USE) in a region of 0.002% of the total energy demanded in that region for a given financial year. In simple terms, the reliability standard requires at least 99.998 per cent of forecast customer demand to be met each year in each region.

ISP consultation process

Location in ISP Rules: clauses 5.22.7 - 5.22.11

The recommended ISP Rules provide for a governance framework that balances the need for rigorous stakeholder consultation engagement to deliver accountability with the need for timely decision making for both the development and implementation of the ISP.

AEMO must publish and consult on a draft ISP prior to publishing the final ISP. AEMO must also conduct a full consultation process on the inputs and assumptions (such as fuel costs) that feed into the ISP as required by AER guidelines.⁵

AEMO must establish an ISP consumer panel to provide expert technical input on consumer issues during the development of the ISP. The panel is discussed further in section 3.4.1.

In establishing a publication timetable for the ISP, the ESB has sought to strike an appropriate balance between the need for timely updates and the need for in-depth consultation. To incorporate the latest available forecasts (which are based on analysis of outcomes during the peak summer period) the ESB proposes that the final ISP will be published at least every two years by 30 June. AEMO will publish and maintain a timetable of key consultation dates.

The AER will review and report on the Inputs and Assumptions Report and draft ISP to ensure that AEMO has transparently explained its key inputs and assumptions and modelling results. If the AER considers that the document is not sufficiently transparent, then AEMO will be required to publish further information and give stakeholders the opportunity to respond. The transparency review is discussed further in section 3.4.2.

Credible options

Location in ISP Rules: clause 5.22.10

For actionable ISP projects, the ISP replaces the first stage of the RIT-T; the Project Specification Consultation Report (PSCR). The PSCR is currently the mechanism by which TNSPs identify the set of credible options to be considered in the RIT-T.

The recommended ISP Rules require the draft ISP to describe credible network and non-network options identified by AEMO during development of the ISP, together with options identified in the TNSPs' planning processes that are communicated to AEMO via the joint planning process. Stakeholders would be consulted on the transmission investment options to be included in the ISP modelling as part of the Inputs and Assumptions consultation. Stakeholders will have the opportunity to put forward alternative credible options, including non-network options.

At the same time as time it publishes a draft ISP, AEMO must also publish a formal call for non-network options, that fulfils the role currently fulfilled by the Project Specification Consultation Report. The call for non-network options describes the identified need, and the technical characteristics required of any non-network option. In preparing the call for non-network options, AEMO would work with TNSPs via the joint planning process.

Proponents of non-network options would have to submit their proposal within 12 weeks of publication of the draft ISP. This means that they would have a longer consultation period than for other types of submissions to the draft ISP.⁶

⁵ These are also relevant for other publications such as the Electricity Statement of Opportunities.

⁶ Other types of submissions on the draft ISP will be subject to a consultation period of at least 30 business days.

If a stakeholder puts forward a non-network credible option in response to the draft ISP, the final ISP would set out AEMO's preliminary view of whether the alternative credible option is reasonably likely to meet the identified need, and therefore whether the TNSP should include an assessment of the alternative credible option in its Project Assessment Draft Report (PADR). In making this decision, AEMO would work with TNSPs via the joint planning process.

Selecting the optimal development path

Location in ISP Rules: clause 5.22.6

AEMO would assess and compile a range of development paths, each path would comprise of a set of credible options that jointly meet the power system needs.

From the various development paths, AEMO would select the optimal development path. This would be the development path that efficiently achieves power system needs in the long-term interests of customers, explained below.

The optimal development path comprises:

- **actionable ISP projects**, which are transmission projects⁷ for which a PADR must be issued within 24 months, as specified in the ISP;
- **future ISP projects**, which are transmission projects that are not required until further into the future, so the need for the project can be reassessed as part of the next ISP; and
- **ISP development opportunities**, which are projects that do not relate directly to the transmission network, such as distribution, generation, storage or demand response projects.⁸ For ISP development opportunities, the ISP's role is to provide information that helps to inform commercial decision making.

The ISP involves a cost benefit analysis of various development paths. Figure 1 at the beginning of this chapter illustrates how power system needs, development paths, and the various projects types relate to each other.

The scale of the current energy transformation brings a high level of uncertainty to long term planning. In light of this uncertainty, AEMO would have some flexibility in its approach to scenarios, modelling and therefore choice of optimal network development path (including a least regrets approach or an alternative). The ISP would not be required to apply a probability weighted approach to prepare a single net benefit number across all scenarios. Rather, AEMO would transparently consult on the net market benefits associated with each development path under each scenario.

The approach to undertaking a cost benefit analysis needs to adequately capture the spread of potential future "worlds" and the value that having optionality in the system can bring for consumers. In this context, "optionality" means the ability to respond flexibly to future developments without being locked into a specific path.

For instance, "optionality" could involve the purchase of easement rights that could expedite the construction of a new transmission line to maintain reliability if a certain event occurs (such as an

⁷ This means either a transmission asset or a non-network option relating to a transmission service.

⁸ For the avoidance of doubt, a distribution, generation storage or demand response project could also be actionable ISP project where it is providing a substitute for a prescribed transmission service under the framework for non-network options.

earlier than anticipated coal generator closure), but does not require customers to bear the full costs of constructing the line until there is greater clarity about when, or if, it will be needed. The AER's Cost Benefit Analysis Guidelines will describe how staged projects are given effect in the ISP/RIT-T process.

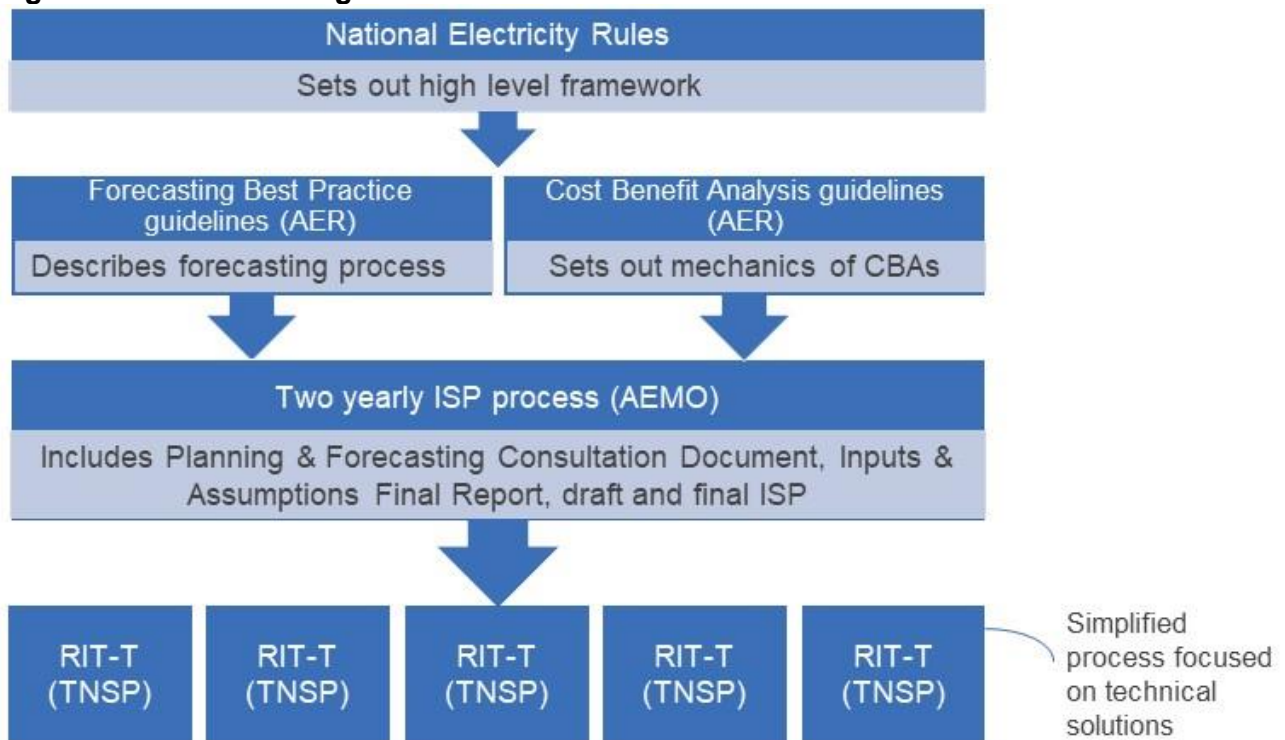
The ISP assesses the costs and benefits of the various potential development paths across a range of scenarios, using the classes of costs and benefits that are consistent with the RIT-T. The optimal development path is required to have a positive net benefit for the most likely scenario, but it does not need to have the highest net benefit in the most likely scenario.

