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GOVERNMENT OF
WESTERN AUSTRALIA

Energy
Policy WA

Allowable Revenue Framework Review

Consultation Paper

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Working together for a brighter energy future.

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Abbreviations

Term	Definition
AEMO	Australian Energy Market Operator
ARF	Allowable revenue framework
BAU	Business as usual
EGM	Executive general manager
ERA	Economic Regulation Authority
ESM Rules	Electricity System and Market Rules
GAB	Gas Advisory Board
GSI Rules	Gas Services Information Rules
MAC	Market Advisory Committee
NEM	National Electricity Market
PSSR	Power system security and reliability
SEO	State Electricity Objective
SWIS	South West Interconnected System
WEM	Wholesale Electricity Market

Executive Summary

AEMO’s Allowable Revenue Framework

As a not-for-profit organisation, the Australian Energy Market Operator (AEMO) is reliant on market participant fees to recover the costs it incurs to perform its functions under the Electricity Industry (Electricity System and Market) Regulations 2004 (ESM Regulations), ESM Rules and Gas Services Information (GSI) Rules (collectively the Rules). These costs are ultimately passed through to consumers. AEMO’s Allowable Revenue and Forecast Capital Expenditure processes is governed by the Allowable Revenue framework (ARF) in the Rules.

As Western Australia’s energy transition has evolved, so have AEMO’s role and responsibilities. With further market reforms and significant investments to support the move towards a decarbonised power system scheduled over the next decade, AEMO’s role and responsibilities are expected to continue to evolve and expand as planning and operating the Wholesale Electricity Market (WEM) and the power system become more complex.

In recent years, AEMO, the Economic Regulation Authority (ERA), and other stakeholders have raised concerns with different aspects of the AFR including rising costs, and changes in cost and fee estimates that have made financial planning more difficult for Market Participants.

In August 2024, AEMO submitted two Rule Change proposals to the Coordinator of Energy (Coordinator) to address these issues and suggested an alternative approach, which would have removed the role of the ERA in assessing AEMO’s Allowable Revenue. The proposals were unanimously not supported by stakeholders, citing risks to AEMO’s accountability, transparency, and cost impacts.

The Coordinator determined not to progress the proposals and decided to implement an interim price indexation for AEMO’s market fees. The Coordinator also committed to undertake a review the AFR in consultation with stakeholders to develop a new fit-for-purpose replacement framework.

The ARF Review commenced in February 2025. This review is being undertaken in three stages:

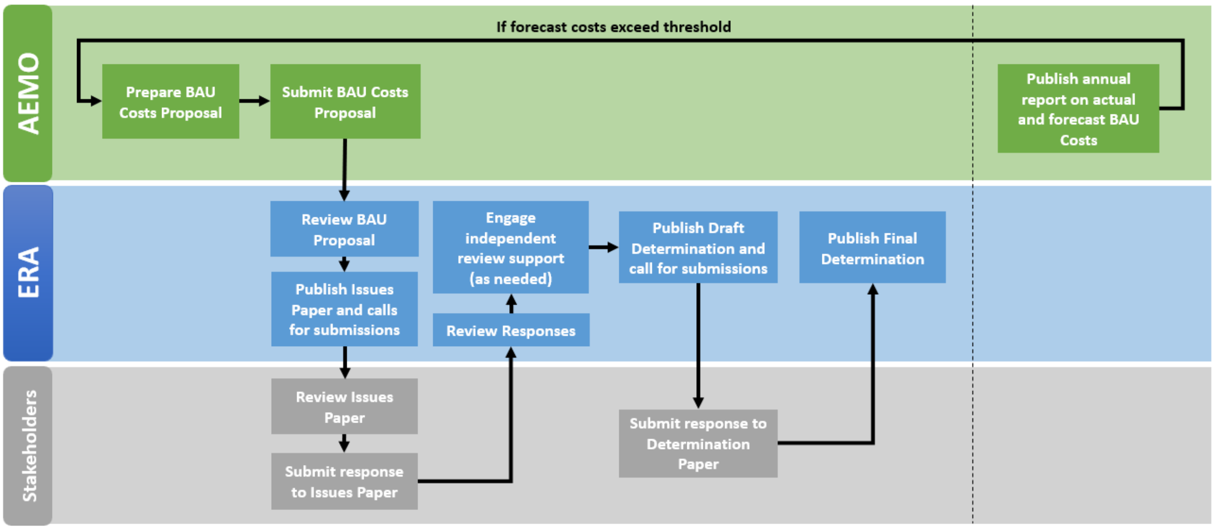
- Stage one: Assess existing frameworks and conduct a jurisdictional scan. The first stage assessed the current ARF processes, identifying issues and inefficiencies. This stage also included a scan of practices in other jurisdictions that could inform potential options for a new framework.
- Stage two: Options development and assessment, proposals development. The second stage identified and assessed options for an efficient and effective ARF that is fit-for-purpose and reflects consideration of stakeholder views and concerns.
- Stage three: Proposed policy position and implementation. This final stage involves consulting on the proposed policy positions, followed by finalising the detailed design, and drafting ESM and GSI amending rules.

Following an Energy Policy WA Industry Stakeholder Workshop on 13 May 2025, this paper sets out proposed changes to the design of AEMO’s Allowable Revenue Framework resulting from the completion of Stage two.

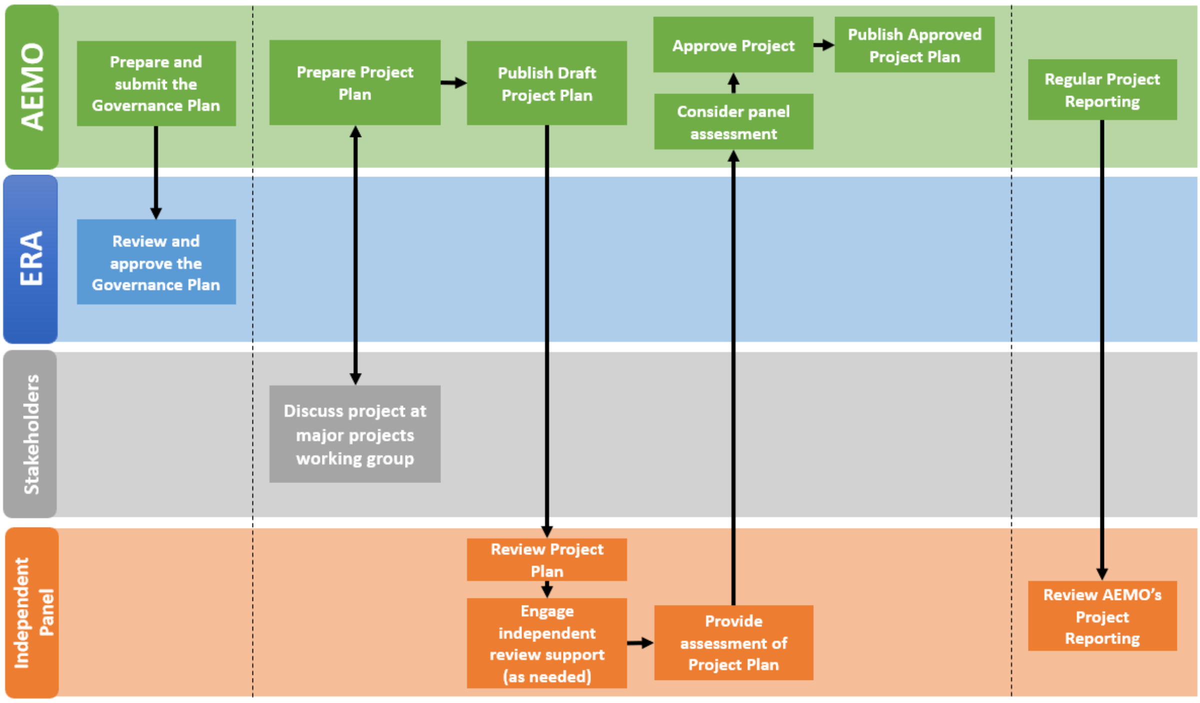
Collectively, the proposals in this paper recommend that AEMO’s expenditure is separated into business-as-usual (BAU) and non-BAU expenditure. BAU expenditure will continue to be reviewed and approved by the ERA, when required. Non-BAU expenditure will be reviewed by a newly formed Independent Project Plan Assessment Panel but ultimately approved by AEMO.

Figure 1 provides a high-level overview of the proposed new framework for BAU and non-BAU expenditure.

Proposed BAU budget process



Proposed non-BAU budget process



Other key details in the proposals include:

- an improved framework for project reporting;
- publication of audited WA financial reports; and
- stronger WA delivery incentives and greater transparency.

Discussion and proposals in this paper are structured by the component parts of the proposed replacement AFR:

- Incentives – how are the entities incentivised to be prudent and efficient;
- Preparation process – who prepares the budget, and how do they do it;
- Assessment and approval process – who approves the budget, and how do they do it;
- Funding Period – how long is the budget approved for;

- Treatment of uncertainty and volatility – are changes to the approved budget allowed, and how are they managed; and
- Monitoring and reporting - – how is compliance with the approved budget monitored, and what information does AEMO publish to enable transparency.

This paper provides all stakeholders with an opportunity to formally respond to Energy Policy WA's proposals. Stakeholders will also have opportunity to comment on draft ESM Rules and GSI Rules amendments later in the year. More information about the ARF Review is available from the Energy Policy WA website[1], including the Scope of Work and Industry Stakeholder Workshop papers.

Call for Submissions

Stakeholder feedback is invited on the proposals that are outlined in this paper. Submissions can be emailed to energymarkets@deed.wa.gov.au. Any submissions received will be published on www.energy.wa.gov.au, unless requested otherwise. The consultation period closes at **5:00pm AWST on Thursday 14 August 2025**. Late submissions may not be considered.

Summary of design proposals and rationale

Table 1 lists the proposals arising from stage three of the ARF Review, along with a summary of the rationale for each proposal.

Table 1: ARF Review proposals

Proposal	Rationale
Proposal 1: 1.1 Enhancements to strengthen reputational incentives within AEMO's existing corporate governance framework should be considered. These enhancements will include: 1.2 AEMO publishing audited financial accounts for Western Australia functions, separate from the aggregated organisational accounts. 1.3 AEMO must ensure that performance indicators for key executives include explicit links to efficient financial performance and timely project delivery, using the same metrics that are published	As a not-for-profit organisation, AEMO cannot be subject to financial incentives to drive and enhance the efficiency of its operations. Reputational incentives are proposed to hold AEMO accountable of the effectiveness and efficiency of its operations and provide stakeholders with clear visibility of applicable targets, including cost efficiency and timely delivery of major projects.

[1] Allowable Revenue Framework Review (www.wa.gov.au)

Proposal	Rationale
and monitored, and must publish the relevant executive performance indicators.	
Proposal 2: 2.1 The ERA will prepare and maintain regulatory guidelines for AEMO submission of proposed BAU expenditure. 2.2 The ERA guidelines will include definitions for BAU and non-BAU expenditure, and provide for appropriate interaction and delineation between the two. 2.3 AEMO will prepare its funding proposals in line with the ERA guidelines. 2.4 AEMO will consult with stakeholders in the preparation of its non-BAU budget, including through the Market Advisory Committee's (MAC's) Major Projects Working Group.	Energy Policy WA considers that AEMO is best placed to continue preparing its funding proposals but proposes to separate the provision of BAU costs from costs for new functions / projects (non-BAU). Preparation of these proposals would include consultation with stakeholders as this remains an important element of the process to ensure transparency. Clearly delineating BAU and non-BAU expenditure requires careful consideration, including how the two may interact. Further guidance on their delineation, including potential overlaps such as when a non-BAU project transitions into a BAU activity, should be provided in a guidelines prepared by the ERA.
Proposal 3: 3.1 The ERA will prepare a regulatory guideline for AEMO's Project Governance Plan. 3.2 AEMO will prepare a Project Governance Plan in line with the guideline. 3.3 The Project Governance Plan will set out how AEMO plans, manages and reports on projects, including project governance, relevant stage gates, decision making processes and estimation methods. 3.4 AEMO will prepare a project plan for each non-BAU project. 3.5 AEMO will consult with stakeholders in the preparation of each project plan.	Preparing a separate proposal for non-BAU costs would allow for more timely and flexible scrutiny and provide a more accurate basis for reviewing AEMO's performance. In particular, separating BAU and non-BAU proposals would enable individual project plans to be reviewed more frequently than is currently possible, reducing the need for in-period revisions and whole-of-funding period reviews. For non-BAU expenditure, AEMO would prepare an overarching Project Governance Plan that sets out the processes and methods it uses to define, approve, and deliver projects. AEMO will create an individual project plan for each proposed project, in line with the Project Governance Plan. The individual project plan will enable improved scrutiny of AEMO's delivery of non-BAU projects, and allow stakeholders to assess AEMO's performance against the plans.
Proposal 4: 4.1 The ERA will prepare a guideline that sets out the information required to be included in AEMO's BAU budget submission, including identification of non-BAU cost implications. 4.2 The ERA guideline will include requirements for an overarching business plan that provides context for AEMO's expenditure, including linking expenditure to strategic goals that relate to the SEO.	Required BAU expenditure content is typically straightforward. Most jurisdictions have specific cost categories that are accounted for under the operations costs. These costs are often compared side-by-side with historical and forecast costs. Energy Policy WA considers that it is reasonable to expect that AEMO would need to carry out all of these activities in the absence of a regulatory review. Requiring this information to be provided should not add to the regulatory

Proposal	Rationale
4.3 The ERA guideline will prescribe that information that AEMO would be expected to prepare in the ordinary course of its business. 4.4 AEMO will prepare its BAU budget submission in accordance with the ERA guideline.	burden, with the benefit of increasing transparency of the budgeting process.
Proposal 5: 5.1. AEMO will prepare individual project plans in compliance with its Project Governance Plan. 5.2. Individual project plans will include a description, scope and rationale of the project, total forecast budget for the duration of the project, project timelines and milestone dates, supporting information as to how the cost and timelines were determined, and the expected impact on market fees over time.	The current information requirements for non-BAU expenditure are identified in the funding proposal guidelines for capital projects. Although these provide the necessary information to estimate project costs in the review period, the guidelines do not currently require specific plans for project delivery that include delivery timelines, milestones or expenditure profiles. If each individual project plan provides this additional information, it can be used to track and report project status over time.
Proposal 6: 6.1. The ERA will review AEMO's BAU expenditure proposals. 6.2. The ERA will retain power to approve, reject or substitute proposed BAU expenditure. 6.3. An Independent Panel will review individual project plans. 6.4. The Independent Panel may request additional information that it requires to inform an assessment of each project plan. 6.5. The Panel's requests must be consistent with good project management practice. 6.6. The Panel must assess whether each proposed project plan has efficient expenditure and has appropriately identified BAU vs non-BAU components. 6.7. The Panel must publish its assessment on each proposed project plan, including any recommendations. 6.8. AEMO must consider and respond to Panel recommendations before approving a project plan. 6.9. AEMO will be responsible and have the authority to approve each project plan.	Energy Policy WA considers that it is important to retain ERA approval of BAU expenditure, while reasonable to introduce another form of scrutiny for non-BAU expenditure. For BAU expenditure, Energy Policy WA proposes that the ERA would review proposed expenditure similarly to its current approach, with changes as noted in sections 4.2 and 4.3. For non-BAU expenditure, Energy Policy WA proposes that AEMO would have final approval, but that the ERA would first approve the overall process for planning and managing projects. A panel of independent experts, convened by the Coordinator of Energy, would review each individual project plan. AEMO would need to consider and respond publicly to the Panel findings prior to finalising and approving the project plans and budget. This process maintains a level of scrutiny of AEMO's expenditure.
Proposal 7: 7.1. AEMO will submit a BAU expenditure proposal for a baseline year. 7.2. The ERA will assess the expenditure proposal and approve baseline BAU expenditure.	Annual review of BAU costs would require significant ongoing effort by AEMO, the ERA, and stakeholders. Although operational activity is never in a completely steady state, once the ERA has reviewed and approved BAU expenditure, the approved level of funding should be sufficient for future years as well – subject to adjustments

Proposal	Rationale
7.3. The ERA will determine an appropriate factor for annual efficiency gains to be achieved by AEMO. 7.4. AEMO's annual BAU expenditure will be set by the approved baseline expenditure, multiplied by an appropriate indexation (similar to the transitional indexation in place today) and the efficiency factor determined by the ERA.	for price pressures (i.e., changes in consumer and wage price indexes) and expected efficiency gains.
Proposal 8: 8.1. AEMO will submit project plans at least six months before the planned commencement of significant project activities. 8.2. The Independent Panel will review project plans twice each year, in time for AEMO to finalise and approve project funding before the start of the project.	Accurately estimating non-BAU project expenditure for a three-year funding period has proven challenging under the current framework. Retaining a multi-year funding period for non-BAU expenditure has potential to delay market reform, require multiple adjustments, and repeat the issues with the current framework. A 6-monthly project plan submission window would balance flexibility for AEMO with a part-time review Panel. AEMO could provide updates outside the review windows, but significant Panel activity would be reserved for twice a year.
Proposal 9: 9.1. If BAU expenditure is forecast to exceed the adjusted baseline for the year by more than a 10% or $5 million threshold, AEMO must submit new baseline BAU expenditure for ERA approval. 9.2. If BAU expenditure is forecast to exceed the threshold only due to commissioning a specific project, and the impacts of that project are limited to specific functions, AEMO must submit a partial baseline BAU expenditure for those functions only, and the ERA is only required to review and approve costs for those functions. 9.3. AEMO can expend funds on project estimate elaboration activities before Independent Panel review. 9.4. For non-BAU projects less than $5 million total cost, AEMO can begin project execution activities up to three months before the project plan has been reviewed and approved by the Independent Panel.	For BAU expenditure, uncertainty should be less, and can continue to use a similar adjustment threshold as the current approach – that is, if expenditure is forecast to change by more than 10% of the approved baseline (as adjusted for future years), Most uncertainty is present for non-BAU project activity, for which project impacts on cost recovery can vary significantly from year to year. It is difficult to put a cap on the amount of overspent allowed as projects vary in multiple aspects. The Independent Panel is best suited to review funds exceeding the projected expenditure. Energy Policy WA considers that AEMO approval for non-BAU funding, together with the six-month window for review, should preclude any need for an uncertainty mechanism on that expenditure. As noted in section 4.4, Independent Panel review is not required for the early-stage project exploration. Further, relatively smaller projects costing less than $5 million dollars may be commenced earlier, depending on the urgency of the project. This provides some flexibility for AEMO while still subjecting projects to later review.
Proposal 10: 10.1. If BAU expenditure is projected to differ significantly from year to year in the baseline review, AEMO must propose an annual revenue recovery adjustment mechanism that	Aside from uncertainty caused by potential forecasting gaps, there is also fees volatility to consider, including where the cost spent on BAU or non-BAU operations has changed due to market forces that are outside the control of AEMO.

Proposal	Rationale
smooths the required revenue to avoid large changes from year to year. 10.2. If new project expenditure would result in a significant step in fees, AEMO should propose a smoothed revenue recovery profile for the project expenditure. This will seek to avoid fees increasing or reducing substantially from year to year, while still recovering costs over the life of the assets. 10.3. Under and over-recovery compared to the smoothed revenue profile can be adjusted in the following year (as is the case for market fees today).	Many jurisdictions apply a smoothing revenue method for revenue recovery to avoid drastic changes from year to year and Energy Policy WA considers a similar approach is appropriate for the ARF.
Proposal 11: 11.1. AEMO will publish an annual report reviewing whole year performance for BAU activities, including comparison of budget and actual expenditure in each relevant category, with detailed explanation for variations. 11.2 AEMO will publish quarterly project reporting, including information on: • capital projects commenced, completed, and not commenced/completed on schedule; • capital projects planned and in progress, with budget and actual spend (separated into personnel time, contractors, and asset purchases) and delivery schedule with progress against project plan milestones; • narrative for any adjustments to project budgets (including contingency drawdowns) or delivery times. 11.3. AEMO must proactively share project scheduling changes with the MAC's Major Projects Working Group. 11.4. The Independent Panel must annually review AEMO delivery against the project plans, and publish its opinion on whether AEMO has delivered on its project plans, and whether it has done so efficiently. 11.5. The Independent Panel may compare AEMO costs against IT project cost benchmarks, and assess efficiency changes over time. 11.6. AEMO must publish results of all audits of systems and processes, and post project reviews. 11.7. AEMO must publish formal financial accounts for its Western Australia segment, including the methods by which it has	Energy Policy WA considers that an annual reporting cycle is sufficient for BAU activity. AEMO can report actuals for the past year at the same time as forecasts for future years. More frequent reporting for project expenditure will provide greater focus for project delivery, lessening the potential for delayed surprises, and making performance monitoring an ongoing process rather than a point-in-time tied to regulatory process. The establishment of the AEMO Major Projects Working Group provides a venue for stakeholder updates, and formal published project plans provide the basis against which project status can be measured. Monitoring can also be strengthened without significant impact on regulatory burden by requiring publication of documents that AEMO generates in the ordinary course of operations, such as software certificates, and project close-out reports. Energy Policy WA considers that this additional reporting will enable better monitoring of AEMO delivery. Under the current framework there is no explicit requirement for any party to monitor AEMO's delivery against cost and time estimates. In addition to its role in reviewing project proposals, the Independent Panel can assess AEMO's delivery, and report on performance annually. While this approach may increase regulatory costs, it would also enhance transparency, provide an independent review to build stakeholder confidence, and strengthen AEMO's reputational incentive to perform its functions.

Proposal	Rationale
allocated any portion of shared costs to its Western Australia functions.	
Proposal 12: 12.1 The Coordinator will review the Allowable Revenue Framework after at least two years of implementation, and no longer than three years after the introduction of a replacement ARF.	A post-implementation review will provide an opportunity to assess the effectiveness of the replacement ARF.

1. Introduction

The Coordinator of Energy (Coordinator) is undertaking a review of the Allowable Revenue frameworks (ARF) under the Electricity System and Market Rules (ESM Rules) and the Gas Services Information (GSI) Rules (collectively the Rules).

The purpose of this review is to develop a new fit-for-purpose replacement framework for the determination of the Australian Energy Market Operator (AEMO)'s Allowable Revenue and Forecast Capital Expenditure under the Rules.

1.1 The role and functions of AEMO in Western Australia

AEMO is an independent, not-for-profit organisation with functions in relation to electricity and gas. In Western Australia, these functions include responsibility for operating the Wholesale Electricity Market (WEM) and for ensuring the secure operation of the South West Interconnected System (SWIS). AEMO is also given the functions for operating the WA Gas Bulletin Board and developing the annual WA Gas Statement of Opportunities.

AEMO's WEM related functions are conferred by the Electricity Industry (Electricity System and Market) Regulations 2004 (ESM Regulations) and the ESM Rules. These include, amongst other functions:

- operating and setting the Reserve Capacity Mechanism, the Short-Term Energy Market and the Real-Time Market;
- planning and forecasting; and
- supporting the Economic Regulation Authority (ERA) in monitoring compliance with the ESM Rules.

AEMO's gas-related functions are established under the Gas Services Information Regulations 2012 (GSI Regulations) and the GSI Rules, which also include provisions for supporting the ERA in compliance monitoring.

1.2 The role and functions of the ERA

The ERA is Western Australia's independent economic regulator. It performs a variety of activities relating to the energy sector, including regulating participants in the WEM, carrying out functions specified in the ESM Rules, regulating electricity networks and certain gas pipelines, and overseeing the retail gas market.

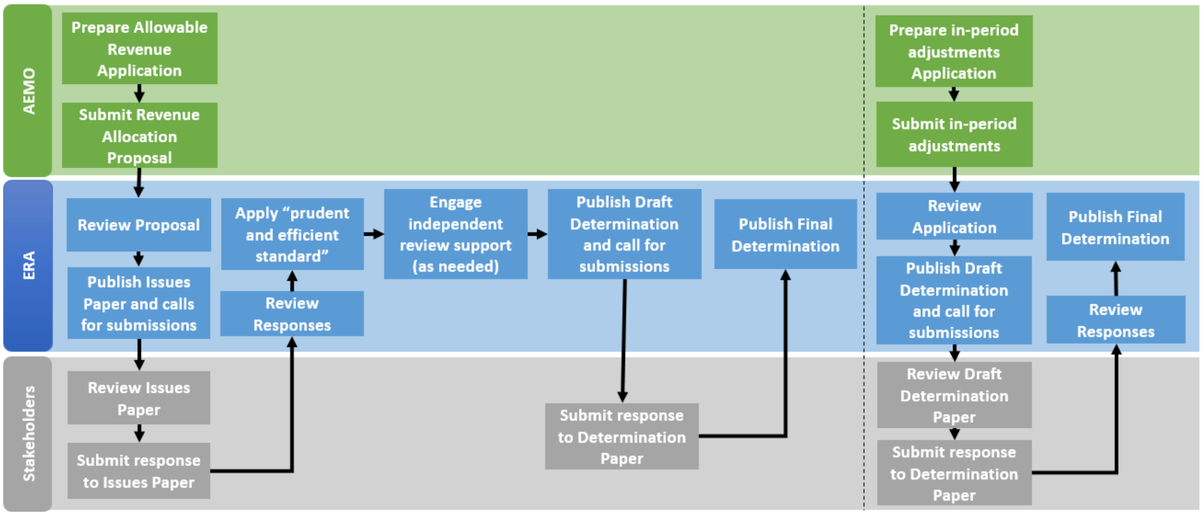
In the WEM its functions include reviewing and approving various market parameters, undertaking reviews of market processes, monitoring and enforcing compliance with the ESM Rules (for Market Participants, AEMO and the Network Operator). The ERA functions also include reviewing and approving the Allowable Revenue and Forecast Capital Expenditure proposals for AEMO to carry out its function in Western Australia.

1.3 The current Allowable Revenue Framework

As a not-for-profit organisation, AEMO is reliant on the market participant fees it is allowed to charge to recover the costs it incurs to perform its functions under the ESM Regulations, ESM Rules and GSI Rules. These costs are eventually passed through to consumers.

AEMO's ability to raise funds through market fees is governed by the Allowable Revenue framework (ARF) in the Rules. The current ARF process is summarised in Figure 2.

Figure 2: Allowable Revenue framework



Every three years, AEMO must develop an Allowable Revenue and Forecast Capital Expenditure proposal to cover the forward-looking costs of performing its functions under the Rules. The ERA is responsible for determining the level of funding required for AEMO to execute its functions efficiently.

The Rules outline the factors that the ERA must consider in determining AEMO's funding proposal. Principally, these include that costs must only consist of those that would be incurred by a prudent service provider, acting efficiently, and seeking to achieve the lowest practically sustainable cost of delivering its functions, while promoting the State Electricity Objective (SEO) in relation to the WEM and the GSI Objective in relation to the GSI functions.

At the same time, the ERA must ensure that the Allowable Revenue is sufficient to cover AEMO's forward looking costs of performing its functions. In addition to the matters prescribed in the Rules, the ERA may give consideration to any other relevant matter in its determination of AEMO's Allowable Revenue.

The ERA determines a single figure that it considers meets the requirements under the Rules for each of the Allowable Revenue and the Forecast Capital Expenditure for each three-year Review Period. Recurring expenditure is recovered in the year of expenditure, while capital expenditure is recovered over time through depreciation and amortisation of assets.

AEMO must make in-period submissions to the ERA if AEMO forecasts it will overspend the approved Allowable Revenue or Forecast Capital Expenditure by more than the lower of 10% or $10 million in relation to the WEM or the lower of 10% or $0.5 million in relation to AEMO's GSI functions.

AEMO must provide all information needed to satisfy the ERA that requested funding is prudent and efficient, and sufficient to cover AEMO's forward looking costs, with the onus on AEMO to develop convincing and thorough submissions.

To assist AEMO in providing information to demonstrate that its funding request meets the required standard to satisfy the ERA's assessment criteria, the ERA has published a proposal guideline that outlines a two-pronged approach to assessing the prudency and efficiency of AEMO's costs[2].

A more detail description on each step of the process can be found in section 4 in this paper.

1.4 The need for review

As Western Australia's energy transition has evolved, so have AEMO's role and responsibilities. When AEMO was established, power system conditions were more predictable, characterised by central large-scale synchronous generation and passive demand, with a network designed for one-way flow to end consumers. With further market reforms and significant investments to support the move towards a decarbonised power system scheduled over the next decade, AEMO's role and responsibilities are expected to continue to evolve and expand as planning and operating the WEM and the power system become more complex.

The energy transition has challenged the ARF processes. In recent years, AEMO has made regular in-period submissions to request additional revenue, and market fees have risen substantially with little notice[3].

The ERA's Final Determination of AEMO's second in-period budget adjustment for the sixth Allowable Revenue period (AR6) expressed concerns that the current ARF is not fit-for-purpose. It highlighted issues with the current regulatory framework and indicated support for the development of a replacement framework with more workable arrangements[4].

AEMO also considers that the current framework is not fit-for-purpose. In August 2024, it submitted two Rule Change Proposals[5] to address challenges with the WEM and GSI ARFs. These Rule Change Proposals sought to remove the requirement for the ERA to determine AEMO's budget and proposed specific elements for the new budget and fee determination process, drawing heavily from the model used in the National Energy Market (NEM), including:

- annual priorities, activities, budget and fee setting using AEMO established processes with requirements to consult with its stakeholders;
- major project delivery reporting, with the ability for stakeholders to provide input into the scope, sequencing, and prioritisation of projects;
- transparency around AEMO's performance through annual reporting; and
- review and oversight of the effectiveness of the new framework by the Coordinator as part of its WEM effectiveness reporting.

All submissions received from stakeholders during the first consultation period strongly objected to the proposed removal of the independent regulatory oversight by the ERA from

[2] ERA Guideline to inform the Australian Energy Market Operator's funding proposal 2022

[3] AEMO has estimated that its AR6 second in period submission will increase the 2024-25 market fee by $1.04 per MWh (a 68 per cent increase) to $2.57 per MWh for 2024-25, up from $1.53 per MWh in 2023-24.

[4] AR6-2nd-In-period submission-Final-determination

[5] RC_2024_01 and GRC_2024_01, each titled "AEMO's Allowable Revenue Framework"

AEMO's budget process. Stakeholders who provided submissions were concerned that market participants and other stakeholders did not have the resources or expertise to consider the prudence and efficiency of AEMO's proposed expenditure.

While stakeholders acknowledged that it is difficult for a market operator to forecast expenditure during time of significant change, they were concerned that the proposed changes did not adequately address core issues with the current frameworks, may reduce AEMO's accountability and transparency, and increase costs to Market Participants.

The Coordinator's Rule Change Reports acknowledged the issues raised, rejected the Rule Change Proposals, and instead proposed Amending Rules to suspend AEMO's current Allowable Revenue Framework with a mechanism to index market fees annually until fees can be set under a replacement framework[6].

1.5 How this review has been conducted

The ARF under the ESM Rules is very similar to the framework for the GSI Rules and, historically, AEMO has combined both of its Allowable Revenue submissions to the ERA. This review has presumed this convention will continue and therefore included an assessment of AEMO's ARF and proposals under both the ESM and GSI Rules.

This review considered all suggestions provided during AEMO's Rule Change Proposals.

1.5.1 The objective of this Review

The objective of this Review is to:

- identify the issues and inefficiencies regarding the current arrangements;
- benefit from best practice elsewhere; and
- develop a new fit-for-purpose replacement framework, that balances the views of AEMO, the ERA and other stakeholders while balancing the three limbs of the SEO.

For a more detailed outline of the SEO and design objectives guiding this Review, please see section 3.1 of this paper.

1.5.2 Staged approach

This Review is being carried out in three stages:

Stage one:

- *Assess existing frameworks and undertake jurisdictional scan*. The first stage is to undertake an assessment of the current ARF processes, identifying issues and inefficiencies. This stage also included a scan of practices in other jurisdictions that could inform potential options for a new framework.

[6] RC_2024_01 Final rule change report and GRC_2024_01 Final rule change report. The amending rules commenced on 23 April 2025.

Stage two:

- *Options development and assessment, proposal development*. The second stage is to identify and assess options for an efficient and effective ARF that is fit-for-purpose and reflects consideration of stakeholder views and concerns.

Stage three:

- *Proposed policy position and implementation*. The final stage involves drafting and consulting on the proposed policy positions, followed by detailed design and drafting of ESM and GSI amending rules.

Stakeholder engagement

Stakeholders have already provided input into the review through comments on the ERA determinations and the AEMO Rule Change Proposals. Energy Policy WA has taken account of this feedback during the review.

Given the roles and responsibilities of AEMO and the ERA under the current framework, Energy Policy WA has engaged directly with these entities throughout stages one and two of the review, to identify options for change and seek input on how those options would affect their organisations.

Energy Policy WA also held an industry workshop during stage two to seek input from other stakeholders on the proposals.

This paper provides all stakeholders an opportunity to formally respond to Energy Policy WA's proposals. Stakeholders will also have opportunity to comment on the draft ESM Rules and GSI Rules amendments to implement the proposals later in the year.

1.5.3 Structure of this Paper

This consultation paper summarises the findings, analysis and policy proposals from stages one and two of the ARF Review, developed to enable the introduction of a new replacement framework.

This paper:

- sets out issues identified with the current ARF;
- describes practices in other jurisdictions;
- discusses options identified in stage two, and evaluates them against pre-defined assessment criteria;
- outlines a proposed new framework; and
- requests feedback on the proposals.

This document is structured as follows:

- **Section 2** describes issues identified with the current framework.
- **Section 3** sets out Energy Policy WA's key design objectives for a new framework, and how options have been evaluated.
- **Section 4** sets out proposals for relevant aspects of the framework.
- **Appendix A** summarises practices in other jurisdictions.
- **Appendix B** includes draft terms of reference for an Independent Panel.

2. Issues with the current Allowable Revenue Framework

As previously described, AEMO, the ERA, and other stakeholders have raised a range of concerns with the current framework. This chapter summarises the issues raised by each party.