2.1.3 Governance framework

Following consideration of stakeholder feedback on the Consultation Draft ISP Rules, the ESB is recommending a two-stage AER transparency review of the ISP. This new feature of the governance framework is discussed in section 3.4.2.

The high-level features of the governance framework are outlined in Figure 2.

Figure 2 Actionable ISP governance framework



The AER has commenced consultation on the CBA guidelines and Forecasting Best Practice Guidelines⁹, with a view to issuing a final determination by the middle of 2020 subject to COAG approval of the ISP Rules package.

⁹ AER, *Guidelines to make the integrated system plan actionable*, November 2019. Available at: <https://www.aer.gov.au/networks-pipelines/guidelines-schemes-models-reviews/guidelines-to-make-the-integrated-system-plan-actionable>

Forecasting Best Practice Guidelines

Location in ISP Rules: clause 5.22.5

The role of the Forecasting Best Practice Guidelines would be to describe at a high level the process that AEMO must apply when preparing the scenarios, inputs and assumptions that feed into the ISP, as well as the methodology for the ISP.

These guidelines already exist and apply to AEMO in the context of the Retailer Reliability Obligation, however their scope would be expanded to include forecasting used to develop the ISP.

The Forecasting Best Practice Guidelines are intended to provide:

- AEMO with guidance and direction on the process to follow in preparing an ISP and how engagement with stakeholders should occur.
- Confidence to market participants regarding the quality and transparency of the outcomes of the ISP and the supporting processes conducted by AEMO.

The forecasts relevant to the ISP would be those used in developing reasonable future scenarios, and costs and market benefits of different development paths over a 20-year time horizon. The forecasting best practice guideline would require AEMO to present, and test through consultation, the details of AEMO's methodology for these forecasts.

Cost Benefit Analysis Guidelines

Location in ISP Rules: clause 5.22.5

The CBA Guidelines, to be prepared and maintained by the AER, would be used to ensure that there is alignment between the ISP and RIT-T.

The mandatory guideline would set out how:

- AEMO approaches the cost benefit analysis and market modelling used to identify the ISP optimal development path; and
- TNSPs conduct RIT-Ts for ISP projects (see section 2.2).

In terms of the development of the ISP, the CBA Guidelines would cover the following matters:

- The objective that AEMO should seek to achieve when:
 - characterising the counterfactual development path¹⁰
 - selecting a set of development paths for assessment
 - describing the identified need to be examined by TNSPs in their RIT-T.
- The framework used to select the optimal development path, including the quantitative cost benefit analysis that should be undertaken.

¹⁰ The counterfactual development path is the status quo or reference option against which costs and market benefits of alternative options are assessed in a cost benefit analysis.

Given the diversity of potential energy futures, the ESB wishes to avoid an unduly prescriptive or formulaic approach to the CBA Guidelines and selection of the optimal development path (see section 2.1.2).

In preparing the CBA Guidelines, the AER would be required to recognise the risks to customers associated with uncertainty including risks associated with over-investment, under investment and investment that is too early or too late.

Dispute resolution on ISP

Location in ISP Rules: Rule 5.23

The ESB's recommendation to COAG EC on dispute resolution recognises the need for appropriate checks and balances and also the difficulties of re-opening a complex, interlinked decision that has been the subject of a two-year consultation process.

Stakeholders would be able to raise a dispute on matters of process within 30 days of the publication of the final ISP, subject to the following criteria:

- A disputing party should have made a submission to a prescribed ISP process, which includes the process to prepare an Input, Assumptions and Scenarios Report, an ISP methodology and a Draft ISP.
- The disputing party must demonstrate a prima facie case of the failure of process and that the dispute is not misconceived, lacking in substance or vexatious.
- if a process failure has occurred, the AER may determine that no remedial action is required or, if it considers it necessary, may direct AEMO to remedy the process failure. This may include consideration by AEMO whether an ISP update is necessary.
- The raising of a process dispute or the making of a determination by the AER does not affect the validity or stay the operation of the ISP.

The ESB considers that stakeholders are best served by opportunities for active engagement throughout the ISP process to identify and debate issues when decision making is occurring. This provides a meaningful, contemporaneous opportunity to participate in AEMO ISP decision making during its two year development process.

The process dispute mechanism would be an additional safeguard that AEMO has adhered to processes required by the Rules and AER guidelines in relation to preparation of key elements of decision making.

2.1.4 Updates to the ISP

Location in ISP Rules: clause 5.22.12

There are a number of circumstances under which AEMO would be required to, or have the option of, updating the ISP.

AEMO would be required to issue an ISP update in the event that:

- A TNSP's preferred option for an actionable ISP project does not align with the ISP, for instance, because its costs have increased to the extent that the project no longer forms part of the optimal development path (see section 2.2.3 for more detail).
- When reviewing the ISP in light of a RIT_T proponent's preferred option, AEMO finds that there is a material change to the need for or characteristics of an actionable ISP project.

AEMO would have the discretion to publish an update to the ISP where new information becomes available to AEMO that may materially change the outcome of a RIT-T that is either commenced, or due to be commenced prior to the publication of the next ISP. In making a decision on whether an update to the ISP is required, and whether consultation on the update is required, AEMO would follow the AER Best Practice Forecasting Guidelines.

If AEMO were to choose to publish an update to the ISP in this circumstance, then:

- AEMO would highlight the new information and the impact on the ISP development path.
- AEMO would apply the new information to the existing ISP model. Any changes to the model itself would be consulted upon as part of the subsequent ISP.
- If there were found to be significant changes to the optimal development path, then AEMO would conduct a round of consultation on the draft result. In making a decision on whether an update to the ISP is required, and whether consultation on the update is required, AEMO would follow the AER Best Practice Forecasting Guidelines.