2.1 Issues raised by the ERA

In its final determination on AEMO's second in-period submission for AR6, the ERA expressed the following concerns:

- The current framework is reflective of electricity networks, for which past costs are a reliable indicator of future expenditure. This assumption is not valid in an environment where reform-related activities must be prioritised and AEMO's functions are rapidly expanding.
- The framework is not leading to outcomes that are beneficial to the WEM, particularly considering the resource burden on both AEMO and the ERA to bridge information gaps and complete the required analysis.
- AEMO has already spent funds on unapproved projects and is seeking to recover those costs through additional funding requests. This indicates that a standard incentive-based regulatory framework is ill-suited to assessing AEMO's funding needs.
- Due to the timelines imposed by the ESM Rules, AEMO was unable to request an operating expenditure adjustment with its first in-period submission.

The ERA also noted that it had experienced considerable challenges receiving a clear explanation from AEMO regarding increases to operational labour costs between the original AR6 and the second in-period submission. The ERA noted that supplementary information provided after the draft determination demonstrated gaps in AEMO's processes and systems, often making justifications incomplete and impeding the ERA's ability to form a clear understanding of AEMO's budget position and funding requirements.

2.2 Issues raised by AEMO

In its Rule Change Proposals, AEMO noted the following concerns:

- The current framework permits the ERA to approve only those forecast costs with a high degree of certainty. In the current environment of fast-paced transition and reforms, costs are difficult to forecast with such certainty.
- Energy market participants' needs, energy reform agendas and policies, and project requirements are constantly evolving contributing to year-on-year uncertainty about AEMO's and market participants' responsibilities and associated costs.
- The rigidity of the framework does not allow the ERA sufficient flexibility to approve a three-year forecast that will be inevitably subject to changing priorities and evolving project scope.

AEMO considered that the current framework has caused the following problems:

- The need to submit four Allowable Revenue submissions since 2020, due to the uncertainty inherent in the energy transition.
- Delays in implementing key reform projects.

- Uncertainty for market participants on when critical projects will be delivered due to funding uncertainty, with consequential difficulty in accurately forecasting the level of Market Fees.
- High administrative costs, with each allowable revenue submission estimated to have cost AEMO approximately $1 million.

AEMO argued that a rigid, set and forget' funding arrangement, based on ex-ante scrutiny, is not appropriate in a context of uncertain policy, regulatory outcomes, and project scopes.

2.3 Issues raised by stakeholders

In response to the Rule Change Proposals and subsequent engagements with Energy Policy WA, stakeholders raised several concerns:

- Rising costs: Annual WEM operating costs have nearly quadrupled between 2018 and 2025. While there are important drivers for this – including capital investment in the significant ongoing reform programme, enterprise-wide capability uplifts across AEMO, and external inflation pressures – stakeholders remain concerned that the cost increases do not reflect efficient delivery of market and system operations.
- Forecasting errors: Market cost and fee estimates have varied significantly in recent years (compared to actuals), complicating stakeholders' financial and commercial planning.
- Project delivery concerns: In AR5, one in four projects approved were not delivered, half went over budget, and underspending in others was due to delays, rather than cost savings. Additionally, some concerns about overspending or underfunding were not raised in a timely manner. Some market changes resulting from policy reform programs – such as Energy Policy WA's 2022 Reserve Capacity Mechanism Review[7] and 2023 Cost Allocation Review[8] - remain unscheduled.

Stakeholders emphasised the continued need for robust external scrutiny of AEMO expenditure across multiple years.

2.4 Underlying drivers

Energy Policy WA has identified a range of underlying causes for the issues outlined above, which can be grouped into three categories: industry context, incentives, and process design.

2.4.1 Industry context

All parties acknowledged that the broader industry context is a key driver of issues with the current ARF. As the electricity sector transitions to one with predominantly renewable

[7] Reserve Capacity Mechanism Review

[8] Cost Allocation Review

supply, high levels of distributed resources, and changing consumer behaviour, the nature and pace of AEMO's operational activities are evolving rapidly and unpredictably.

Significant market design changes to support the energy transition have created uncertainty around the scope and timing of capital projects. In such a context, setting expenditure years in advance guarantees the need for adjustments.

2.4.2 Incentives

In any regulatory regime, if the interests and incentives of the regulator (on behalf of those who use and pay for the service) and the regulated entity align, it is much easier to ensure the outcomes align with overall goals.

The current ARF is based on the regulatory mechanisms commonly used for for-profit monopoly network businesses. However, AEMO's status as a not-for-profit entity means that it cannot be allocated a share of savings or overruns, and all costs incurred are necessarily passed through to consumers. This means that AEMO does not have direct financial incentives for delivering in a timely and efficient manner. Reputational incentives to maintain reliability ("keep the lights on") may outweigh incentives to operate in a prudent and efficient manner.

The current framework also challenges the ERA's incentives. If the ERA denies funding because it considers that AEMO's proposed costs are not prudent and efficient, and AEMO either cannot reduce the scope of its activities or cannot identify further efficiencies, it cannot source funds from elsewhere. The ERA may be seen as responsible for any service quality issues, whether or not the issues result from inadequate funding. Alternatively, the ERA may be asked to approve in-period funding in circumstances when the AEMO has exhausted its budget and will face a funding shortfall. Consequently, the ERA may feel compelled to approve in-period adjustments even when proposed expenditures are not clearly justified.

2.4.3 Process design

Process-related drivers relate to how easy it is for the process to identify the true prudent and efficient cost, and whether the process itself is efficient:

- Spending limit: AEMO is not constrained from spending funds above its approved limit, or on projects which have not been scrutinised. As a result, funding requests can relate to funds that have already been spent, for which funding cannot be denied (due to AEMO's not-for-profit status).
- Benchmarking challenges: it is difficult for the ERA to compare AEMO's efficiency with other similar entities, as the functions performed, and the operating environment are different. In some categories, past costs are not a good indicator of forward-looking costs.
- Information availability: The ERA's determination is informed by the quality of information provided. AEMO has been limited in what information it can produce, and the ERA has often had insufficient information to properly scrutinise expenditure. At the same time, AEMO is concerned that the level of information required to scrutinise expenditure goes beyond what it produces in the ordinary course of business, incurring additional effort and cost.
- Evidentiary standard: AEMO is required to operate "prudently and efficiently". In a changing environment, it has been difficult to clearly define what this standard entails. If this cannot be demonstrated, ERA cannot approve funding, meaning in-period adjustments become a necessity.

- Performance review: Once funds are approved for expenditure, there is limited requirement to report on delivery against plans, projects, and budgets. This makes oversight more difficult and reduces transparency.

3. Design objective and assessment criteria

3.1 Design objective

The review established overarching guiding principles that reflect the SEO:

> *The SEO is to promote efficient investment in, and efficient operation and use of, electricity services for the long-term interests of consumers of electricity in relation to —*
>
> *(a) the quality, safety, security and reliability of supply of electricity; and*
>
> *(b) the price of electricity; and*
>
> *(c) the environment, including reducing greenhouse gas emissions.*

These principles provide a structured basis for evaluating the implications, trade-offs, outcomes and developments of potential ARF reforms, while also considering relevant aspects of the GSI regime. As outlined earlier (see section 1.5.1), the overall objective of this Review is to develop a framework that aligns with the three limbs of the SEO.

3.2 Assessment criteria

The SEO has three limbs. To relate each limb to the matters under consideration in the ARF, Energy Policy WA has identified key areas for each limb to be considered in a qualitative assessment for each option for changing the ARF.

3.2.1 Secure and reliable electricity supply

Ensuring security of supply is AEMO's obligation as the System Operator of the SWIS. The ARF should not directly impact power system security and reliability, and the security and reliability of electricity supply can be provided by any of the design options presented.

3.2.2 Price of electricity

Since AEMO recovers its costs from electricity and gas market participants through market fees, those costs are ultimately passed through to end consumers. As a result, the ARF can impact electricity prices.

Energy Policy WA has identified that there are three aspects of this limb to assess:

- Efficiency – does the change to the ARF have potential to increase the efficiency of AEMO's operations relative to other options. Would it encourage AEMO to achieve more for a given level of expenditure, or achieve the same for less?.
- Regulatory burden – would the change result in more or less effort in the ARF process itself. Does it require AEMO, the ERA, and other parties to do work that would not otherwise be required for prudent business operations.
- Cost-certainty and predictability – would the change make market fees more predictable for participants. Would it increase the level of certainty for AEMO expenditure.

3.2.3 The environment

Western Australia is in the midst of an energy transition, and is in the process of reforming market functions to meet net zero carbon targets. The ARF design can contribute to environmental outcomes through timely implementation of market reform.

There are two aspects of this limb to assess:

- Facilitating the energy transition and implementing market reforms – does the change improve or impair the ability to implement market reform projects and initiatives.
- Performance and accountability – does the change help to ensure that the energy transition projects are delivered according to plan. Does it clarify who is accountable for delivery or non-delivery.

3.2.4 Transparency and stakeholder visibility

Stakeholders have expressed a need for greater transparency in the ARF. In addition to the specific requirements of the SEO, Energy Policy WA will also assess potential change options for their impact on market transparency.

When assessing this aspect, Energy Policy WA has considered whether the potential change to the ARF provides more or less transparency of the processes and outcomes, and the level of opportunity for stakeholders to be heard in the process of developing expenditure forecasts.

4. A new Allowable Revenue framework

This section discusses options and proposals for a revised Allowable Revenue framework. It considers the framework in seven component parts:

- Incentives;
- Preparation process;
- Proposal content;
- Assessment and approval process;
- Funding period;
- Treatment of uncertainty; and
- Monitoring and reporting.

4.1 Incentives

In Western Australia, AEMO performs a natural monopoly function. It is the party designated to operate market and system operations functions under the Rules, including implementing changes to the markets and to AEMO functions resulting from rule changes.

Incentives for efficient and timely delivery by a regulated monopoly can be either financial or reputational. Which incentives are possible for the WEM and GSI regime depends on the governance structure for the market and system operator.

Traditional monopoly regulation can provide strong financial incentives to operate efficiently, by allowing savings and overruns to be shared by those who own and operate the monopoly business. This is only possible where the regulated entity is for-profit, with shareholders separate from those who receive (and pay for) its services.

When market and system operations are delivered by a not-for-profit entity, incentives for efficient decision making are reputational only. Reputational incentives function by holding decision makers accountable to those they are serving. If an organisation has a poor reputation, its statements may be ignored or discounted, it may struggle to attract staff, or its people may find it more difficult to progress in their careers (an executive's ability to deliver or not is known by future potential colleagues, employers, and clients).

Reputational consequences can translate into financial impacts on accountable individuals within the organisation, e.g. salaries and bonuses can be impacted, or a board or CEO can be replaced.

4.1.1 Current arrangements

The strength of reputational incentives faced by AEMO are heavily influenced by its governance structures.

As with most companies, the AEMO Board oversees AEMO's activities to ensure it meets its responsibilities under relevant laws and regulations. The AEMO Board monitors the performance and cost-effectiveness of, and risks associated with, AEMO's operations and systems, including WEM activities. AEMO has a broad range of statutory functions, including operating the NEM on the east coast, which is significantly larger than the WEM.

AEMO measures its organisational and executive performance against a balanced scorecard that is approved by the Board, and audited for verification. This scorecard includes the key business and strategic measures in the Strategic Corporate Plan[9] and is materially influenced by the performance of the Western Australia Division. This includes delivering reform projects, stakeholder feedback/ sentiment, and employee engagement.

Overall organisational performance against all objectives affects a significant portion of remuneration for all executives. The Western Australian executive general manager (EGM) is also assessed against a WA-specific scorecard, agreed with the CEO and overseen by the Board.

AEMO's delivery of its Western Australia functions is a relatively small part of its wider activity, and it is not clear what priority is assigned to Western Australia's stakeholders concerns by the board and CEO. Delivery of Western Australia functions has limited effect on AEMO's overall reputation, and it seems unlikely that inadequate performance of Western Australia's functions would result in significant consequences for the AEMO board and CEO. The reputational incentives are therefore muted.

4.1.2 Issues and options

At a high level, there are two key questions to consider:

1. Should WEM and GSI operations be carried out by a for-profit entity.
2. If not, how can a not-for-profit entity be incentivised to operate prudently and efficiently.

A for-profit market and system operator is not suitable at this time

One approach to incentivising efficient WEM and GSI operation and development would be to set up a for-profit market and system operator. This would allow traditional monopoly regulation or competitive tendering to apply financial incentives to the parties delivering those services.

Experience elsewhere shows that for-profit system and market operators can maintain reliable electricity supply, but that there are challenges to efficient delivery. Entities regulated this way generally have incentive to overstate their costs, but once costs are approved, they have a financial incentive to operate efficiently. This type of regulation requires strong service quality metrics to avoid a situation where the regulated entity saves money by not delivering services or allowing an unreasonable level of asset deterioration.

Under this model, the ERA's role would become even more important. Because of the information asymmetry between the regulator and the regulated entity (the regulated entity will always know more about its business than the regulator), comparison data would be critical:

- In a steady state environment, where there is limited change, costs can be compared against prior period costs.
- If regulated entities perform the same functions as monopolies in other places, their costs can be benchmarked against each other.

[9] AEMO's Strategic Corporate Plan FY26.

The distinctive nature of the WEM and the SWIS means that it is difficult to benchmark market and system operation costs, and the current pace of change in the sector means that there is significant market reform activity, which makes it even more difficult to accurately assess the appropriate level of expenditure.

Energy Policy WA considers that during the current energy transition, a for-profit market and system operator would not align with the SEO in terms of driving lower costs or enabling environmental goals (by delivering market reform) and would significantly disrupt and delay current or future reform activity.

Incentive options for a non-profit market and system operator

AEMO's Rule Change Proposals proposed to remove the ERA's role in scrutinising and approving AEMO's operational and capital expenditure. Market Participants and other stakeholders opposed this change, which would have had the effect of weakening reputational incentives.

At the other extreme, a market and system operator fully dedicated to Western Australia functions with governance and executive management fully focused on Western Australia (whether outside AEMO or ringfenced within AEMO) would have much clearer reputational incentives than the current arrangements. Energy Policy WA considers that this approach is not available during the current period of industry transition, as it would require significant restructuring, increasing costs in the short term and reducing the ability to deliver reform in the medium term.

If stakeholders consider wholesale reform to governance arrangements is necessary, a separate review of AEMO's governance arrangements would be required to meaningfully examine this topic. The ARF review has instead focused on incremental changes to the status quo governance arrangements, considering options which increase the power of reputational incentives for AEMO within its current corporate governance arrangements, as shown in Figure 1.

Energy Policy WA expects that any amendments in this range will be able to deliver reliable supply, so the deciding considerations against the SEO will be cost and environmental outcomes (enabled by delivering necessary reform).

Figure 1: Viable solution space

Energy Policy WA has identified a variety of options to sharpen reputational incentives within current structures, including:

- Increasing transparency in all aspects of the ARF.
- Publishing audited accounts for AEMO Western Australia functions, separate from the aggregated organisational accounts.
- Ensuring alignment of the Western Australia EGM's incentives, for example by:

- requiring key performance indicators to include financial and project performance against publicly reported budgets and timelines;
- publishing their key performance indicators, so stakeholders can see that targets include measurements of cost efficiency and timely delivery; and
- ensuring the Western Australia EGM had delegations for key WA decisions, and that delegations are published.

- Requiring at least two AEMO board members to have an explicit objective to look after the interest of the WEM;
- Establishing a Western Australia-specific advisory board, requiring AEMO to report to the board, and/or requiring advisory board approval for certain decisions;
- Establishing a Western Australia-specific budget review panel (without decision making power), made up of respected independent experts, and requiring AEMO to seek input from, respond to, and report to the panel as part of budgeting processes.

Some of these options would require approval and implementation from AEMO, for example anything that impacts on AEMO governance structures for non-WA functions. Nonetheless, Energy Policy WA would like input from stakeholders on these and any other potential options on how to sharpen reputational under AEMO's existing corporate governance framework.

4.1.3 Proposal

Proposal 1: Incentives and penalties

Proposal

1.1 Enhancements to strengthen reputational incentives within AEMO's existing corporate governance framework should be considered.

1.2 AEMO publishing audited financial accounts for Western Australia functions, separate from the aggregated organisational accounts.

1.3 AEMO must ensure that performance indicators for key executives include explicit links to efficient financial performance and timely project delivery, using the same metrics that are published and monitored, and must publish the relevant executive performance indicators.

Consultation questions

(1)(a) Do stakeholders consider that a review of governance arrangements for WEM and GSI functions is necessary or required?

(1)(b) Do stakeholders support the proposed approach to AEMO executive performance indicators?

(1)(c) Which (if any) of the incremental improvement options identified do stakeholders think would be effective in sharpening reputational incentives?

(1)(d) Are there other incremental improvements, not listed, which stakeholders consider may strengthen reputational incentives?

4.2 Preparation process

The first step in the Allowable Revenue framework process is the preparation of a proposal detailing AEMO's projected expenditure.

4.2.1 Current arrangements

In the current framework, AEMO prepares an Allowable Revenue and Forecast Capital Expenditure Proposal and submits it to the ERA for review. The proposal includes all of AEMO's operational and forecast capital expenditure in the three year funding period.