2.1.5 Interactions with TNSP planning processes

Joint planning framework

Location in ISP Rules: clause 5.14.4

Engagement between AEMO and TNSPs in the development of the ISP would be a key part of the ISP regime. This engagement would not be linear or one sided, but would be a two-way, ongoing engagement throughout the ISP development process. This would ensure that the most up to date information is shared among AEMO and TNSPs.

The recommended ISP Rules include new provisions (compared to the Consultation Draft ISP Rules) that would require TNSPs and AEMO to engage with each other as part of the transmission planning process.

Interactions with Annual Planning Reviews

Location in ISP Rules: clause 5.12.2

The current regulatory framework establishes linkages between the Transmission Annual Planning Reports (TAPRs) and the National Transmission Network Development Plan. All TNSPs must report on how their annual plans consider the system needs identified in the NTNDP. These linkages would be maintained in the new framework.

As the final ISP would be subject to a 30 June deadline, there would be a timing issue since TAPRs are currently required to be published by 30 June each year. To give the TNSPs a reasonable amount of time to prepare their TAPRs, the ESB proposes to move the TAPR deadline to 31 October, in both final ISP and non-ISP years. Each TAPR should report on how the TNSP's plan compares with the projects in the latest available ISP or ISP update.

2.1.6 System security reports

Location in ISP Rules: new Rule 5.20

The recommended ISP Rules replace the current requirements of the old NTNDP (Rule 5.20) with a regime that allows for stand-alone documents for annual "System Security Reports", NSCAS Reports, System Strength Reports and Inertia Reports. This is instead of these reports

being incorporated into the ISP itself, since this would entail that the reports are published only every second year.

The content requirements for each report would be the same as under the NTNDP framework, and these reports would continue to be published at least annually on the ISP database. This would allow AEMO to be more agile in issuing NSCAS gaps, system strength shortfalls and inertia shortfalls as power system conditions change. Specifically:

- The content of the NSCAS 'methodology' (NSCAS description and NSCAS quantity procedures relocated from clause 3.11.4) would remain unchanged.
- The System Strength Requirements Methodology and the Inertia Requirements Methodology would remain unchanged.
- For each of the system security methodologies, AEMO must develop changes in accordance with the Rules consultation procedures.

AEMO would still be required to consider power system security as part of its ISP analysis, and the system security reports would form part of the supporting materials that would be published with the ISP.

2.1.7 Allocation of planning costs to TNSPs

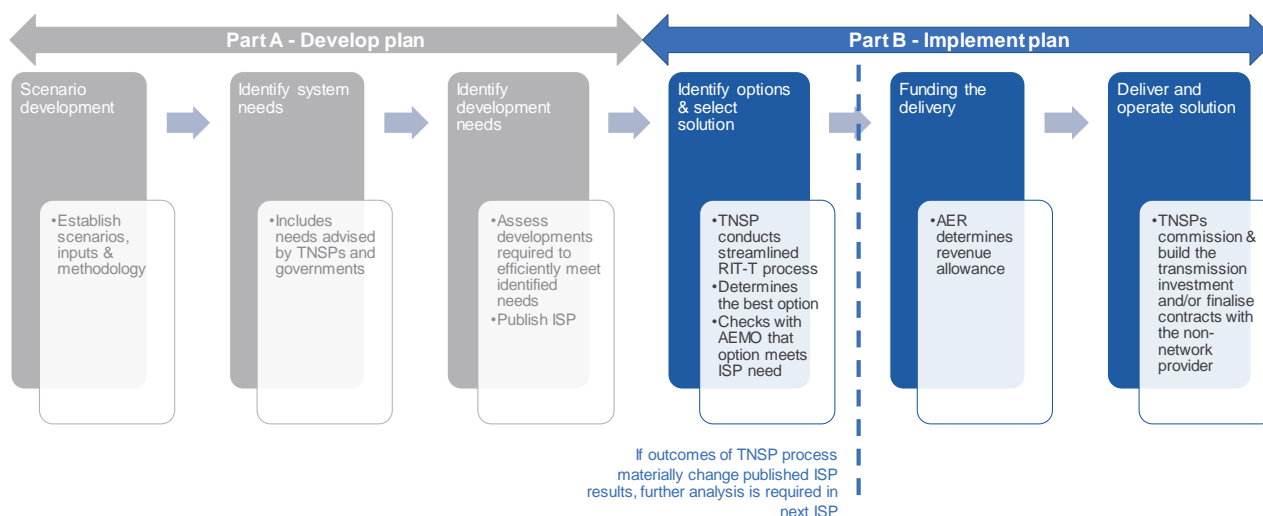
Location in ISP Rules: Amendments to clauses 2.11.1, 6A.22.1
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The ISP Rules include an amendment to clause 2.11.1 to enable the allocation of the costs for National Transmission Planner (NTP) services provided by AEMO to TNSPs, together with an amendment to Chapter 6A to permit TNSPs to recover the costs.

The NTP costs are currently paid by Market Customers (retailers) under the existing participant fee determination. The proposed amendment would allow the allocation of the costs of NTP functions to TNSPs. This is consistent with the key 'reflective of involvement' criterion under the Rules for allocating AEMO's budgeted revenue requirements.

AEMO proposes to undertake a consultation process to determine how the NTP costs are to be allocated to the individual TNSPs.

2.2 Implementing the ISP



Key points:

Under the recommended ISP Rules:

- For actionable ISP projects, TNSPs would be required to publish a Project Assessment Draft Report (PADR) by the date specified in the ISP (not less than 6 months after the publication of the final ISP) unless the AER approves a request for an extension.
- RIT-Ts for ISP projects will be streamlined, recognising the work already done by the ISP and avoiding duplication of planning and modelling by the TNSPs.
- The ISP would replace the Project Specification Consultation Report (PSCR), specifying the identified need and an ISP candidate option that should be considered by the RIT-T proponent.
- The role of the RIT-Ts would be to focus on different technical solutions by looking in detail at engineering aspects, refining costs, considering alternate options, and staging.
- TNSPs may rely on the ISP for the key modelling inputs to be used in the RIT-Ts, as set out in the Cost Benefit Analysis Guidelines.
- There is a feedback loop whereby the TNSP obtains written advice from AEMO as to whether RIT-T preferred option aligns with the ISP.
- A mechanism would be created that has the effect of allowing an actionable ISP project that has passed a RIT-T to be able to commence an amended contingent project process.
- The Last Resort Planning Power will be removed as it will be superseded by the actionable ISP framework.
- The AEMC is required to commence a review of the governance of the ISP framework after 30 June 2025.

2.2.1 Scope of RIT-Ts for actionable ISP projects

Location in ISP Rules: Rule 5.16A

The current Rules for the RIT-T will remain largely unchanged for non-ISP projects. Therefore, there will be two types of RIT-T assessment. The proposed changes to the RIT-T framework for actionable ISP projects are described in more detail in section 2.2.2 below.

The ESB proposes that the ISP should provide the overarching cost benefit analysis that identifies the development needs, and the RIT-Ts for actionable ISP projects would examine the costs and benefits of different technical solutions. RIT-Ts for actionable ISP projects would be assessed under a different process from the current RIT-T framework, and instead, a streamlined

version of the RIT-T would be set out in a new clause of the Rules, with further detailed requirements set out in the Cost Benefit Analysis Guidelines.