4.2.2 Issues and options

There are two key issues to be determined for proposals preparation:

- What party should prepare the revenue proposal; and
- How the proposal should be prepared.

All jurisdictions reviewed in the international scan have the same arrangements as Western Australia: the entity prepares its own budget proposal. Having another party prepare the proposal would be inefficient as it would require AEMO at least as much time and effort to provide the information necessary to complete the proposal.

The opportunity for improvement lies in ensuring that sufficient information for scrutiny is prepared in compiling the proposal, while the effort required to prepare and review it is minimised. One approach used in other places is to separate expenditure on business-as-usual (BAU) activities from expenditure on change initiatives such as market reform projects. This allows more predictable activities to be scrutinised on a longer cycle, while preserving flexibility to respond to ongoing change. The current ARF combines BAU and non-BAU costs together in the same process.

There is also an opportunity to improve stakeholder consultation during the preparation of funding proposals, particularly major capital expenditure. To this end, Energy Policy WA acknowledges the recent formation of the MAC's Major Projects Working Group[10], which will play an important consultative role in the timely development of project impact assessments. This will include AEMO providing cost estimates for reform projects based on draft Rules and provide an opportunity for stakeholders to scrutinise these before Rule Changes are finalised.

BAU costs

BAU costs are those that relate to functions defined in the ESM and GSI Rules as they exist at the time of the proposal. This includes ongoing costs to operate the power system, electricity market mechanisms, and GSI functions. To the extent that the processes and systems supporting those activities need to be maintained, refreshed, or upgraded, the costs of this continuous improvement may also reasonably be treated as BAU costs. This includes hardware and software infrastructure as well as office accommodation and staff upskilling.

BAU costs are characterised by their routine nature, and while they may be subject to timing and volume change (i.e. the frequency of service requirements), over time they should be relatively stable and 'predictable' relative to more volatile project expenditure costs.

[10] AEMO Major Projects Working Group web page

Non-BAU costs

Non-BAU costs relate to changes, additions, and subtractions to and from existing functions. This includes market reform implementation, or significant reorganisation of processes and platforms. These costs are less certain, and can be subject to significant variability from year-to-year. These are the costs that have been most problematic in the current ARF.

Some European and North American jurisdictions initiate their budget process by preparing an overarching business plan that identifies projects expected to commence, continue, and complete during the review period.

4.2.3 Proposal

Energy Policy WA considers that AEMO is best placed to continue preparing its funding proposals but proposes to separate the provision of BAU costs from costs for new functions (non-BAU). Preparation of these proposals would include consultation with stakeholders as this remains an important element of the process to ensure transparency.

Preparing a separate proposal for non-BAU costs would allow for more timely and flexible scrutiny and provide a more accurate basis for reviewing AEMO's performance. In particular, separating BAU and non-BAU proposals would enable individual project plans to be reviewed more frequently than is currently possible, reducing the need for revisions and repeated reviews.

Careful consideration needs to be given to clearly delineating BAU and non-BAU expenditure, including how the two may interact. Further guidance on this distinction, including potential overlaps such as when a non-BAU project transitions into a BAU activity, should be provided in a guideline prepared by the ERA.

For non-BAU expenditure, AEMO would prepare an overarching Project Governance Plan that sets out the processes and methods it uses to define, approve and deliver projects. AEMO will create an individual project plan for each proposed project, in line with the Project Governance Plan.

Proposal 2: Preparation process – BAU expenditure

Proposals

2.1 The ERA will prepare and maintain a regulatory guidelines for AEMO submission of proposed BAU expenditure.
2.2 The ERA guidelines will include definitions for BAU and non-BAU expenditure, and provide for appropriate interaction and delineation between the two.
2.3 AEMO will prepare its funding proposals in line with the ERA guidelines.
2.4 AEMO will be required to consult with stakeholders during the preparation of its non-BAU budget, including through the Market Advisory Committee's (MAC's) Major Projects Working Group.

Consultation questions

(2)(a)Do stakeholders support separating BAU and non-BAU expenditure?

(2)(b) What stakeholder consultation should occur during preparation of the budget proposal?

Proposal 3: Preparation process – non-BAU expenditure

Proposal

3.1 The ERA will prepare a regulatory guideline for AEMO's Project Governance Plan.

3.2 AEMO will prepare a Project Governance Plan in line with the guideline.

3.3 The Project Governance Plan will set out how AEMO plans, manages and reports on projects, including project governance, relevant stage gates, decision making processes, and estimation methods.

3.4 AEMO will prepare a project plan for each non-BAU project.

3.5 AEMO will consult with stakeholders in the preparation of each project plan.

Consultation questions

(3)(a) Do stakeholders support AEMO preparation of a Project Governance Plan?

(3)(b) What stakeholder consultation should occur during preparation of each project plan?

4.3 Content

The extent of information required to support cost estimation for hundreds of millions of dollars of expenses is significant. Even in the absence of a formal budget approval process, AEMO would spend substantial time and effort planning, estimating, and reviewing budget information. For example, operational functions and capital programs must be scoped, estimated, and delivered.

This section of the paper discusses the proposals content options that are applicable for Western Australia.

4.3.1 Current arrangements

The ERA publishes a guideline to inform AEMO's funding proposals[11]. The guideline sets out:

- The criteria that ERA uses to make its determination on AEMO's proposal (prudence and efficiency).
- The type of information and the level of detail expected from AEMO's proposal, particularly in:
  - Workforce planning and costing;
  - Capital expenditure; and
  - Operating costs and allowable revenue.
- The approach that the ERA will use regarding its determination.
- Templates to guide development and presentation of AEMO's proposal.

Operating costs must be split into labour costs, accommodation, depreciation and amortisation, finance costs, and IT and telecommunication costs.

Capital expenditures include reform projects within AEMO's scope of obligations but not part of BAU operations. For each capital project, AEMO must provide forecast expenditure

[11] ERA-Final-funding-proposal-guideline

(including inside and outside the review period), the business function of each project, and the type of assets acquired.

The ERA can update the funding proposal guideline as needed, including in response to how Rule Changes affect AEMO's functions and their funding process.

The guideline serves only as a guide rather than a mandatory format that AEMO is obliged to follow. AEMO is not explicitly penalised for not following the guidelines. Where ERA rejects costs or reduces AEMO budget due to insufficient information provision, AEMO can apply to recover the rejected or reduced cost through an in-period adjustment .

4.3.2 Issues and options

Generally, the form and content of the revenue proposals are similar across the jurisdictions reviewed. Most budget proposal content focuses on the amount per line item and the supporting explanation on what drives the expenditure. This practice is similar to the current Western Australia regime.

As noted in section 4.2, Energy Policy WA is proposing to separate the provision of BAU costs from costs for new projects.

BAU expenditure proposal content

The BAU expenditure content is typically straightforward. Most jurisdictions have specific cost categories that are accounted for under the operating costs. These costs are often compared side-by-side with historical and forecast costs. Options for change include requiring AEMO to:

- Identify the level of change to operational activities in each area from year-to-year.
- Explain and justify changes in budget compared to the previous year's actual outturn, especially where expenditure relates to steady state or near-steady state activity.

It is reasonable to expect that AEMO would need to carry out all of these activities in the absence of a regulatory review, so requiring this information to be provided should not add to the regulatory burden, with the benefit of increasing transparency of the budgeting process.

In addition, BAU expenditure could be framed by an overarching business plan. This approach is used internationally[12] to provide context for ongoing activity on an annual basis. A business plan could include:

- A summary of AEMO's key strategic aims for Western Australia (which should be driven by the SEO).
- A summary of AEMO's key work priorities and major planned deliverables for the year, including how they relate to the key strategic aims.

In line with international practice, the ERA guideline could specify business plan information to be provided.

[12] E.g. in the UK, under the NESO Business Plan: Guidance Document

Non-BAU expenditure proposal content

As discussed in section 4.2, Energy Policy WA is proposing that AEMO prepares a Project Governance Plan that sets out the processes and methods it uses to define, approve and deliver projects.

With the proposed split of BAU and non-BAU costs, AEMO will create an individual project plan for each proposed project, in line with the Project Governance Plan.

The current information requirements for non-BAU expenditure are identified in the funding proposal guidelines for capital projects. Although these provide the necessary information to estimate project costs in the review period, the guidelines do not currently require specific plans for project delivery such as delivery timelines, milestones, or expenditure profiles beyond the review period. If each individual project plan provides this additional information, it can be used to track and report project status over time (see section 4.7).

Many projects will impact BAU expenditure once commissioned. For example, if a project implements a new operational function, new resources may be required to carry out the function. Similarly, if a project automates an existing function, it may reduce the ongoing effort required. Each project plan should include an assessment of the project impact on BAU costs. An ERA guideline should describe how non-BAU projects identify consequential impacts on BAU costs in project plans and budgets. This will ensure the ERA are aware and able to monitor BAU cost impacts between its reviews of AEMO BAU costs.

Similarly, sometimes it may be efficient to include improvements to existing processes in a project to deliver market reform. AEMO's Project Governance Plan should set out how AEMO will determine the proposed split of project costs between BAU and non-BAU expenditure proposals.

4.3.3 Proposal

Proposal 4: Content - BAU

Proposal

4.1 The ERA will prepare a guideline that sets out the information required to be included in AEMO's BAU budget submission, including identification of non-BAU cost implications.

4.2 The ERA guideline will include requirements for an overarching business plan that provides context for AEMO's expenditure, including linking expenditure to strategic goals that relate to the SEO.

4.3 The ERA guideline will prescribe that information that AEMO would be expected to prepare in the ordinary course of its business.

4.4 AEMO will prepare its BAU budget submission in accordance with the ERA guideline.

Consultation questions

(4)(a) Do stakeholders believe the ERA document should serve solely as a guideline, or should its requirements be formally incorporated into the Rules?

(4)(b) Do stakeholders consider that AEMO's BAU submission should be supported by an overarching business plan? Do stakeholders have any comments on the content to be included in such a business plan?

(4)(c) Do stakeholders agree that the information AEMO would reasonably be expected to prepare in the ordinary course of business should be sufficient to allow the ERA to review prudence and efficiency of AEMO BAU expenditure?

Proposal 5: Content – non-BAU
Proposal 5.1 AEMO will prepare individual project plans in compliance with its Project Governance Plan. 5.2 Individual project plans will include a description, scope and rationale of the project, total forecast budget for the duration of the project, project timelines and milestone dates, supporting information as to how the cost and timelines were determined, and the expected impact on market fees over time. **Consultation questions** (5)(a) Do stakeholders agree that the form and content of individual project plans should be set by the Project Governance Plan? (5)(b) Do stakeholders agree that the content of individual project plans should include the information specified? If not, what should they include?

4.4 Assessment and approval process

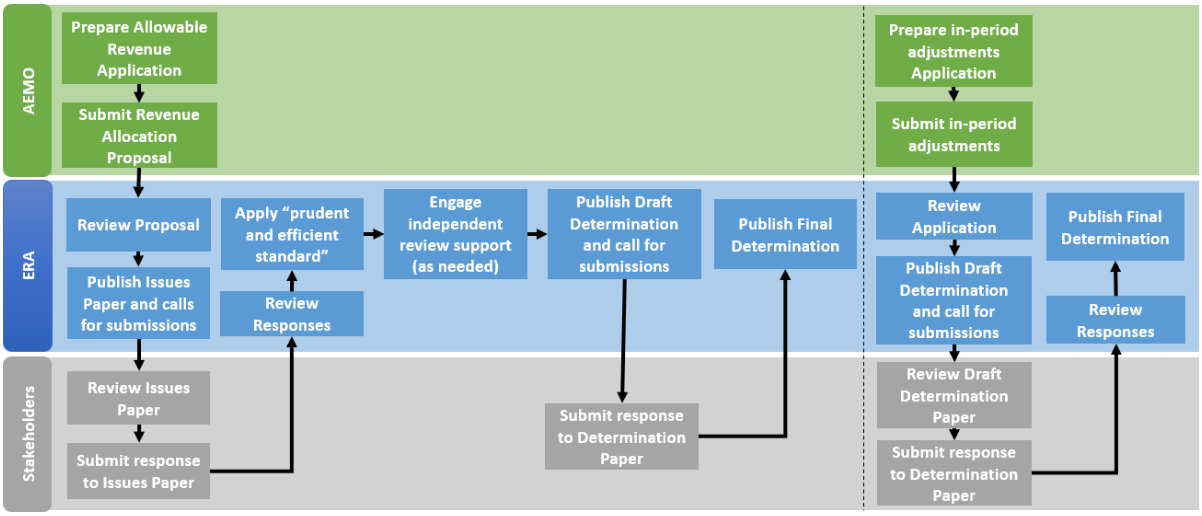
4.4.1 Current arrangements

The current assessment and approval process is shown in Figure 2. The revenue proposal is submitted by AEMO to the ERA. The ERA conducts initial reviews and then publishes an issues paper, seeking public feedback. Any interested stakeholder can submit a response. Informed by stakeholder responses, the ERA reviews AEMO's submission, applying the "prudent and efficient" standard as described in its guidelines. ERA may also engage independent review support as needed.

After its review, the ERA publishes a draft determination for AEMO's funding. This draft determination is also open for public submissions. After considering and reviewing stakeholder feedback, the ERA decides whether to approve, reject, or substitute AEMO's revenue application, and publishes its final determination.

If AEMO forecasts its expenditure to increase by more than the lower of 10% or $10 million in relation to the WEM or the lower of 10% or $0.5 million in relation to AEMO's GSI functions from the Allowable Revenue or Forecast Capital Expenditure approved by the ERA, it must submit an in-period adjustment to the ERA. The assessment and approval process runs similarly to the main submission. The main difference is that the in-period adjustment no longer requires an issues paper. Instead, the draft determination is published after AEMO's submission. Then, the final determination comes after ERA reviews the stakeholder responses to the draft determination.

Figure 2: Allowable Revenue Framework submission and approval process



4.4.2 Issues and options

The previous sections have detailed who will prepare and what content should be prepared for the revenue proposals. Treating BAU costs and non-BAU costs separately allows the option to have separate processes for assessment and approval.

Globally, there are two main models for assessment and approval. Budget proposals are either approved by the ISO board – made up of representatives of those funding the costs (market participants, ISO members, or government), or by an independent regulator (local or federal).

There are three broad options to consider for assessment and approval:

- Refine and improve the status quo: AEMO prepares the budget with stakeholder consultation and the ERA reviews and approves it.
- The ERA approval is replaced with another form of formal scrutiny, followed by AEMO approval as outlined below:
  - AEMO prepares the budget with stakeholder input. An independent body reviews and publishes its findings.
  - Stakeholders consider the proposal and the independent review, and provide submissions.
  - AEMO adjusts the budget to address feedback, and approves a final budget, publishing reasons for any departures from the independent review recommendations.
- Informal scrutiny: AEMO prepares the budget with stakeholder consultation, AEMO approves the budget and publishes it with responses to stakeholder submissions.

These options could be combined, for example by applying a refined status quo process to BAU expenditure, while replacing ERA approval with a different form of scrutiny for project expenditure.

Energy Policy WA considers that either form of formal scrutiny would have a similar regulatory burden. The regulatory burden would be lower with the third option, at the cost of less transparency and visibility for stakeholders.

The ERA has indicated that under the current approach, it is unable to effectively fulfil its duties in relation to reviewing project expenditure. Given the importance of adequate funding to maintain power system security and reliability, it has to approve costs that AEMO considers necessary, but which ERA has not been able to determine as prudent and efficient, or has determined to be not prudent or efficient. For this reason, Energy Policy WA considers that a continuation of the status quo is not an option. At the same time, stakeholders have signalled their desire that AEMO's expenditure should remain subject to external scrutiny, so a consultation-only approach will not be sufficient.

Energy Policy WA considers that it is reasonable to retain ERA approval of BAU expenditure, but introduce another form of scrutiny for non-BAU expenditure.

For BAU expenditure, Energy Policy WA proposes that the ERA would review proposed expenditure similarly to its current approach, with changes as noted in sections 4.2 and 4.3.

For non-BAU expenditure, Energy Policy WA proposes that AEMO would have final approval role, but that the ERA would first approve the overall process for planning and managing projects and their expenditure, and a panel of independent experts, convened by the Coordinator of Energy, would review each individual project plan. AEMO would need to consider and respond publicly to the Panel findings prior to finalising and approving the project plan and budget.

Projects can have implications for BAU costs in two ways:

1. BAU and non-BAU activity may be delivered by the same project (e.g., it may be efficient to automate an existing process while systems are being amended for a wider market change). Costs for such BAU components should be provisioned from the existing approved BAU budget and should not be treated as additional expenditure above the approved budget.
2. Non-BAU activity may result in ongoing changes to BAU requirements once a project is commissioned. If this results in an ongoing increase or reduction to BAU costs, it may trigger a need to revisit the approved BAU budget – see section 4.6.

Cross-subsidy between BAU and non-BAU

The individual non-BAU projects budgets are proposed to be approved by AEMO. This has raised concerns regarding the potential risk of cross-subsidy, where AEMO includes BAU costs in the non-BAU budget or vice versa.