The new form of the RIT-T would involve a detailed assessment of specific project implementation options and their costs and benefits, including routes, technology options, and construction options. The RIT-Ts would also explore the potential for option value arising from a staged approach to investment decision making.

Ensuring alignment with the ISP

Location in ISP Rules: Clauses 5.15A.3, 5.16A.5

The recommended ISP Rules framework is designed to prevent misalignment between the ISP and RIT-T.

For each actionable ISP project, the ISP will describe the identified need, together with a proposed credible option that meets the identified need known as the ISP candidate option.¹¹ In the RIT-T, the TNSP will consider options for meeting the identified need, including the ISP credible option, non-network options put forward following the publication of the draft ISP, and any new credible options not previously identified that meet the identified need. TNSPs are not required to reassess alternate credible options in the RIT-T if those options have already been considered and rejected under the ISP process.

The CBA Guidelines will describe the objective that AEMO must seek to fulfil when describing an identified need in the ISP. The guidelines will need to strike a balance between describing an identified need in a way that permits alternatives to be considered whilst maintaining the integrity of the whole of system plan.

Feedback loop

The proposed framework incorporates a feedback loop whereby a TNSP seeks advice from AEMO as to whether the results of the RIT-Ts align with the ISP. Prior to submitting a contingent project application to the AER, the TNSP must obtain written advice as to whether:

- the RIT-T preferred option meets the identified need set out in the ISP
- the cost of the RIT-T preferred option does not change the project's status as part of the optimal development path.

AEMO will assess whether the preferred option selected by the TNSP is consistent with the optimal development path. If circumstances have changed such that the project is no longer part of the optimal development path (for instance, because the cost of the TNSP's preferred option is higher than the assumed cost of the ISP candidate option), then it will be necessary for AEMO to issue an update to the ISP using the new information.

If the TNSP's preferred option is not consistent with the optimal development path, then it will not be eligible for regulated funding as an ISP project (see section 2.2.3).

Consideration of non-network options

Location in ISP Rules: 5.15A.3, 5.16A.4

¹¹ If the ISP modelling concludes that there is an immaterial difference in net market benefits between two or more credible options, then the ISP may describe more than one ISP candidate option to be explored at a more granular level via the RIT-T.

Stakeholders will have the opportunity to respond to a call for non-network options, to be issued by AEMO at the same time as the draft ISP.

Where the final ISP indicates that a non-network option meets or potentially meets the identified need, the TNSP must assess the non-network option in their PADR. If the final ISP indicates that a non-network option does not meet the identified need, the TNSP is not obliged to assess non-network option in their PADR.

PADRs may also consider any alternative credible options identified during the course of the TNSP's planning process. While the framework is designed to be flexible, in practice the ESB expects TNSPs and AEMO to work closely in the development of the ISP so that all relevant credible options can be assessed as part of the ISP process.

Timing of RIT-Ts

Location in ISP Rules: Clause 5.16A.4

The recommended ISP Rules put in place the deadline for the publication of the PADR for actionable ISP projects, which must be no earlier than 6 months after the publication of the final ISP. When AEMO determines the date by which the RIT-T for an actionable ISP project should commence, it would balance the urgency of the identified need with the benefits of giving the TNSP additional time to prepare its PADR.

TNSPs could seek an extension from the AER if they required additional time. Where ISP projects are not required until after the next ISP, the need and timing of these projects would be confirmed in the next ISP. Future ISP projects would only become actionable ISP projects when the ISP triggers a PADR to occur prior to the next ISP.

2.2.2 Governance framework

A number of revisions are required for the RIT-T Rules and application guidelines for projects as a result of the introduction of the ISP framework.

Conduct of RIT-Ts for actionable ISP projects

Location in ISP Rules: Clauses 5.15A.3, 5.16A.4

The recommended ISP Rules include a number of changes to the current RIT-T framework to establish a RIT-T framework for actionable ISP projects with the following features:

- the obligation to prepare a PSCR would be removed.
- TNSPs would adopt the identified need/s described in the ISP.
- TNSPs would assess the ISP candidate option identified in the ISP, as well as any new credible options identified by the TNSP and any non-network options submitted in response to the draft ISP (if in AEMO's view the non-network option is reasonably likely to meet the identified need).
- TNSPs would not be obliged to consider credible options that have already been considered and rejected during the ISP process
- TNSPs could rely on the ISP central case for their inputs, assumptions, transmission development path, and to the extent possible, modelling including risk weightings (unless circumstances have materially changed, in which case, AEMO would issue an update to the ISP).

The ESB proposes that matters relating to RIT-Ts for ISP projects should be set out in the CBA Guidelines, reflecting that these RIT-Ts form part of an integrated system planning process.

The AER has commenced a consultation on the required revisions to the RIT-T and RIT-T application guidelines¹², with a view to issuing a final determination by the middle of 2020 pending COAG EC's approval of the recommended ISP Rules.

Dispute resolution on RIT-Ts

Location in ISP Rules: Rule 5.16B

Stakeholders could raise disputes in relation to RIT-Ts as per the current arrangements. Parties would not be able to dispute a RIT-T insofar as the RIT-T reflected outcomes that had been derived from the ISP in accordance with the Rules and CBA Guidelines.

2.2.3 Incorporating ISP projects into the TNSP's revenue determination

Location in ISP Rules: Clause 5.16A.5, Rule 6A.8

The recommended ISP Rules include amendments to the economic regulation framework to establish a mechanism so TNSPs receive funding to invest in actionable ISP projects.

The ESB recommends the creation of a mechanism that would allow an ISP project that has passed a RIT-T to be able to commence an amended contingent project process where all the following trigger events are met:

1. The ISP identifies the project as requiring a RIT T to be completed within the revenue determination period; and
2. The TNSP completes a RIT T that satisfies the RIT T requirements; and
3. AEMO confirms that the TNSP's preferred option meets the identified need set out in the ISP; and
4. AEMO confirms that the cost of the TNSP's preferred option does not change the project's status as part of the optimal development path; and
5. The amount applied for in the contingent project application is no greater than the cost assessed by AEMO in (4) above.

The recommended ISP Rules remove the preferred options assessment (clause 5.16.6) from the Rules as this would be duplicative and take additional time. The time available to the AER for making a contingent project determination would be the same as under the current contingent project framework.

2.2.4 Last resort planning power

Location in ISP Rules: Old Rule 5.22 (deleted)

The Last Resort Planning Power (LRPP) currently confers on the AEMC the ability to direct a TNSP to undertake a RIT-T where the AEMC assesses that an expected inter-regional constraint

¹² AER, *Guidelines to make the integrated system plan actionable*, November 2019. Available at: <https://www.aer.gov.au/networks-pipelines/guidelines-schemes-models-reviews/guidelines-to-make-the-integrated-system-plan-actionable>

is not being addressed by a TNSP. Under the new ISP framework, TNSPs would have an obligation to undertake a RIT-T for actionable ISP projects and publish a PADR within specified timeframes. The ESB proposes to remove the LRPP on the basis that it will be superseded by the actionable ISP framework.