To mitigate this risk, scrutiny must include clear definitions of BAU and non-BAU, and careful consideration of expenditure delineation. As outlined in proposal 2, the ERA will prepare and maintain a regulatory guideline for the AEMO submission of proposed BAU expenditure and include definitions for BAU and non-BAU expenditure.

Knowing where and when AEMO spends its budget is a key foundation of the assessment and approval. Simply put, there is a need to reduce the information asymmetry between AEMO and stakeholders.

- The separation of the BAU and non-BAU process enables the distinction between the cost allocated to each project or expense category. Any over- or under-recovery of the budget is distinguishable during assessment.
- The addition of an ex-ante scrutiny by the Independent Panel to review AEMO proposed budget on non-BAU projects would address the stakeholders concerns regarding the proposed removal of the ERA's role.
- An ex-post project and cost reporting requirement would affirm the suitability of the approved budget (see Section 4.7).

The assessment and approval guidelines would be designed with these principles.

Role and function of the Independent Project Plan Assessment Panel

The role of the Panel is to review project plans, determine whether it considers the expenditure is efficient and the BAU expenditure has been appropriately identified, and publish its opinion and any recommendations to AEMO.

The Panel is intended to provide executive level input and scrutiny on behalf of market fee payers (stakeholders) on the reasonableness and efficiency of each proposed project budget before significant funding is committed. The Panel is not intended to perform a bottom up, line by line review of project estimates, but rather to assess:

- whether the project scope and budget are appropriate and efficient to implement the required reform or activity;
- whether AEMO's process to determine the estimates is reasonable; and
- whether project time and cost plans are neither unduly cautious nor excessive.

For each submitted project plan and budget, the Panel would publish a review report with its findings, and AEMO would be required to respond prior to approving its project plan(s).

The Panel would also have a role to evaluate AEMO's delivery performance by reviewing project reports, assessing them against approved plans and publishing an annual performance report.

Energy Policy WA has developed draft terms of reference (**Appendix B**) to provide further details on the proposed Panel. This includes an outline of:

- the Panel's role and activities, including timing and information gathering powers;
- the extent of Energy Policy WA's role in supporting the Panel;
- governance matters including confidentiality, budget and composition; and
- member responsibilities, including guidance on expected time commitment.

4.4.3 Proposal

Proposal 6: Assessment and approval Process
Proposals 6.1 The ERA will review AEMO's BAU expenditure proposals. 6.2 The ERA will retain power to approve, reject or substitute proposed BAU expenditure. 6.3 An Independent Panel will review individual project plans. 6.4 The Independent Panel may request additional information that it requires to inform an assessment of each project plan. 6.5 The Panel's requests must be consistent with good project management practice. 6.6 The Panel must assess whether each proposed project plan has efficient expenditure and has appropriately identified BAU vs non-BAU components. 6.7 The Panel must publish its assessment on each proposed project plan, including any recommendations. 6.8 AEMO must consider and respond to Panel recommendations before approving a project plan. 6.9 AEMO will be responsible and have the authority to approve each project plan.
Consultation questions (6)(a) Do stakeholders support the proposed assessment and approval process? (6)(b) Do stakeholders agree with the proposed role of the Independent Panel?

4.5 Funding period

4.5.1 Current arrangements

Currently, AEMO requests funding on a three-year cycle. If the Allowable Revenue or Forecast Capital Expenditure changes by more than a defined threshold[13], AEMO submits an in-period adjustment.

4.5.2 Issues and options

Many international jurisdictions have a one-year cycle for funding. The entity prepares an annual budget with non-binding forecasts for subsequent years. The review and approval process lasts several months; then the approved budget is confirmed before the start of the relevant financial year. Jurisdictions that observe a two-year, three-year or longer funding period include a mechanism to deal with uncertainty within the funding period (see section 4.6).

Options for Western Australia are:

- Retaining the status quo – a three-year funding period for all activity.
- Moving to a one-year funding period for all activity but requiring indicative forecasts for subsequent years.
- Having different funding periods for BAU and non-BAU activity, for example:
  - A multi-year period for lifecycle projects and other BAU related costs.
  - A shorter period for reviewing and approving market reform projects, especially for projects with a budget above a certain threshold.
  - Having project expenditure submitted at any time throughout the year, when it is ready for review.

Annual review of BAU costs would require significant ongoing effort by AEMO, the ERA, and stakeholders. Although operational activity is never in a completely steady state, once the ERA has reviewed and approved BAU expenditure, the approved level of funding should be sufficient for future years as well – subject to adjustments for price pressures (i.e. changes in consumer and wage price indexes) and expected efficiency gains.

Accurately estimating non-BAU project expenditure for a three-year funding period has proven challenging under the current framework. Retaining a multi-year funding period for non-BAU expenditure has potential to delay market reform, require multiple adjustments, and repeat the issues with the current framework. However, if project plans can be submitted at any time during the year, it would be difficult for the Independent Panel to maintain a part-time role and contain its costs.

[13] The lower of 10% or $10 million in relation to WEM functions, and the lower of 10% or $0.5 million in relation to GSI functions.

A 6-monthly project plan submission window would balance flexibility for AEMO with the costs related to the Panel. AEMO could provide updates outside the review windows, but significant Panel activity would be reserved for twice a year.

Energy Policy WA therefore proposes that the ERA carries out a one-off review of AEMO BAU costs for a baseline year, with AEMO revenue in future years derived by adjusting the baseline by an appropriate indexation (similar to the transitional indexation in place today) less an efficiency allowance to be determined by the ERA.

Non-BAU project plans should be reviewed twice annually, with the review commencing at least six months ahead of when the costs will start being incurred.

4.5.3 Proposal

Proposal 7: Funding Period – BAU expenditure

Proposals

7.1. AEMO will submit a BAU expenditure proposal for a baseline year.

7.2. The ERA will assess the expenditure proposal and approve baseline BAU expenditure.

7.3. The ERA will determine an appropriate factor for annual efficiency gains to be achieved by AEMO.

7.4. AEMO's annual BAU expenditure will be set by the approved baseline expenditure, multiplied by an appropriate indexation (similar to the transitional indexation in place today) and the efficiency factor determined by the ERA.

Consultation questions

(7)(a) Do stakeholders support the proposed funding period for BAU expenditure?

(7)(b) Do stakeholders support the proposed indexation of BAU expenditure to reflect changes in underlying costs?

(7)(c) Do stakeholders support the proposed indexation to include an assumed efficiency gain?

Proposal 8: Funding period – non-BAU

Proposal

8.1. AEMO will submit project plans at least six months before the planned commencement of significant project activities.

8.2. The Independent Panel will review project plans twice each year, in time for AEMO to finalise and approve project funding before the start of the project.

Consultation questions

(8)(a) Do stakeholders support the proposed funding period for non-BAU expenditure?

(8)(b) Do stakeholders support the twice per year review by the Independent Panel?

4.6 Treatment of uncertainty and volatility

When funding is approved for a multi-year period, the ARF must have a mechanism to deal with unexpected costs within the period. Typically, jurisdictions with a funding period longer than one year have uncertainty mechanism to deal with potential over- or under-spending within the funding period.

4.6.1 Current arrangements

Currently, it is difficult to approve funding for an uncertain activity- whether BAU or Non-BAU project. AEMO can expend funds on uncertain activities, but only by diverting efforts from previously approved activities, and then either finding savings or deliberately spending more than the approved amount.

If AEMO's Allowable Revenue or Forecast Capital Expenditure changes by more than a defined threshold[14], AEMO must submit an in-period adjustment, and the ERA reviews the budget all over again, with the same level of rigour used in the original assessment.

In recent years, this process has been used frequently to manage changes due to significant changes in project costs, some of which were too uncertain to be approved in the original submission.

Because costs are recovered through market fees, this frequent use of in-period submissions has resulted in significant changes in market fees from year-to-year, with limited notice for fee-payers.

4.6.2 Issues and options

Internationally, there are a variety of mechanisms used to deal with uncertainty and volatility. Many are similar to Western Australia's, requiring the entity to apply to recover additional spending beyond what was originally approved. Such regimes typically come with the obligation to refund any underspend to the payers.

Other methods used elsewhere include:

- Approving expenditure within budget categories, and not allowing funds to be transferred between categories without prior approval. This would be more restrictive than the current WEM and GSI approach.
- Distinguishing between forecast errors (known-knowns that were incorrectly estimated), known-unknowns (predicted projects with uncertain size and scope) and unknown-unknowns (completely unforeseen activity) in in-period adjustments.
    - Approving "unpredictable" (or "known-unknowns") capex on a different evidentiary standard than "predictable" capex, so that market fees can reflect it, with additional process steps to access the unpredictable funding allocation.
    - Allowing a ringfenced budget for projects that have not been scrutinised (unknown-unknowns)
- Using a multi-year business plan to signal upcoming activity, with changes to the plan only made following a structured process.

Most uncertainty comes from non-BAU project activity, in which project impacts on cost recovery can vary significantly from year to year. Some jurisdictions seek to smooth these changes over time by:

- Selecting a depreciation schedule for each project which reduces volatility between years. This may or may not be allowed depending on the accounting policies in use.

[14] The lower of 10% or $10 million in relation to WEM functions, and the lower of 10% or $0.5 million in relation to GSI functions.

- Provisioning a capital reserve to buffer year-to-year variation in depreciation and amortisation amounts. This means either collecting funds early to offset later depreciation charges or incurring increased financing costs to cover depreciation and delaying the collection of funds from market participants.

Energy Policy WA considers that AEMO approval for non-BAU funding along with a six-month window between reviews should preclude any need for an uncertainty mechanism on that expenditure. As noted in section 4.4, the Independent Project Plan Assessment Panel review is not required for the early-stage project exploration needed to formalise scope, budget, and timelines.

For BAU expenditure, uncertainty should be less, and a similar adjustment threshold can continue to be uses as in the current approach – that is, if expenditure is forecast to change by more than $5 million or 10% of the approved baseline (as adjusted for future years), AEMO must prepare a new baseline submission, and ERA must review and make a new determination. The one exception is where forecast expenditure is pushed above the baseline re-submission threshold by completion of a project which was already identified to incrementally affect BAU costs in a clearly defined area. In this case, the ERA should review only the areas of change, rather than the whole BAU cost base.

4.6.3 Proposal

Proposal 9: Treatment of uncertainty

Proposals

9.1 If BAU expenditure is forecast to exceed the adjusted baseline for the year by more than a 10% or $5 million threshold for the WEM, or 10% or $0.25 million threshold for the GSI, AEMO must submit new baseline BAU expenditure for ERA approval.

9.2 If BAU expenditure is forecast to exceed the threshold only due to commissioning a specific project, and the impacts of that project are limited to specific functions, AEMO must submit a partial baseline BAU expenditure for those functions only, and the ERA is only required to review and approve costs for those functions.

9.3 AEMO can expend funds on project estimate elaboration activities before Independent Panel review.

9.4 For non-BAU projects less than $5 million total cost, AEMO can begin project execution activities up to three months before the project plan has been reviewed and approved by the Independent Panel.

Consultation questions

(9)(a) Do stakeholders agree that uncertainty measures are not required for non-BAU expenditure?

(9)(b) Do stakeholders support the proposed measures to manage uncertainty in BAU expenditure?

Proposal 10: Treatment of volatility

Proposals

10.1 If BAU expenditure is projected to differ significantly from year to year in the baseline review, AEMO must propose an annual revenue recovery adjustment mechanism that smooths the required revenue to avoid large changes from year to year.

10.2 If new project expenditure would result in a significant step in fees, AEMO should propose a smoothed revenue recovery profile for the project expenditure. This will seek to avoid fees increasing or reducing substantially from year to year, while still recovering costs over the life of the assets.

10.3 Under and over-recovery compared to the smoothed revenue profile can be adjusted in the following year (as is the case for market fees today).

Consultation questions

(10)(a) Do stakeholders support the proposed approach to reducing volatility in market fees?

(10)(b) Do stakeholders have preferred maximum level of advancement or delay in cost recovery?

4.7 Monitoring and reporting

Monitoring and reporting are a key measure to ensure transparency and accountability.

4.7.1 Current arrangements

AEMO is required to report on its financial performance annually, in line with the ERA's regulatory reporting guideline. The requirement includes separate statements of cashflow and financial position for AEMO's Western Australia operations, and statements of expenditure and contingency for each project, including reasons for changes to scope, budget, contingency, and timelines.

Recent AEMO budget and annual report publications have not met all the requirements and have heavily aggregated project reporting. AEMO is currently working on improvements to annual reporting to provide the missing data.

4.7.2 Issues and options

Reporting requirements are common internationally. The difference of each monitoring and reporting scheme usually lies in the amount of detail required and the frequency of submission. Most jurisdictions have the entity submit these reports to the regulator or publish it on their websites for the public to access. Reporting allows transparent comparison of actual expenditure with the budget, and actual project delivery timelines with planned dates.

AEMO's current reporting frequency (annually) is the longest period among all jurisdictions reviewed. Many require more frequent reporting, typically monthly or quarterly. Some provide for irregular submissions depending on project delivery.

Options for reporting are:

- Annual reporting for BAU outcomes, with the same break-down as in the original submission, with updated forecasts, and explanations for departures from the previous year's budget, activities not performed, and funds not spent.
- Requiring proactive information sharing of project scheduling changes, with stakeholder feedback on impacts of changes.
- More frequent regulatory reporting (monthly or quarterly), including updates on operational spend, capital project scope, budget and commissioning, new projects not previously planned, and planned projects deferred or cancelled.
- Detailed project reporting, showing milestones, status, and reasons for changes. This could potentially be automatically extracted from AEMO's programme management tools.

An annual reporting cycle is sufficient for BAU activity. AEMO can report actuals for the past year at the same time as it reports forecasts for future years.

More frequent reporting for project expenditure will provide greater focus for project delivery, lessening the potential for untimely surprises, and making performance monitoring an ongoing process rather than a point-in-time tied to the regulatory process.

The establishment of the MAC's Major Projects Working Group[15] provides a venue for regular stakeholder updates, and formal published project plans provide the basis against which project status can be measured. Monitoring can also be strengthened without significant impact on regulatory burden by requiring publication of documents that AEMO generates in the ordinary course of operations, such as software certificates and project close-out reports.

Energy Policy WA considers that this additional reporting will enable better monitoring of AEMO project delivery. Under the current framework there is no explicit requirement for any party to monitor AEMO's delivery against cost and time estimates. In addition to its role in reviewing project proposals, the Independent Panel could assess AEMO's delivery, and report on performance annually. While this approach would slightly increase regulatory costs, it would also enhance transparency, provide an independent review to build stakeholder confidence, and strengthen AEMO's reputational incentive to perform its functions effectively and efficiently.

4.7.3 Proposal

Proposal 11: Monitoring and reporting

Proposals

11.1 AEMO will publish an annual report reviewing whole year performance for BAU activities, including comparison of budget and actual expenditure in each relevant category, with detailed explanation for variations.

11.2 AEMO will publish quarterly project reporting, including information on:

- capital projects commenced, completed, and not commenced/completed on schedule;
- capital projects planned and in progress, with budget and actual spend (separated into personnel time, contractors, and asset purchases) and delivery schedule with progress against project plan milestones;
- narrative for any adjustments to project budgets (including contingency drawdowns) or delivery times.

11.3 AEMO must proactively share project scheduling changes with the MAC's Major Projects Working Group.

11.4 The Independent Panel must annually review AEMO delivery against the project plans, and publish its opinion on whether AEMO has delivered on its project plans, and whether it has done so efficiently.

11.5 The Independent Panel may compare AEMO costs against IT project cost benchmarks, and assess efficiency changes over time.

11.6 AEMO must publish results of all audits of systems and processes, and post project reviews.

[15] AEMO Major Projects Working Group

11.7 AEMO must publish formal financial accounts for its Western Australia segment, including the methods by which it has allocated any portion of shared costs to its Western Australia functions.

Consultation questions

(11)(a) Do stakeholders support the proposed reporting approach?

(11)(b) Do stakeholders support the proposed independent review of AEMO performance?

4.8 Process diagrams

Figure 3 and Figure 4 show the proposed new processes for BAU and non-BAU expenditure.

Energy Policy WA considers that a post-implementation review of the replacement ARF should be conducted after at least two years of operations in order to evaluate how effectively the framework is operating.