2.3 Transitional arrangements

Location in ISP Rules: Chapter 11

It is necessary to establish transitional arrangements to implement the new framework. The recommended ISP Rules include the following transitional arrangements:

1. provisions that deem the 2020 ISP process to have met the requirements set out in the ISP Rules package;
2. applying the new RIT-T framework to actionable ISP projects identified in the 2020 ISP;
3. rules to apply the streamlined post RIT-T regulatory arrangements (e.g. removal of preferred options assessment) to all RIT-Ts following the making of the final ISP Rules; and
4. provide for a review of the ISP Rules within 5 years.

The supporting AER guidelines are being developed in parallel with the 2020 ISP, which means that TNSPs may find it difficult to progress work on a PADR using the new framework.

In these circumstances, the ESB proposes that if a RIT-T has already commenced for a project identified in the final 2020 ISP (for instance, the PSCR has been issued but not the PADR), then it is proposed that the TNSP would be able to choose whether to apply the new streamlined RIT-T process set out under the ISP rules or use the current process.

As the actionable ISP Rules have been developed over the same period as the draft 2020 ISP, the ESB recognises that AEMO's process for the 2020 ISP is not necessarily identical to the process described in this ISP Rules package. AEMO is engaging closely with the other market bodies regarding its 2020 ISP process so that the ESB can be satisfied that it meets an appropriate standard.

The ESB recommends that AEMC be required to conduct a review of the actionable ISP Rules by 30 June 2025. This timing would allow the review to encompass three ISPs (not including any ISP updates): the 2020 ISP, the 2022 ISP and the 2024 ISP.

3. Changes since the publication of the Consultation Draft ISP Rules

The purpose of this section is to describe how the ESB has amended the final ISP Rules in response to stakeholder feedback on the draft ISP Rules. The key changes from the Consultation Draft ISP Rules relate to the:

1. purpose of the ISP
2. treatment of public policy
3. definition of an actionable ISP project
4. governance framework, including the introduction of a new consumer panel and an AER transparency review
5. cost benefit analysis framework, including changes to ensure alignment between the ISP and RIT-Ts, and to give effect to staged projects
6. joint planning framework
7. cost recovery for preparatory activities
8. contingent project triggers
9. allocation of AEMO's planning costs to TNSPs
10. review of ISP Rules
11. other minor amendments, including changes to clarify the transitional arrangements.

A detailed summary of submissions on the Consultation Draft ISP Rules, together with the ESB's response to the issues raised, is set out in an accompanying document.

3.1 Purpose of the ISP

Location in ISP Rules: Rule 5.22.2

In the Consultation Draft ISP Rules, the purpose of the ISP was to:

- (1) trigger the RIT-T process for actionable ISP projects; and
- (2) inform decisions in relation to ISP development opportunities.

Some stakeholders, including Energy Consumers Australia and the Public Interest Advocacy Centre, suggested that this purpose was too narrow. The ESB has amended the purpose of the ISP to the following: "to establish a whole of system plan for the efficient development of the power system that achieves power system needs for a planning horizon of at least 20 years for the long-term interests of the consumers of electricity".

3.2 Public policy

Location in ISP Rules: Rule 5.22.3

Many stakeholder submissions, including consumer and generator submissions, suggested that it was not appropriate for public policy needs to be treated as a power system need.

The ESB recognises that there is a difference between a technical power system requirement (such as a security or reliability need) and a public policy need. Accordingly, the recommended ISP Rules include amendments to remove public policy from the definition of a power system need.

However, the ESB retains the view that inefficient outcomes are likely to emerge where power system planning occurs without regard to committed government policy. Accordingly, the recommended ISP Rules continue to enable AEMO to have regard to public policy when

developing the ISP. The criteria that AEMO uses to assess whether a public policy should be included in the ISP remains unchanged from the Consultation Draft ISP Rules.

Some stakeholders suggested that the ISP should include modelling of futures unconstrained by state-based Government policies. Proposed rule 5.22.6 includes a requirement for AEMO to describe how each development path performs under any sensitivities that AEMO considers reasonable, which could include a “no public policy” sensitivity.

3.3 Definition of an actionable ISP project

Location in ISP Rules: Chapter 10

Some stakeholders, including Energy Consumers Australia, suggested that the definition of an actionable ISP project set out in the Consultation Draft ISP Rules was too broad. Under those draft rules, an actionable ISP project was defined to encompass both:

- projects required in the short-term (and for which the ISP triggers a RIT-T)
- projects that would be reassessed in the next ISP.

The ESB considers that the draft definition had the potential to be confusing, since it does not differentiate between:

- projects for which a RIT-T would be triggered under the actionable ISP framework
- projects which would be re-assessed as part of the next ISP, since they are not required in the short term and may be affected by changing circumstances.

Accordingly, in the recommended ISP Rules, an “actionable ISP project” is limited to those transmission projects for which a PADR is required within 24 months. Projects for which a PADR would not be required until after the next ISP are defined as “future ISP projects”.

The ISP would only have to specify the identified need and an ISP candidate option for actionable ISP projects not future ISP projects.

The definition of “optimal development path” has been amended to include future ISP projects. This change maintains consistency between RIT-T modelling and the ISP modelling across the full outlook period.

3.4 Governance framework

A number of respondents to the Consultation Draft ISP Rules, including AGL, the Australian Energy Council, Major Energy Users and the Energy Users Association of Australia submitted that the AER should have a greater oversight of the ISP. Some user groups indicated that they rely on the AER to critique proposed investments as they do not have the expertise or capacity to do so.

The ESB’s recommendations are designed to deliver both strong governance and timely decision making. The recommended ISP Rules include requirements on AEMO to conduct a rigorous and transparent consultation process in accordance with AER guidelines, and the opportunity for stakeholders to raise a dispute where the consultation process is not followed.

In light of stakeholder feedback, the ESB has introduced two additional mechanisms to the ISP governance framework:

- An ISP consumer panel; and
- an AER transparency review

Together, these measures are intended to give customers confidence that the optimal development path, identified needs and investments proposed in the ISP are in the long-term interests of consumers. The following sections explain the new mechanisms.

3.4.1 ISP consumer panel

Location in ISP Rules: 5.22.7

The recommended ISP Rules require AEMO to establish a panel to provide input on consumer issues during the development of the ISP. AEMO must publish expressions of interest and terms of reference in convening a panel. The role of the consumer panel would be to assist AEMO to improve its planning decisions by providing input on issues of importance to consumers.

Preparing the ISP is a technical and complex process which can make it challenging for individual consumers and small not-for-profit consumer groups to participate fully in the ISP development process. The expert members of the panel will bring consumer perspectives to the ISP development process to better balance the range of views considered as part of its decisions.

The ISP consumer panel would consist of at least three members appointed by AEMO who have relevant qualifications and experience. The ESB envisages that the ISP consumer panel would perform a similar function to the AER's Consumer Challenge Panel.¹³

The ISP consumer panel would be required to provide two reports to AEMO regarding the ISP process; one in relation to the Input, Assumptions and Scenarios Final Report and one in relation to the draft ISP. AEMO would be required to explain how it had regard to the panel's reports but is not obliged to give effect to any recommendations.

In addition to the mandatory ISP consumer panel under the ISP Rules, AEMO has established other stakeholder groups to support the development of the ISP. This includes an ISP Customer Reference Group (CRG) which has been established by AEMO to facilitate engagement in the development of the 2020 ISP.

Going forward, the role of an ISP CRG is to support engagement between AEMO and consumer representatives through the two-year development of an ISP.

The ESB does not support the proposal for an ISP Panel with a formal decision-making role. The ISP has the potential to affect commercial interests and hence the decision should lie with a financially independent party.

3.4.2 AER transparency review

Location in ISP Rules: clause 5.22.9 and clause 5.22.13

The recommended ISP Rules require AEMO to transparently disclose its inputs and assumptions, to explain how the inputs and assumptions were derived and to provide an explanatory statement regarding the results of its analysis.¹⁴

¹³ See <https://www.aer.gov.au/about-us/consumer-challenge-panel>

¹⁴ See in particular the AER Cost Benefit Analysis Guidelines, the AER Best Practice Forecasting Guidelines, Rule 5.22.6, Rule 5.22.7 and 5.22.13.

However, given the scale of the ISP modelling exercise and the supporting materials that accompany the ISP, it is a significant task to assess whether AEMO has transparently explained its key inputs and assumptions.

To give customers and other stakeholders confidence in the ISP process, the AER must conduct a transparency review following the publication of:

- the final Inputs, Assumptions and Scenarios Report¹⁵
- the draft ISP.

The ESB intends that the role of the AER's transparency review is to ensure that AEMO has adequately explained how key inputs and assumptions for the ISP have been derived and sourced and that the draft ISP adequately explains how these inputs and assumptions have driven AEMO's modelling results. It is not intended to create a requirement for AEMO to undertake additional modelling to explore the merits of the ISP.

The AER must publish a report on its review within one month of publication of each of the AEMO documents. To the extent the AER identifies areas for improvement in a report, AEMO would have to publish further detail, but AEMO would have no obligation to make any substantive changes. Stakeholders would be given an opportunity to respond to further detail published by AEMO following an AER report.

3.5 Joint planning

Location in ISP Rules: 5.14.4

TNSPs suggested that the Consultation Draft ISP Rules be amended to include several new obligations on AEMO as part of the joint planning framework.

The ESB considers that the joint planning framework set out in the recommended ISP Rules broadly strikes the right balance between ensuring that the ISP benefits from TNSPs' expertise whilst also enabling AEMO to consider the views of all stakeholders.

Nonetheless, the ESB has adopted one of the Energy Network Association (ENA)'s proposed amendments so that AEMO is expressly required to share information on proposals for non-network options with TNSPs. This change is intended to facilitate the prompt assessment of non-network options.

ENA also proposed that AEMO be required to adopt the TNSP's cost estimates for projects. The ESB does not consider it is appropriate for AEMO to be required to do this as this could compromise the independence of the ISP. The existing joint planning provisions require AEMO to cooperate and consult with TNSPs on matters such as costs. Further, the TNSPs' cost estimates would form the basis of AEMO's advice for the purposes of the contingent project triggers (see section 3.10).

ENA also requested that AEMO be required to undertake the RIT-T modelling on behalf of TNSP. The ESB does not consider it appropriate for the Rules to require AEMO to undertake the RIT-T modelling on behalf of TNSPs, as the conduct of RIT-Ts is a TNSP function.

¹⁵ The ISP is published every two years and the Inputs, Assumptions and Scenarios Report is published every year (as these forecasts are also used for other purposes including the electricity Statement of Opportunities). The AER will only conduct a transparency review of the Inputs, Assumptions and Scenarios Report in years that form the basis for the ISP.

3.6 Cost benefit analysis framework

Some stakeholders expressed the view when responding to the Consultation Draft ISP Rules that AEMO should not have flexibility in its approach to scenario development, modelling and selection of the optimal development path.

The ESB remains of the view that AEMO requires flexibility to address reasonably anticipated risks in the context of uncertainty regarding which future scenario will arise. However, the recommended ISP Rules include amendments to cost benefit analysis framework to: (1) address the risk of misalignment between the ISP and RIT-T, and; (2) accommodate staged projects, as detailed below.

3.6.1 Risk of misalignment between the ISP and RIT-T

Location in ISP Rules: Rule 5.10.2

The AER's issues paper on the Cost Benefit Analysis guidelines indicate that when preparing the RIT-Ts, TNSPs would continue to be required to conduct a probability weighted cost benefit analysis.

In submissions to the Consultation Draft ISP Rules, TNSPs identified a risk that this approach may result in misalignment in cases where AEMO's decision is driven by the need to mitigate a risk that does not form part of the central scenario. To address this risk, TNSPs requested that the ISP Rules should also provide flexibility to TNSPs in preparing their RIT-Ts.

The ESB does not support the TNSP's proposed solution because it does not resolve the risk of misalignment. A TNSP could use its flexibility to adopt an approach that does not align with the ISP.

The ESB considers that the risk of misalignment can be dealt with via the AER's CBA Guidelines and requires only minor changes to the ISP Rules package, namely an amendment to the definition of an ISP parameter.

3.6.2 Staging of projects to accommodate uncertainty

Location in ISP Rules: Rules 5.16A.5, 5.22.6(a)(6)

Modelling for the 2020 draft ISP demonstrated the value of being able to progress projects to a stage whereby they are ready to proceed if required, without committing to the full cost of the project in the first instance.

This raises a question of how the RIT-T and contingent project frameworks could apply where the ISP recommends that a stage of a project should proceed in order to mitigate risk, but further information is required before a decision to implement the whole project.

The ESB considers that this matter can largely be addressed via the AER's CBA Guidelines. However, the recommended ISP Rules include amendments that would permit TNSPs to apply for contingent project funding for a stage of a project. This amendment is intended to create flexibility for one stage of a project to proceed without committing to the cost of the entire project.

3.7 Preparatory activities

Location in ISP Rules: Rule 5.22.6

The Consultation Draft ISP Rules conferred a new regulatory obligation on TNSPs to undertake preparatory activities for upcoming ISP projects, including:

- detailed engineering design;
- route selection and easement assessment work;
- cost estimation based on engineering design and route selection;
- preliminary assessment of environmental and planning approvals; and
- council and stakeholder engagement.

Under the Consultation Draft ISP Rules, the obligation to commence preparatory activities arose 24 months prior to the due date for the PADR specified in the ISP.

The recommended ISP Rules include a revised definition of an actionable ISP project. All actionable ISP projects have a due date for a PADR that is less than 24 months. Accordingly, TNSPs retain an obligation to commence preparatory activities for actionable ISP projects as soon as practicable.

In some circumstances, it could be appropriate for a TNSP to commence preparatory activities more than 24 months before the PADR. Accordingly, the ESB recommended ISP Rules enable AEMO to specify whether a TNSP should commence preparatory activities for a future ISP project. The link to the due date for the PADR has been removed.

3.8 Cost recovery for cancelled/deferred projects

TNSPs consider that the ISP Rules should amend the existing revenue determination framework to create a mechanism for recovering the costs TNSPs incur associated with preparatory activities, particularly given the risk that a future ISP may find that the project should be delayed or cancelled.

The ESB considers that TNSPs do not require an additional revenue stream for preparatory activities because these costs can be accommodated within TNSPs' operating expenditure allowance via the revenue determination.

3.9 Allocation of planning costs to TNSPs

Location in ISP Rules: Rule 6A.23.3

In responding to the Consultation Draft ISP rules, TNSPs submitted that they could be exposed to costs beyond their control if AEMO's national transmission planner costs were recovered using the current revenue determination framework.