Figure 3: Proposed BAU budget process

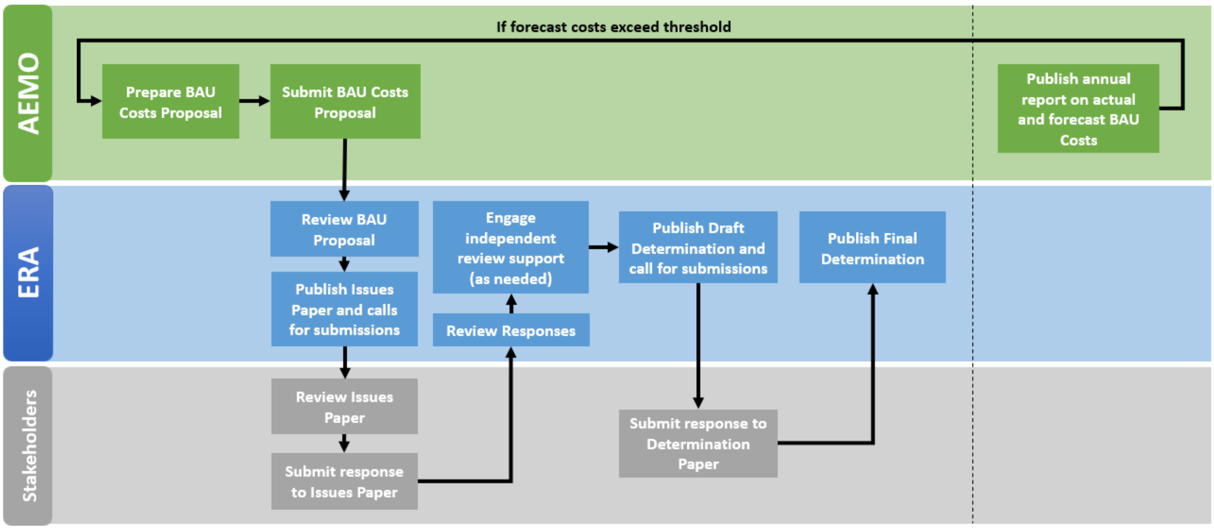
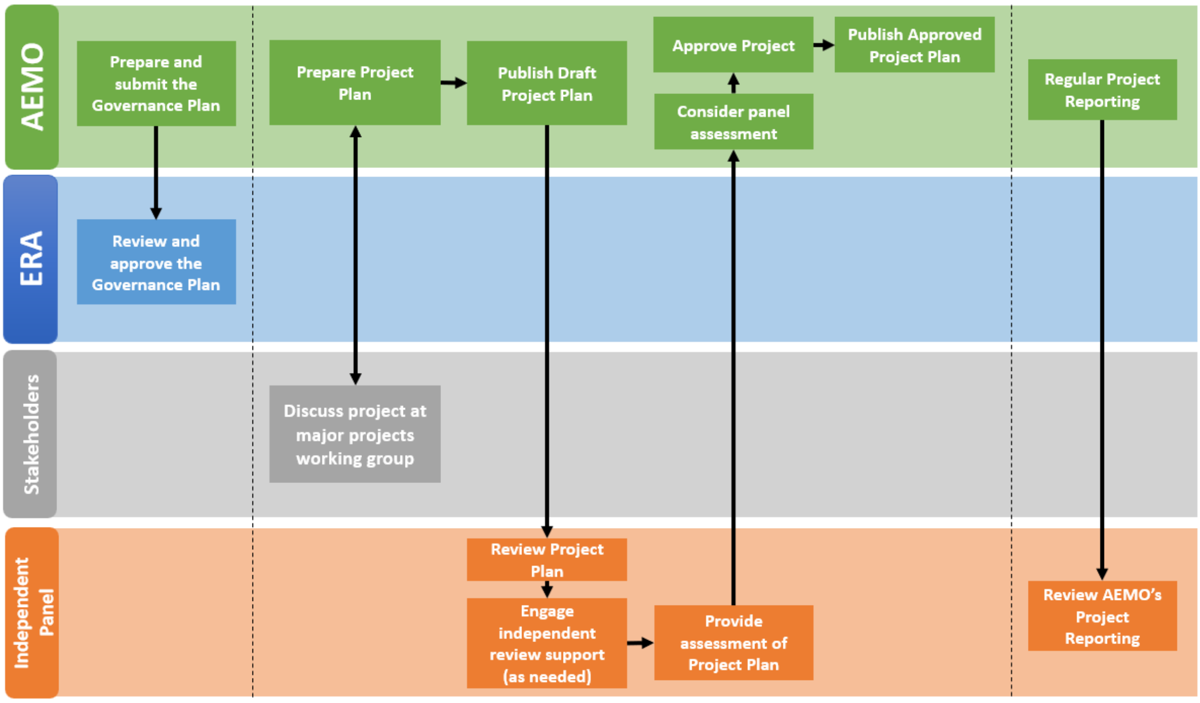


Figure 4: Proposed non-BAU budget process



4.8.1 Proposals

Proposal 12: Post-implementation review

Proposals

12.1 The Coordinator will review the Allowable Revenue Framework after at least two years of implementation, and no longer than three years after the introduction of a replacement ARF.

Consultation questions

(12)(a) Do stakeholders support a post-implementation review and the suggested timing?

(12)(b) Do stakeholders support a one-off post-implementation review (rather than a recurring review, for example every 5 years)?

Appendices

Appendix A. Jurisdictional scan

As part of the review, practices from 15 regulated service providers across various international jurisdictions were examined.

- NZ: System Operator
- NZ: Market Operation Service Providers
- Great Britain: System Operator (NESO)
- Great Britain: Market Operator (Elexon)
- UK: Data Communications Company
- Ireland: EirGrid/SEMO
- Canada: Ontario Independent Electricity System Operator (IESO)
- Canada: Alberta Electricity System Operator (AESO)
- USA: Independent System Operator-New England (ISO-NE)
- USA: Pennsylvania-New Jersey-Maryland Independent System Operator (PJM ISO)
- USA: California Independent System Operator (CAISO)
- USA: New York Independent System Operator (NYISO)
- USA: Midcontinent Independent System Operator (MISO)
- Singapore: Energy Market Authority (System operator, PSO)
- Singapore: Electricity Market Company (Market operator, MO)

A.1 Key insights

Preparation

The entity concerned always prepares its own funding proposal, typically in line with regulations or regulatory guidelines.

Stakeholders are given the opportunity to be part of the process during the budget development (SEMO, Elexon, UK DCC, UK NESO, IESO, AESO, NYISO) and during external scrutiny (UK DCC, IESO, AESO, ISO-NE, PJM, Singapore).

Content

The content of regulatory submissions is substantial and detailed. Entities provide breakdowns of operational and capital expenditure, showing assumptions made, supporting evidence, and reasons for changes in previous estimates. Some of the jurisdictions also include forecasting of future expenditures in their proposal.

In the UK, the regulator (Ofgem) publishes an expectations paper ahead of each regulatory period, setting out what it expects to see in regulated entity business plans.

Funding Period

Many review annually (e.g., Elexon, UK DCC, UK NESO, AESO, USA ISOs) and includes indicative forecasting for future non-budget years. Some jurisdictions review every 2 or 3 years (SEMO, IESO, Singapore). UK annual reviews cover a rolling 2-year horizon. NZ is longest with 5-8 years.

Assessment and approval

Generally, the regulator of the entities reviews and approves the proposed funding of the entities. (SEMO, UK DCC, UK NESO, NZ, IESO, Singapore).

However, there are some jurisdictions where the funding proposal is approved by the entity's Board (Elexon, AESO, ISO-NE, PJM, CAISO, NYISO, MISO). These Boards often consist of representatives from Participants, therefore, can be replaced by other fee payers in the market (Elexon, PJM, CAISO, NYISO, MISO). Some of these Boards are also obliged to follow the cap on collectible fees set by the regulator (PJM, CAISO, NYISO, MISO).

There is also a case wherein the government has approval or veto power on the entity's funding proposal (IESO).

Treatment of opex and capex

Operating Expenditures (OPEX) and Capital Expenditures (CAPEX) are separate line items for each entity's funding proposals. OPEX consists of employee salary and benefits, as well as any expenses that relate to their day-to-day operations the system or market operator of the market including asset depreciation. CAPEX refers to project-related costs incurred by the entity.

For most entities (US, UK), OPEX and CAPEX are recovered in the same process, typically through market fees. Some entities, however, have a separate funding approval and assessment process for non-BAU CAPEX (NZ) and sometimes a separate recovery mechanism for CAPEX (CAISO, ISO-NE).

Treatment of uncertainty

There are different approaches to managing uncertain expenditure.

- "Reopener" for new scrutiny of significantly changed plan (external approval), including changes in scope and delivery dates.
- Amendment process with additional revenue collected in-year (board approval)
- Underspend may be refunded to payers within the financial year, or carried over to the next period.
- Capital reserve for budget overspend to buffer year-to-year cost changes (interest bearing)
- Different treatment for "predictable" and "unpredictable" capex – budget allocation made for both, but additional steps required to firm up spend before unpredictable funding allocation can be accessed.
- "Lifecycle" projects included in approved revenue, "reform/redesign" projects scrutinised individually before commencement, with multi-year business plan used to signal upcoming activity (subject to separate preparation and consultation, driven by policy maker)
- Ringfenced component of spend that can be used for projects that have not been scrutinised, rather than across the whole budget.

Incentives and penalties

All observed incentives for not-for-profit entities are reputational. The common method (UK, NZ, USA) is setting targets for key financial and operational metrics and requiring regular public reporting. Corporate KPIs can flow through to individual KPIs.

Reporting and monitoring

There are entities that are required to deliver annually, quarterly, or monthly reports on the progress of projects against their initially submitted plan (UK, NZ, IESO, USA).

Some jurisdictions require a performance review against a prearranged set of Key Performance Indicators (KPIs) at longer intervals (UK and NZ).

These reports are often published with the project cost figure and other relevant information for public scrutiny. For UK entities, performance reporting is also subject to stakeholder input and feedback.

Below is the tabular summary of the international review based on the policy design aspects of each jurisdiction’s allowable framework revenue.

Jurisdiction	Preparation	Funding period	Assessment and approval	Treatment of OPEX and CAPEX	Treatment of uncertainty	Incentives and penalties	Reporting and monitoring
NZ SO	Transpower (SO)	5-8 years	EA (regulator) receives and pays the invoice	BAU expenditure contracted on a multi-year basis, non-BAU projects reviewed and approved as needed.	N/A	For-profit. • Performance incentives based on KPI performance. • Early Delivery Incentive for capital projects	• Monthly, Quarterly, and Annual self-assessment Reports. • Ad hoc reports upon EA's request
NZ MOSP	MOSP prepares the invoice	5-8 years	EA (regulator) receives and pays the invoice	BAU expenditure contracted on a multi-year basis, non-BAU projects reviewed and approved as needed.	N/A	For profit. Shareholders bear cost overruns and benefit from savings. Material breaches are subject to contract cancellation	Monthly and Annual self-assessment Reports.
UK NESO	NESO	annual	Ofgem (regulator) approves the Budget after stakeholder consultation	Separate line items but are recovered in the same process	• Unit Cost Allowance • Time lags and smoothing • Indexation and edge effects	Not for profit	Monthly, quarterly, and mid-year performance based on benchmarked measures
UK Elexon	Elexon	annual	Approved by the Board after going through public consultation	Separate line items but are recovered in the same process	Business Strategy is revised when there is over-spending; under-spent funds are refunded to Participants	Not for profit	Monthly financial reports

Jurisdiction	Preparation	Funding period	Assessment and approval	Treatment of OPEX and CAPEX	Treatment of uncertainty	Incentives and penalties	Reporting and monitoring
UK DCC	DCC	Customer pays monthly	Published Charging Methodology that will be scrutinised by both the stakeholders and Ofgem	Separate line items but are recovered in the same process	Baseline Margin Adjustment Application	Performance incentive based on System Performance, Contract Management, and Customer Engagement	Financial Reporting commentary, internal costs, and other published documents are open for stakeholder feedback
EirGrid/SEMO	SEMO	3 years	Approved by Regulatory Authorities; consultation includes a Price Control Working Group	Separate line items but are recovered in the same process	K-factor to adjust revenue requirement (add or subtract in case of over- or under-recover)	• Cost Incentive – revenue cap for opex; ex-ante allowance for capex • Performance Incentive based on KPIs	Annual and Quarterly Performance reports, Bi-annual Capex updates, and detailed report of capex updates at least once a year.
Canada IESO	IESO	3 years	Approved by Ontario Energy Board with consultation from Parties (chosen Industry Participants)	Separate line items but are recovered in the same process	Adjustment mechanism where adjustment for first year is applied to the third year	Key performance index: Schedule Performance Index and Cost Performance Index	Quarterly report on Progress of projects and an Annual Business Outlook
Canada AESO	AESO	annual	Board approves after consultation with stakeholders	Separate line items but are recovered in the same process	Excess funds can be used in the future; additional budget request must be approved by the Board	Not for profit	• Annual Year in Review • Quarterly Stakeholder Report • Monthly Transparency Report

Jurisdiction	Preparation	Funding period	Assessment and approval	Treatment of OPEX and CAPEX	Treatment of uncertainty	Incentives and penalties	Reporting and monitoring
USA ISO-NE	ISO-NE	annual	The proposal is reviewed by Participant Committee and the Board's Financial Committee. The Board approves the budget and files it to the regulator for assessment if just and reasonable.	• Opex is filed annually, while capex is filed annually and quarterly • Opex is recovered through fee collection, capex is financed through private placement funding	True-up mechanism depending on the service ISO is providing	Not for profit	• Annual Reports • Quarterly Spending updates (for capex) • Quarterly Stakeholders (NEPOOL) updates
USA PJM	PJM	Annual	Finance Committee reviews the proposal for the PJM Board of Managers approve. FERC sets the ceiling of customer rates charged by PJM.	Separate line items but are recovered in the same process	• Excess revenue are refunded to participants • Budget deficit can be funded from the long-term reserve	Not for profit	• Audited and Unaudited Financial Statements • Quarterly and Annual financial and operating reports • Budget and forecast data and results
USA CAISO	CAISO	Annual	Stakeholder meetings are conducting before submitting the proposal to the Board of Governors. The Board will approve the budget in	Opex and capex are managed separately: • Opex is part of revenue requirement • Capex is cash-funded;	Operating Cost Reserve Adjustment value is added/subtracted from the O&M budget before the	Not for profit	• Quarterly Financial reports, • Audited annual financial statements • Market Planning and

Jurisdiction	Preparation	Funding period	Assessment and approval	Treatment of OPEX and CAPEX	Treatment of uncertainty	Incentives and penalties	Reporting and monitoring
			consideration of FERC's approved cap.	financed by capital reserve if there is deficit	finalised Revenue Requirement		Performance Forum Calendar • Implementation Milestones • Active, completed, and preliminary project listings
USA NYISO	NYISO	Annual	Budget and Priorities Working Group is consulted, then the BOD would approve the budget. The Regulator approve changes to tariff	Recovered the same way but the Working Group prepares a separate project budget recommendation	Variance of actual and approved costs are published; Budget surplus can be used to make early repayments of outstanding debts or be carried over for future years.	Not for profit	Annual reports on: • Actual vs budget report • Financial statement • Project milestone update The Working Group also has regular meetings to review status of projects, budgetary spending, and revenue recovery
USA MISO	MISO	Annual	Various sub-committees and stakeholders can review and submit their feedback on the proposal. The MISO Board approves the Budget while the tariff	Recovered the same way but Capital Project updates are more frequently published (quarterly, rather than annually)	• Cost Control Efforts • Budget adjustments based on potential variances	Not for profit	• Annual Audited Financials report • Quarterly capital project closeout

Jurisdiction	Preparation	Funding period	Assessment and approval	Treatment of OPEX and CAPEX	Treatment of uncertainty	Incentives and penalties	Reporting and monitoring
			is approved by the Regulator FERC.				
Singapore EMA	EMA (PSO)	3 years	Specific process not mentioned. EMA as the Regulator approves the budget.	Separate line items but are recovered in the same process	• Under-recovery of revenue increases the market fees • Over-recovery of the revenue reduces the market fees	Not for profit	Market Rules requires EMA to publish annual reports that include their detailed and audited financial statements
Singapore EMC	EMC (MO)	Annual	Rule Change Panel reviews the budget and writes a report to the EMC Board who finalises the proposal. EMA approves the budget.	Separate line items but are recovered in the same process	Adjustment to the price cap is applied to the Revenue Requirement	EMC receives a regulated rate of return on its expenditure, on a cost-plus model.	Market Rules require EMC to publish approved expenditure, revenue requirement, and schedule of fees on the website.

A.2 New Zealand System Operator (Transpower)

New Zealand energy has a total generation capacity of 9,931 MW and peak demand of 7.122 MW in 2023. More than 60% of its generation is from renewable hydro with rising penetration of wind and solar capacity.

The NZ Power System is operated by Transpower, a state-owned enterprise who is also the electricity Grid Owner. These roles are ring-fenced through Part 7 of the Electricity Industry Participation Code 2010.

Consequently, Transpower's remuneration as the System Operator (SO) is also separately reported and assessed. The System Operator Service Provider Agreement (SOSPA) specifies the obligations of Transpower as the SO and the adequate revenue it is allowed to obtain based on its performance.

Transpower is led by a Board whose members are appointed by its shareholder – the NZ government.

Preparation

When the SOSPA is renegotiated, Transpower prepares a budget proposal for review by the Electricity Authority (the Authority), the regulator.

For non-BAU activity (market design support, market reform project activity, or technical support), the Authority provides a scope request, and Transpower responds with a funding estimate.

According to the SOSPA, Transpower provides an invoice of the monthly fees to the Authority, the regulator.

Content

The SOSPA proposal contains high level and detailed supporting information for SO's proposed activity over the next funding period. Opex is built on a bottom up budget, with details of staff numbers, individual cost areas, and narrative on change from previous periods. Capex budget for lifecycle maintenance activities is included, including projects to enhance BAU processes.