In response, the ESB has included in the recommended ISP Rules an amendment to Chapter 6A of the Rules that permits TNSPs' maximum allowed revenues to adjust automatically to recover fees advised by AEMO.

3.10 Contingent project triggers

Location in ISP Rules: Rule 5.16A.5

In responding to the Consultation Draft ISP Rules, consumer groups expressed concern that the costs used in the ISP for an actionable ISP project may not reflect the actual costs of delivering that project.

To address this concern, the ESB has introduced a new trigger event. A TNSP is only entitled to apply to the AER for revenue through the new contingent project framework if the amount applied for in the contingent project application is no greater than the cost considered by AEMO via the feedback loop (discussed in section 2.2.1).

TNSPs also expressed concern regarding the operation of the feedback loop provided for the Consultation Draft ISP Rules. The ESB has amended the recommended ISP Rules to make it clear that the feedback loop is not intended to pre-empt the results of the TNSP's RIT-T process.

The recommended ISP Rules now provide for the feedback loop to:

- confirm that the TNSP's preferred option meets the identified need set out in the ISP
- check that the optimal development path set out in the most recent ISP is still valid in light of the results of a RIT-T.

The ESB has split the feedback loop into two separate trigger events reflecting each of these functions. The intent of this change is to give TNSPs confidence that their preferred option aligns with the ISP before they incur the additional costs required to firm up their cost forecasts to the level of certainty required to submit a contingent project application to the AER.

3.11 AEMC review of ISP Rules

Location in ISP Rules: Rule 11.xx.18

A number of submissions, including submissions from consumer groups, generators and the Australian Energy Council, suggested that the actionable ISP framework should be reviewed. In light of this feedback, the recommended ISP Rules include a provision that requires the AEMC to review the actionable ISP framework by 30 June 2025.

3.12 Other minor changes from Consultation Draft ISP Rules

The ESB has also made the following minor amendments to the recommended ISP Rules since the Consultation Draft ISP Rules:

- *ISP updates.* The ESB has amended the ISP update provisions to require AEMO to issue an ISP update if, during the course of a feedback loop, AEMO forms the view that there is a material change to the need for or characteristics of an actionable ISP project identified in the most recent ISP. This would include the situation where an actionable ISP project fails the feedback loop (i.e. the project is not eligible to receive funding under the actionable ISP framework because it does not align with the ISP, either due to its technical characteristics or cost).

- *Call for non-network options.* The Energy Networks Association submitted that AEMO's call for non-network options should include information regarding the technical characteristics that any non-network option would need to have. This requirement is consistent with the current Rules requirements for the Project Specification Consultation Report. The ESB agrees that the proposed change is appropriate.
- *ISP candidate option.* The draft ISP Rules envisaged that AEMO would identify a single ISP candidate option for each actionable ISP project. In the event that the ISP modelling shows an immaterial difference between the net market benefits of two or more credible options, the ESB has provided for AEMO to have the ability to nominate more than one ISP candidate option for further exploration in the RIT-T.
- *System security reports.* The ESB identified a need for further Rule changes to separate NSCAS reporting from the NTNDP in a way that does not create unintended consequences.
- *Transitional arrangements.* The ESB has redrafted the transitional arrangements relating to existing actionable ISP projects in response to feedback that the Consultation Draft ISP Rules were unclear on this matter. However, the intent remains unchanged; TNSPs would be able to choose to apply either the "old" RIT-T framework or the new actionable ISP framework to projects identified as actionable ISP projects in the 2020 ISP.¹⁶

¹⁶ Except if they have commenced or completed a preferred options assessment under the old framework (and they have not reapplied the RIT-T using the new framework).

4. Assessment framework

This section describes the ESB's assessment of the recommended ISP Rules.

4.1 Explanation of the issues & rationale for proposed solution

In June 2017, the *Independent Review into the Future Security of the National Electricity Market* (the 'Finkel Review') provided a blueprint highlighting that System Planning was a key pillar to delivering future reliability, increased security, rewarding consumers, and lowering emissions. Key recommendations (Recommendations 5.1 and 5.2) in the blueprint included a requirement for AEMO to develop an integrated grid plan to facilitate the efficient development and connection of renewable energy zones and priority projects.¹⁷

In 2018, AEMO released its inaugural Integrated System Plan and more recently in December following extensive consultation it has released its Draft 2020 Integrated System Plan (ISP)¹⁸. The draft 2020 ISP presents a roadmap of nationally significant and essential investments in the electricity system to ensure the system meets its security and reliability requirements with the least cost and lowest regret to consumers. AEMO estimates that optimal development path in the draft ISP will result in \$2.55 billion of net market benefits in the central scenario, relative to the outcome that would arise if no new interconnectors are built.

Following the delivery of the Finkel Review, the COAG Energy Council agreed on a timeline to implement 49 of the 50 recommendations, including those on System Planning.¹⁹ In August 2018, the Chair of the Energy Security Board was tasked with providing a plan to make the Integrated System Plan actionable, the *Integrated System Plan: Action Plan* was provided to the December COAG Energy Council meeting²⁰. At this meeting Minister's tasked the Energy Security Board with doing more work to operationalise the ISP.²¹

The package of rules that has been consulted on in this report specifically relates to implementing Recommendations 8, 9 and 10 of the *Integrated System Plan: Action Plan* and integrates the ISP into planning processes.

4.2 Costs and benefits of the recommended ISP Rules

The ESB's recommendations for the ISP Rules package would implement the previous policy directives provided by COAG Energy Council to the ESB (see 4.1). The intent of this recommended package of rules is to operationalise the ISP that was identified as being critical to managing the transition in the NEM by the Finkel Review.

The ISP provides a whole of system approach to planning for strategic transmission investments in the NEM. The recommended ISP Rules formalise the role of the ISP and how it is developed, including the need for effective stakeholder engagement and contribution into its development which are critical to streamlining the regulatory processes for the approval of transmission projects.

17 <https://www.energy.gov.au/sites/default/files/independent-review-future-nem-blueprint-for-the-future-2017.pdf>

18 <https://aemo.com.au/en/energy-systems/major-publications/integrated-system-plan-isp>

19 <http://www.coagenergycouncil.gov.au/sites/prod.energycouncil/files/publications/documents/12th%20COAG%20Energy%20Council%20Communique%20V2.pdf>

20 <http://www.coagenergycouncil.gov.au/sites/prod.energycouncil/files/publications/documents/isp%20action%20plan.pdf>

21 <http://www.coagenergycouncil.gov.au/sites/prod.energycouncil/files/publications/documents/21st%20COAG%20Energy%20Council%20Communique.pdf>

The ISP is a whole of system cost benefit analysis, and the benefits of the recommended ISP Rules reflect the benefits identified in AEMO's ISP. By giving effect to system planning, the recommended ISP Rules create a framework for investment decisions that account for and take advantage of synergies arising between inter-dependent projects. This is not permitted under the current Rules which require each project to be assessed on an incremental basis.

The recommended ISP Rules will also generate benefits by streamlining current regulatory processes for transmission by recognising work already done by the ISP. The ISP will replace the first stage of the RIT-T (the Project Specification Consultation Report), avoiding unnecessary duplication that would currently require TNSPs to conduct additional planning and modelling activities. Retaining this duplication in the Rules would result in additional consultation on the same issues identified in the ISP and delay action in responding to any identified needs that had already been highlighted.

The recommended ISP Rules require AEMO and stakeholders to expend additional resources during the ISP development and consultation process. Many of the costs associated with these additional resources can be attributed to the Finkel Review recommendation requiring AEMO to "develop an integrated grid plan to facilitate the efficient development and connection of renewable energy zones and priority projects" and are associated with implementing Recommendations 8 and 9 of the *Integrated System Plan: Action Plan*.

The balance of costs associated with implementing Recommendation 10 of the *Integrated System Plan: Action Plan* that is intended to streamline the RIT-T by enabling the ISP to replace the Project Specification Consultation Report are much smaller.

The ESB considers the additional costs on AEMO and industry as a result of these rule changes are more than offset by the benefits both in terms of the streamlined RIT-T process and incorporating the synergies arising from system planning more generally.

Importantly the recommended ISP Rules will continue to support a rigorous cost benefit analysis, that COAG Energy Council Minister's identified "*as an essential part of the process to ensure costs to consumers are minimised*"²². Given the increased role for the ISP in guiding the future development of the NEM, this new framework is also expected to encourage greater involvement by key stakeholders than currently occurs. These stakeholders will play a critical role in the development of key inputs and assumptions, and in assessing the outcomes identified in the ISP.

Broadly the benefits provided by the recommended ISP Rules are that they:

- will embed a strategic plan for the development and transition of the NEM into the National Electricity Rules that captures the system wide benefits of an integrated plan,
- ensure that this plan contributes to the regulatory assessment of strategic transmission investments, avoiding duplication and speeding up the current regulatory processes, and
- encourage greater stakeholder involvement in planning for the future.

4.3 Consistency with the national electricity objective and Strategic Energy Plan

Under the National Electricity Law, the ESB may recommend rules to the COAG Energy Council if the following requirements are satisfied:²³

- the Rules are in connection with energy security and reliability of the NEM or long-term planning for the NEM.
- the Rules are consistent with the national electricity objective; and

²² <http://www.coagenergycouncil.gov.au/sites/prod.energycouncil/files/publications/documents/21st%20COAG%20Energy%20Council%20Communique.pdf>

²³ Section 90F of the National Electricity Law.

- there has been consultation on the Rules in accordance with any requirements determined by the COAG Energy Council.

The national electricity objective is “to promote efficient investment in, and efficient operation and use of, electricity services for the longer-term interests of consumers of electricity with respect to (a) price, quality, safety, reliability and security of supply of electricity; and (b) the reliability, safety and security of the national electricity system.”²⁴

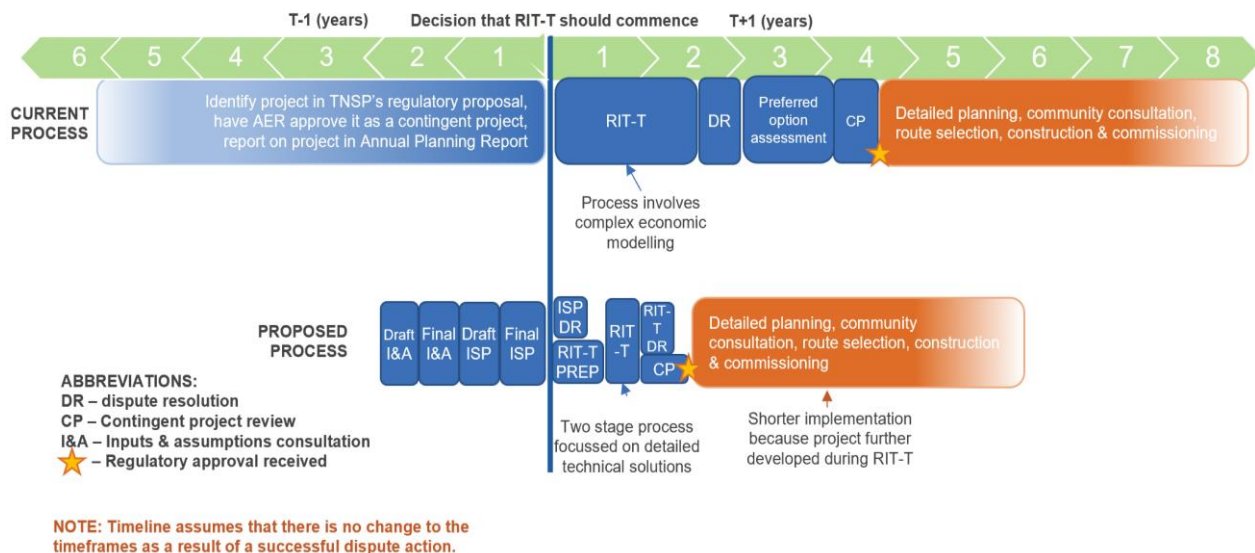
Having considered issues raised in submissions to the Consultation Draft ISP Rules, the ESB’s view is that the recommended ISP Rules are consistent with the NEO for the following reasons:

- It gives effect to a whole-of system plan for the efficient development of the power system, taking into account efficiency, reliability, security, and public policy;
- It reduces the administrative burden associated with the RIT-T process and
- It establishes a clear path for timely transmission investment decisions, whilst retaining a rigorous and independent cost benefit analysis framework, transparency and public consultation processes.

The proposed framework is designed to deliver an orderly transition as technological and market factors transform the energy supply mix. The actionable ISP framework would allow significant investment decisions to be informed by a NEM-wide perspective (rather than the current regional approach), taking into account factors arising as a result of increasingly complex and distributed power system.

The actionable ISP framework reflected in the recommended ISP Rules would promote the NEO by creating a more timely and effective regulatory process, which would lead to more efficient transmission planning. The expected time savings are highlighted in the timeline below.

Figure 3 Target timeframes under recommended framework



The new framework will also support efficient investment decisions by market participants as they would have greater clarity regarding the future development of the power system, including information about where and when opportunities may arise.

In preparing the ISP, AEMO would be required to conduct an extensive and transparent consultation process. By giving AEMO a stronger role in transmission planning, the proposed framework is more independent and impartial than a TNSP-led process.

The ESB is also required by the MCE-approved guidance to consider whether the recommended ISP Rules are consistent with one or more of the high-level outcomes offset out in the Strategic Energy Plan.

The ISP recommended Rules are directly concerned with putting in place a long-term planning framework to deliver a secure and reliable NEM. They promote several of the high-level outcomes set out in the Strategic Energy Plan, including:

- system planning and development is informed by clear and transparent rules; and
- electricity and gas sectors efficiently deliver at least their share of emissions reduction target/s while ensuring reliable supply
- markets operate safely, securely and efficiently, under full range of operating conditions, with minimal intervention.

A *National Electricity Amendment (Integrated System Planning) Rule 2020*

[See attached document.]

B Abbreviations and Technical Terms

AEMC	Australian Energy Market Commission
AEMO	Australian Energy Market Operator
AER	Australian Energy Regulator
CBA	Cost Benefit Analysis
COAG EC	Council of Australian Governments Energy Council
ECA	Energy Consumers Australia
ESB	Energy Security Board
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
RIT-T	Regulatory Investment Test for Transmission
TNSP	Transmission Network Service Providers

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