The monthly invoice consists of five components that are set out separately.

- Fixed fee component
  - Net opex component
  - Historic capex component
  - In-flight capex component
  - Fixed fee capex component, including first year capex returns, if any
- Market design fee component
- Service enhancement fee component
- Direct services fee component
- Wash up and incentive fee component.

Any supporting documentations regarding these fees, if requested by the Authority are to be provided as well.

The first component covers SOSPA activity, the remaining components relate to separately approved budgets for additional services provided to the Authority by the SO.

Funding period

The Authority and Transpower renegotiate the SOSPA every 5-8 years.

Non-BAU activity is reviewed and approved as needed, with funding for major projects agreed at the outset of the project.

Once approved, funding works like a commercial contract. The Authority is set to pay Transpower for its System Operation services monthly, as specified in section 7.5 of the SOSPA. In case there is a dispute that remains unresolved by the payment deadline, the Authority is still obliged to pay the undisputed portion of the invoice.

SOSPA also specifies the obligation of EA to pay the SO on time. Any unpaid portion by its due payment would be subject to additional interest payment.

Assessment and approval

The Authority ultimately approves the budgets for all activity. It conducts due diligence to explore the scope of activities, cost estimates, and if necessary, EA can request for additional supporting evidence and documentation.

Treatment of opex and capex

The Fixed Fee component of the invoice separates its opex and capex components. The net opex component is calculated as the gross opex component, adjusted with the CPI adjustment factor, less pricing manager fee adjustment. On the other hand, capex components include the historic capex, in-flight capex, and fixed fee capex.

Schedule 2 of the SOSPA states that capex return is the sum of the depreciation of the PSO's asset base, the average of the opening and closing values of the asset base multiplied by the post-tax WACC (Weighted Average Cost of Capital), and the amount to offset the tax benefit or cost from depreciation.

Treatment of uncertainty

Capital projects are managed separately from the SOSPA. When market reform leads to a major project, the budget and schedule is agreed between the SO and the Authority separately.

Incentives and penalties

Under the SOSPA, Transpower is eligible to receive an incentive fee based on its performance as the System Operator. A performance metric is set and agreed between Transpower and the Authority before the beginning of the year. This metric contains high-level outcomes that are assessed using quantitative and qualitative components. The System Operator has to gain a score of 80% to receive its full incentive payment. A score below that would lessen the incentive accordingly. For year 2023-2024, there are 18 performance metrics scored from 1-5 using a calibrated scale.

SOSPA also includes an incentive for high-value CAPEX projects. The Authority and Transpower can negotiate a delivery incentive value and delivery incentive date for each forecast high value SO asset. If the project is fully commissioned before the early delivery incentive date, Transpower can be subject to the deliver incentive amount that is up to 10% of the asset's forecast value.

Reporting and monitoring

The SO is required to provide monthly, quarterly, and annual self-review reports. These reports include Transpower's self-assessment against the KPIs, which the Authority would use as basis for the final incentive.

The Authority reviews the SO's delivery of the Key Performance Indicators (KPI) set at the beginning of the year. The assessment result would increase or decrease the incentive fee component as published along with the review of the SO's performance.

Transpower is also obliged to produce an annual cost-of-service report for the financial year. Any other Ad hoc report requested by the Authority are to be provided by the SO, as well.

A.3 New Zealand Market Operation Service Providers (MOSPs)

Market Operation Services are competitively contracted by the Electricity Authority through a tender process.

- The Clearing Manager is responsible for invoicing and ensuring that industry participants pay the among of electricity they have consumed, as well as the financial transmission rights they have purchased. New Zealand's Stock Exchange (NZX), a public company, is the contracted Clearing Manager.
- The Financial Transmission Rights (FTR) Manager creates and allocates the financial transmission rights to industry participants through regular auctions. Energy Market Services, a Transpower division, is the contracted FTR manager.
- The Reconciliation Manager uses the information from the clearing manager to process and reconcile data needed to allocate the share of electricity generation or consumption to the industry participants. NZX is also contracted as the Reconciliation Manager
- The Registry Manager is responsible for the national database of industry participants or the Electricity Registry. This database includes every point of connection on local and embedded networks. Jade Software Corporation Limited, a for-profit company, is the contracted registry manager.
- Wholesale Information and Trading System (WITS) is the central facility in buying and selling wholesale electricity in New Zealand. NZX is the contracted WITS Manager.

All Market Operation Service Providers (MOSPs) have signed a Service Provider Agreement with the Electricity Authority.

Preparation

The Authority issues a request for proposals to provide MO services, including detailed functional specifications for all roles. Prospective providers prepare proposals in response. Proposals cover BAU activities, and can also include known market reform activity. Proposals can include proposed improvements to the services.

Capital project spendings are managed separately, where the Authority and the Provider would negotiate based on the project scope and timing.

Content

Provider proposals follow the form provided in the RFP. There is limited emphasis on bottom up budget construction, as competition for the roles allows the Authority to focus on the quality of the solution proposed, and the total overall cost. Providers do provide rate cards to be used for future market reform project work.

Providers submit an invoice to the Authority that contains the Monthly Fees. The fee includes payment on Infrastructure, System, Services, and Resources (employees' hourly rates) adjusted to a CPI Index.

For the tendering process, the content of the proposal submitted by potential Providers may vary depending on the requirements set by the Authority.

Funding period

MOSP tenders are issued every 5 to 8 years. Current MOSPs were contracted for an initial term of until June 2024 with an option for renewal for a further of three years (which were exercised). These long-term contracts allow the providers to recover fixed costs and the Authority flexibility on its procurement schedule.

Contracted Providers are paid Monthly Fees as set in the Service Provider Agreement.

Assessment and approval

The process of contracting MOSPs is a procurement exercise similar to other services tendered by the Authority. A team is set up to review applications and proposals for every tender round. They may also opt to engage outside parties in assisting their assessment.

Treatment of opex and capex

The treatment of opex and capex during the tendering process would vary depending on the requirements of the market service to be procured.

The Monthly Fee invoice does not specify the separation of opex and capex as well. They are recovered and filed similarly for MOSPs.

Any additional requirement specified (i.e., reform projects or system enhancement) in the Service Provider Agreement that incurs expenditure is separately negotiated with the Authority through a delivery contract. Other parties may engage in independent review of the cost estimation for these additional requirements.

Treatment of uncertainty

The Provider’s monthly invoice of base service fees are subject to CPI indexing or adjustment. The process of calculating the CPI Index is specified in each Provider’s Agreement.

Incentives and penalties

As for-profit entities, MOSP shareholders get the benefits of efficiency, and bear the cost of overruns. The Authority has less negotiating power for market reform projects, as at that point the provider is locked in.

All MOSPs have signed an Agreement with the Authority that contains the obligations of both parties regarding, but not limited to, fees, intellectual property, confidentiality and security, business continuity, general liability and indemnity, and dispute resolution. If the Provider commits a material breach and fails to remedy the said breach within the allowed time period (i.e., 10-15 Business Days depending on the market service provided), the Authority may terminate the Agreement.

The Service Agreement also requires the Providers to be assessed against performance standards. However, failure to meet or exceeding these standards do not have financial consequences or incentives. Any excess cost or savings bone by the MOSP are kept by the MOSP.

Reporting and monitoring

The Agreement obliges the Provider to prepare an annual strategic plan or road map regarding its role as the MOSP. This is reviewed by the Authority and can be used in setting the annual performance standards agreed upon by the two parties.

The Provider is also required to submit monthly self-review reports based on the performance standard. For other relevant matters regarding the market service provided by the MOSP, the Authority and the Provider conduct monthly meetings to discuss.

A.4 Great Britain: System Operator (NESO)

The National Energy System Operator (NESO) of Great Britain is a government-owned System Operator with its share capital acquired by the Department for Energy Security and

Net Zero (DESNZ). NESO is responsible for the UK energy sector with a de-rated generation capacity of 74.8 GW and peak demand of 48.3 GW during winter.

NESO has its own independent Board and Directors and is under the regulation of the Office of Gas and Electricity Markets (Ofgem). The DESNZ does not have operational control over NESO's functions as operations as the System Operator.

Preparation

NESO prepares a Business Plan that includes information on its forecasted expenditure for the following Regulatory Year commencing 1 April.

Content

The Business Plan contains:

- Forecast of total expenditure incurred for Regulatory Year ahead;
- Explanation and justification of total expenditure that discusses the allocation of costs by NESO and provides a detailed explanation of their spending over the current and future years;
- Summary of key strategic aims over the time period; and
- Summary of key work priorities and major planned deliverables for the Regulatory Year.

Funding period

The revenue is assessed and approved on an annual basis.

Assessment and approval

NESO can engage stakeholders in preparing the Business Plan. Once it is finalised, the revenue proposal would be submitted to the regulator. Ofgem assess the revenue proposal from NESO and publishes an annual Plan Determination on the NESO website.

Treatment of opex and capex

Capex and Opex are specified as separate items in the NESO Business Plan. However, both are recovered through service fees known as "pass-throughs" collected from consumers via network charges.

Treatment of uncertainty

Prior to the establishment of NESO, the System Operator was part of the National Grid Electricity System Operator (NGESO) who owns the transmission networks in Great Britain. The NGESO has incentive-based price control in place as uncertainty mechanisms to ensure that the consumers would only pay for the output delivered. The mechanism adjusts the baseline revenue allowance using three common design features:

- Unit Cost Allowance – adjusted according to the difference between actual volume of output delivered and output forecasted in the baseline scenario.
- Time lags and smoothing – adjustments made to ensure that changes are more predictable and to reduce the variation in consumer bills
- Indexation and edge effects – adjusted for indexation (i.e., inflation and real price effects) and edge effects (i.e., deliverables to be finished in the next period)

Ofgem uses these uncertainty mechanisms to manage the risk of forecasting higher or lower expenditure allowances.

NESO continues to use the same uncertainty mechanisms for the period 2026-2031.

Incentives and penalties

NESO is a not-for-profit organisation owned by the government. Neither the NESO nor the Government receive financial return or losses, including from incentives, disallowances, enforcement penalties, or damage.

The UK government appoints the chair of the NESO Board and one other member of the Board to maintain the separation between setting national policy and the government's influence as the majority shareholder. The government also approves the appointment of the non-executive directors of the NESO Board as chosen through a fair and transparent process.

Reporting and monitoring

Ofgem requires NESO to report their monthly, quarterly, and mid-year performance based on the following benchmarked measures:

- Balancing Costs
- Demand Forecasting
- Wind Generation Forecasting
- Short Notice Changes to Planned Outages
- Day-ahead procurement

These reports also include regularly reported evidences, such as:

- Transparency of Operational Decision Making
- Carbon intensity of NESO actions
- Security of Supply
- CNI Outages
- Zero Carbon Operability Indicator

Every project is also required to have a deliverable tracker for milestone. These are made available on the NESO website for the public to access and download.

A.5 Great Britain: Market Operator (Elexon)

Elexon is a not-for-profit company that has the role of Market Facilitator appointed by Ofgem. They oversee the day-to-day management of the Balancing and Settlement Code (BSC) and the Data Integration Platform (DIP) that will soon be used as data sharing avenue between Market Participants and Elexon. As the BSC Company (BSCCo), Elexon also has the responsibility of preparing the implementation of the British Electricity Trading and Transmission Arrangements. Moreover, Elexon is responsible for overseeing these other market operations:

- running the Contract for Difference (CfD) Settlement System through a subsidiary CfD Service Provider;
- establishing the Capacity Market Advisory Group to develop, analyse, and make recommendations to the Capacity Market Rules; and
- appointing an administrator of the Network Charging Compensation scheme

Preparation

The BSC Digital Code Section 6.1.1 (b) states that the BSSCo (Elexon) should prepare an Annual Budget consisting of their expecting expenditure for the coming BSC Year or "Plan Year", along with their Business Strategy.

Content

All expenditure necessary to carry out Elexon's function are specified in the Annual Budget Proposal. These are presented in financial reports such as:

- Consolidated profit and loss account
- Consolidated balance sheet
- Company balance sheet
- Consolidated cash flow statement

Historical balances, profits, and losses from the previous two calendar years are also included in the financial statements.

Funding period

Budget and Capital Spending are funded and assessed annually.

Assessment and approval

Elexon is expected to prepare the Business Strategy and Annual Budget drafts before the start of the Year. A copy of the draft is submitted to the Panel and to all Parties to seek their feedback and comments on the proposed budget. Input from the stakeholders would be considered in the review and revision done by the BSSCo. The final Annual Budget would be approved by the Board.

Treatment of opex and capex

Opex and capex are separately itemised in the financial statements. However, they are both under the "BSC Costs" category that are recovered through charging the relevant BSC Parties such as electricity generators, suppliers, and traders.

Treatment of uncertainty

The BSC Digital Code also has provisions on potential budget overspending or underspending.

If Elexon exceeds the budget expenditure, they are obligated to inform the Panel and all Parties of the amount and the explanation thereof. A draft revision of the Annual Budget would then be submitted to the stakeholders, along with a revision to the Business Strategy, if Elexon deems it necessary to change the Plan or limit their forecasted spending. Similar to the process of the Annual Budget, the revised budget would approved by the Board.

On the other hand, any underspent budget is refunded to the Market Participants.

Incentives and penalties

As a not-for-profit entity, Elexon is not subject to any financial incentive or penalty mechanisms.

The Board members are elected by the Parties from which Elexon collects its funding. If the fee payers are deemed unhappy about the Board's performance, particularly regarding spending and budgeting, they can vote to replace the Board.

Reporting and monitoring

Elexon prepares monthly financial reports submitted to the Board that includes:

- Investment decisions
- Investment performance
- Investments remaining in excess of Elexon's limits

Elexon constantly monitor its expenditures to ensure that the do not go beyond the approved budget. However, financial information outside the annual report and annual financial statements are not published on the website.

A.6 UK: Data Communications Company

The UK Data Communications Company (DCC) is the Smart Meter Communication License holder whose main responsibility is to design, build, and manage telecommunications technology infrastructure that support smart meters all over Britain. Their license is granted by the government in 2013 and they are regulated by Ofgem.

The Allowed Revenue for DCC is specified in Criteria 36 of the Smart Meter Communication Licence.

Preparation

DCC prepares and submits an Indicative Budget for the second and third Regulatory years every April, July, October, and January of the year, Part of this Indicative Budget document is the Estimated Allowed Revenue for three consecutive Regulatory years, including the current one.

Content

The Estimated Allowed Revenue, for every Regulatory year, is a sum of:

- Estimated Fixed Revenue,
- Estimated Explicit Charges Revenue, and
- Estimated Elective Services Revenue.

These items are specified and in the Indicative Budget Documents with a brief description of the specific costs of each revenue category. The Indicative Budget document also includes information on events or projects relevant to the cost estimates, as well as publication timetables for Charging Statements and Indicative Charging Statements.

Funding period

Budget approval is carried out each year.

DCC's revenue is collected through customer payment that is issued every month. The Smart Energy Code specifies that these invoices are to be paid by the due date (i.e., the later of 5 working days after receipt of invoice and 8 working days after the end of the respective invoice month) published on the DCC website.

Indicative Budgets and Charging Statements are published on a quarterly basis.

Assessment and approval

The process of reviewing the Charging Methodology involves stakeholders. DCC is required to:

- publish their Charging Methodology for Service Charges on their Website; and
- invite stakeholder to Quarterly Finance Forums to explain and discuss the quarterly updates to forecasted costs and budget, as well as progress to projects.

As part of the Smart Meter Communication License, Ofgem can scrutinise DCC financial performance through Price Control Submissions. This mechanism involves Ofgem:

- assessing the current cost against the forecasted cost;
- adding performance incentives; and
- accepting (or rejecting) the Baseline Margin (BM) Adjustment proposed by DCC.

This is an ex-post price control designed to affect the rest of the Licence term rather than the current Regulatory year.

Treatment of opex and capex

The reports split costs into Internal and External Costs.

- External costs cover the Fundamental Service Provider (FSP) costs. These costs are charged to service users.
  - Set-up costs
  - Fixed operation charges or enduring costs.
- Internal Costs are payroll salaries and compensation to DCC staff, IT, and facilities. DCC has a contractual right to recover internal costs to ensure that they remain financially viable. Other external service providers that are not FSPs are included in the internal costs. These costs are recovered from service providers.
  - Payroll, non-payroll, and recruitment
  - Internal Services
  - IT services
  - Accommodation
  - All other costs

Treatment of uncertainty

The Baseline Margin (BM) is part of the Allowed Revenue calculation set in the Smart Meter Communication Licence. DCC uses BM to cover the excess cost incurred or the budget saved over the Regulatory Year.

As part of the Price Control Submissions, DCC may apply for a BM Adjustment. This application would be assessed by Ofgem and would be open for stakeholder opinion before its approval or rejection.

Incentives and penalties

The Price Control assessment includes DCC's submission of its self-assessment under the Operational Performance Regime (OPR). The OPR has the following components:

- System Performance
- Contract Management
- Customer Engagement Incentives

Ofgem will review DCC's submission and its performance. Stakeholders are also allowed to give their responses on relevant questions regarding each criterion of the OPR. The Regulator would then reward the appropriate performance margin based on the consolidated opinion.

Reporting and monitoring

The Price Control Information Report consists of multiple documents with detailed information, including, but not limited to, the following topics:

- Financial Reporting Commentary
- Internal Costs
- Operational Performance Regime
- Proposal for a relevant adjustment to External Contract Gain Share
- Programmes Redacted

- Baseline Marginal Adjustment
- Baseline Magin Project Performance Adjustment

These individual documents are published in the DCC website. Ofgem also publishes a consultation paper to seek stakeholder feedback regarding the DCC costs and proposed BM Adjustment. DCC could also submit a response or other evidence to support the contents of the paper. After considering stakeholder input, Ofgem would release a Decisions Paper.

Aside from that, DCC has an Independent Compliance Officer who provides an annual review for the DCC Board. This is incorporated into an Annual Compliance Report.

A.7 Ireland: Single Electricity Market Operator (SEMO)

The Single Electricity Market Operator (SEMO) is a contractual joint venture of EirGrid (Transmission Operator) and System Operator of Northern Ireland (SONI) that facilitations the Single Electricity Market (SEM) of Ireland and Northern Ireland. SEM is the first gross mandatory pool market with dual currency operation across multiple jurisdictions with a fully dispatchable capacity of 7,356 MW and peak demand of 5,577 MW in 2022.

SEMO is managed by both EirGrid and SONI. SEMO's joint regulators – the Utility Regulator and the Commission for Regulation of Utilities – are collectively known as the Regulatory Authorities (RA). Moreover, the SEM has its own Committee (SEMC) that acts as the decision-making body governing the market.

Preparation

SEMO prepares its revenue requirement proposal as the Market Operator.

Content

The revenue requirement is only a part of the Price Control Process. Preparing the revenue requirement proposal involves a Business Plan that is used as basis for the financial proposal. The key information on this document is:

- Expected Opex
- 'Financeability'
  - Depreciation
  - WACC Return
  - Collection agent Margin
  - Parent Company Guarantee
- K-factor (i.e., adjustment for under or over-recovery of revenue)

Capital investment proposals and incentive approaches are also included as a key building block of the Price Control.

Funding period

The current Price Control regime covers a five-year period from 2024 to 2029. The previous Price Control covered only 3 years (2021 to 2024).

Tariffs, on the other hand, are determined through an annual tariff process based on the final determination of the Price Control for the relevant year.

Assessment and approval

The RA sends a Business Plan Questionnaire (BPQ) to SEMO which serves as a format and content guide while preparing for the proposal. After SEMO's submission, the RA would appoint external consultants to review and analyse the documents. This part of the process may include workshops with the consultant and SEMO, in case the consultants would like to raise some clarifications or queries regarding the costs specified in the proposal.

A SEMO Price Control Working Group (WG), with members decided by the RA and discussed with SEMO, is also involved in the process. The WG's main obligation is provide feedback during the consultation process.

The RA is responsible for approving the Price Control revenue requirement proposal after taking into consideration all input from stakeholders.

Treatment of opex and capex

Opex and capex are separately specified in the Price Control process.

Opex requirements include the following high-level categories:

- Labour
- IT costs
- Corporate, HR and Facilities
- Finance and Regulation

SEMO also accounts for the Delta Opex which is an adjustment to capex-related opex costs.

Capex submission includes the costs expected from projects and investments, as well information on the:

- Regulatory Asset Base;
- Depreciation; and
- WACC return.

Treatment of uncertainty

The SEMO Revenue Requirement includes a 'K-factor' that serves as an adjustment variable in case of over or under-recovery of revenue. If there is excess tariff recovered, the amount would be deducted for the next period's tariff. Likewise, an under-recovery would be added to the approved tariff of the succeeding year.

Incentives and penalties

There are two ways in which SEMO is incentivised by the Price Control mechanism.

- Cost Incentive
    - Opex has a revenue cap (RPI-X) regulation that is coupled with a cost risk sharing obligation. The Price Control determination includes an ex-ante allowance to discourage increase in cost due to inefficiency. At the same time, the RA gain information from cost risk sharing, which lowers the impact of asymmetric information. The efficiency factor (X) is determined every Price Control.
    - Capex is also subject to ex-ante allowance. Aside from that, RA conducts an ex-post efficiency review on predictable and unpredictable Capex costs incurred. This process may or may not include public consultation.
- Performance Incentives are based on the performance of SEMO against the Key Performance Indicators (KPIs). These KPIs are set every Price Control period and are open for Participant feedback. For the previous Price Control regime, there were six KPIs that would grant a maximum additional 4% of the total operational expenditure allowance yearly.

Reporting and monitoring

SEMO provides the following reports:

- Market Operator’s Annual Performance that includes SEMO’s assessment of its own performance against its obligations as the Market Operator. The RA has recently expressed their preference to streamline reporting by including in this report the SEMO’s performance against the KPIs set for Price Control incentives, instead of submitting a separate KPI Outturn report.
- Market Operator’s Quarterly Performance in accordance with the Trading and Settlement Code and SEMC decision paper
- Bi-annual Capex updates to be submitted to the Market Operator User Group (MOUG).
- Detailed report of capex updates for Market Participants and other Stakeholders that should be published at least once a year.

SEMO and SEMC continues to seek improvements on their reporting regime in order to provide more transparency and accountability.

A.8 Canada: Ontario Independent Electricity System Operator (IESO)

The Independent Electricity System Operator (IESO) manages the power system and the Ontario Wholesale Electricity Market operations for Ontario that amounts to a total of 37.2 GW installed capacity and a historical peak demand of 27 GW. IESO is regulated by the Ontario Energy Board (OEB) whose Directors are appointed by the Lieutenant Governor in Council (LGIC) and whose members are then appointed by the Board of Directors.

Preparation

IESO prepares a revenue requirement, expenditure, and fees proposal as part of their obligation under section 25(1) of the Electricity Act 1998. This Revenue requirement proposal is subject to the Minister of Energy’s approval of a proposed Business Plan for the period covered.

Content

The submitted Business Plan contains a section on the financial overview for the Relevant period. This includes:

- Detailed written overview of the proposed costs and projects including scope, timeline, cost, key resources, and potential risks
- Detailed financial statements for the current year and the forecast for the current year and the succeeding three years.
- Explanation of the key expense drivers

Funding period

The Revenue Requirement Proposal covers three Fiscal Years. Application submission was previously done annually until 2023 where the multi-year period application commenced.

Assessment and approval

Following the approval of the Business Plan, IESO will prepare a revenue requirement, expenditures, and usage fees proposal. This proposal would be subject to scrutiny by a number of approved participating intervenors from the industry – collectively known as the Parties. The Parties would raise an issue list on the submitted proposal. A Settlement Workshop between the IESO and the Parties would be conducted to discuss these issues more in detail. Once the Parties and IESO have come to a comprehensive agreement, they will prepare a Settlement Proposal, which would be approved by the Ontario Energy Board (OEB).

The Settlement Proposal includes various attachments to support the application, including:

- Annual Report and Audited Financial Statement of Previous Period
- Minister's letter of approval of the Business Plan
- Revenue Requirement and Usage Fee Methodology
- Performance Measures and Targets from the previous period to the current
- Overview and itemization of expenses

Treatment of opex and capex

Opex and Capex are separately attached in the Settlement Proposal. The Operation, Maintenance, and Administration (OM&A) expenses includes employee compensation and remuneration. On the other hand, the capex attachments consist of project planning process, existing projects, and project progress. Capex is also subject to performance targets.

Treatment of uncertainty

The Settlement Proposal approved by the OEB includes an Adjustment Mechanism in case IESO encounters unforeseen expenses or changes in revenue. IESO's operating reserve level is part of the Forecast Variance Deferral Account (FVDA) that is the basis for fee adjustments. If the FVDA falls below 0 on the first year of the recovery period, IESO would be able to apply for an adjustment for the third-year fees.

For the previous recovery period of 2023 to 2025, IESO was also able to submit an Incremental Fees Application to increase its revenue requirement for the last two years of the period. This application is accompanied by an Amended Business Plan that must be approved by the Minister of Energy.

Incentives and penalties

IESO has two key performance index that are included in their reporting obligations.

- Schedule Performance Index, calculated by dividing earned value over the planned value, to estimate the conformity of project to its planned progress.
- Cost Performance Index, calculated by dividing earned value by actual cost, to measure the cost efficiency of the project.

For 2023 and 2024, the target is set to 80% of the strategic initiatives. A higher percentage of 85% is set as the target for 2025. IESO's capital projects are assessed against these are Performance Indices are reported quarterly and serves as a reputational incentive to be time and cost-efficient.

Reporting and monitoring

IESO provides a quarterly report published on their website that contains:

- Schedule Performance Index and Cost Performance Index.
- Schedule against set baseline schedules;
- Year-to-date comparison of actual spend and annual budget, as well as total actual spend and total budget;
- Any changes to cost forecast, schedule forecast, or scope of the project;
- Milestone progresses at the end of each quarter
- Public version of Strategic Risk Review; and
- Average FTE actuals on an annual basis.

IESO is also required to submit an Interim Year Business Outlook to the Minister of Energy for each Fiscal Year of the Business Cycle. This outlook should contain:

- Progress on energy transformation policies, including IESO’s response to any changes in government policies
- Description of significant variances between the budgeted opex and capex and the actual amount of expense
- Any unplanned material opex and capex changes

A.9 Canada: Alberta Electricity System Operator (AESO)

The Alberta Electric System Operator (AESO) is the corporation established to be the Independent System Operator and the Wholesale Electricity Market Operator for the Alberta Interconnected Electric System with an installed capacity of 20,777 MW and peak demand of 12,384 MW in 2023. AESO is considered a “public agency” by its definition, and therefore a not-for-profit agency.

The AESO Board governs and oversees the business and affairs of AESO. Its members are appointed by the Alberta Government. Besides the Board, AESO is also under the regulation of the Alberta Utilities Commission (AUC).

Preparation

AESO prepares the Budget Proposal along with its Business Plan as part of the Budget Development Process (BDP).

Content

The Business Plan and Budget Proposal document includes the following sections:

- Transmission Operating and Other Industry Costs
- General and Administrative, Borrowing Costs and Amortization and Depreciation
- Projects Costs
- Revenue Recovery

Each section includes an overview, a written explanation, and a comparison with the previous year’s actual and forecasted budget.

Funding period

The Business Development Process is conducted annually to set the budget for the current year. For 2025 BDP, the established budget is also used to forecast the budget for the next two years.

Assessment and approval

The 2025 BDP started with a one-on-one meeting with AESO, the AESO Board, and Executive members of participating stakeholders to assess and set the priorities of AESO for the coming year. This meeting would be used as basis in creating the Draft Budget proposal based on the set priorities. The Draft Budget Proposal document will be presented to the stakeholders, where a virtual Q&A session will be hosted to address the stakeholders’ frequently asked questions regarding the proposal.

After considering the input and feedback from stakeholders, AESO will draft the Business Plan and Budget Proposal. The Proposal will be reviewed and assessed by the Board. Any Board decision regarding the Business Plan and Budget Proposal would be published for the public’s view.

BDP from previous years are similar with the involvement of one-on-one sessions with the Board and the Executives, as well as asking for and incorporating stakeholders’ feedback.

Treatment of opex and capex

The Business Plan and Budget Proposal separates General and Administrative, Borrowing Costs and Amortization and Depreciation Cost from the Project Costs. Majority of these costs are recovered through the energy market trading charge per MWh trade.

AESO also has Transmission Operating and Other Industry Costs accounted for in their Budget Proposal. However, transmission has a separate revenue recovery which is through an AUC-approved tariff.

Treatment of uncertainty

The BDP established a process to deal with unforeseen changes during the budget period that may require material budget amendment.

- If the forecasted budget is below or in line with the previously approved amount, the remaining would be used for future year business priorities, or accumulated in the deferral accounts, depending on management's decision.
- If the forecasted budget is above the previously approved amount, and is within the manageable variance, AESO should seek approval from the Board and issue stakeholder communication to go over-budget.
- If the forecasted budget is above the previously approved amount and the manageable variance, AESO would review the new funding requirement with stakeholders, and then seek the approval of the Board.

The Manageable Variance is defined as the difference between the forecast and actual variance, that should be:

- Not more than 10% of budgeted general and administrative expenditure, or
- Not more than 20% of budgeted project expenditures.

Incentives and penalties

AESO is a not-for-profit organisation, and therefore is not subject to incentives or penalties.

Reporting and monitoring

AESO publishes various reports regarding their operations through their website. These include:

- Annual Year in Review, Financial Results, and Corporate Governance
- Quarterly Stakeholder Report to update Stakeholders on the budget
- Monthly Transparency Report on the Board's expenses

A.10 US: Independent System Operator-New England (ISO-NE)

ISO New England is a not-for-profit company designated by the Regulator Federal Energy Regulatory Commission (FERC) to be the Grid Operator, Market Operator, and Power System Operator to the regions that include Connecticut, Rhode Island, Massachusetts, Vermont, New Hampshire, and the most of Maine. The entire ISO-NE has about 29.7 GW of generating capacity and an all-time peak demand of 28.13 GW.

Preparation

The ISO-NE Board of Directors will create a Business Plan which would be the basis in establishing the Core Operating Budget Proposal. A separate Capital Budget is filed and submitted.

Content

Separate budget proposals are prepared for operations-related expenses and capital projects.

The Operating Budget is driven by ISO's strategic planning goals. These goals form the Core Operating Budget, and seven additional steps:

- Defining objectives, activities, and goals;
- Identifying efficiencies for each ISO department,
- Developing priorities
- Determining resourcing requirements
- Developing budget estimates for each department
- Adjusting budgets to align staff resources and activities with the business plan
- Conducting senior staff review to ensure alignment of budget with business plan and overall fiscal constraint.

On the other hand, Capital Budget filing includes:

- New approved projects, their costs, description, and target completion date
- Capital projects completed and each project's actual and target costs
- Projects with significant changes and the reduction/increase in the budget
- Capital projects in planning with budget and description
- Non-Project Capital Expenses (for hardware, software, and furniture and fixture purchases) with the total expense and comparison of actual cost and budget
- Additional Supporting Information

Funding period

The Funding process is done annually, from April to November.

Assessment and approval

ISO-NE presents the preliminary budget with the States and NEPOOL (i.e., New England Power Pool, the association of market participants doing business in the six states of New England). Any comments from these stakeholders are accounted for in creating the Revenue Requirement or Budget Presentation.

The Budget Presentation is reviewed at NEPOOL Budget and Finance Subcommittee meeting, then at a separate meeting with the state agencies. Any comments or questions gathered from here is considered for the next step. Afterwards, both the Revenue Budget and Capital Budget are reviewed at the NEPOOL Participants Committee who vote on whether to support the budget or not.

As these stakeholder processes happen, the ISO-NE Board of Directors also conduct their own review of items of the budget in which Board committees are responsible for. The Board also receives updates throughout the process from management and from the Audit and Finance Committee.

The Board then discusses the budget at a meeting, where they also review questions, comments, and feedbacks from stakeholders. The votes of the Participants Committee are considered in the Board's assessment.

The Board will vote on the budgets after reviewing all inputs from stakeholders. Once approved, the budget will be filed with the Regulator FERC. FERC reviews the budget along with supporting documents to see if the charged rate brought by the approved revenue requirement is reasonable and just.

Treatment of opex and capex

ISO-NE budgeting process treats Opex and Capex differently from filing to funding recovery. Table 2 below summarises the difference between the opex and capex in terms of proposal filing, content, and revenue recover.

Table 2: NYISO Opex and Capex

	Opex	Capex
Filing	As mentioned in Section 3.673.-1529878960, Opex are considered part of the annual revenue requirement filing.	Capital Budget is filed annually and quarterly.
Content	Opex includes all costs that ISO-NE incurred when meeting the set strategic goals	Capex are costs relating projects and IT hardware and software
Recovery	Opex costs are mainly recovered through collection of Participant fees.	Capex is largely funded through private placement financing, with financing costs passed on to market participations. However, capital assets that are not funded by private financing or other sources can be charged on Market Participants.

There is also a separate True-up Mechanism detailed for Opex and for Capex. See Section 3.673.-1529878960.

Treatment of uncertainty

The true-up mechanism for Opex allows the ISO to deal with any excess or deficit in budget. There are different processes in dealing with under- or over-spending Opex depending on the type of service provided.

Generally, the difference between the actual and approved budget from the year prior (y-1) will be added (underspending) or subtracted (overspending) to the budget proposal for the next year (y+1). However, for Energy Administration Services, these under- or over-spending amounts would be allocated to specific portions of the said service.

Capex uncertainty relates to the nature in which the funding is acquired. For capital asset costs that are not funded by private financing, ISO-NE is allowed to collect from the Market Participants. Moreover, if the private financing is terminated, accelerated, or required payment, the ISO can bill the Participants an amount equal to the proportion of its Tariff to the total Tariff of all the Participants.

Incentives and penalties

ISO-NE's operation is not subject to any incentive or penalty scheme.

Reporting and monitoring

ISO-NE is regulated by FERC with a signed a Settlement Agreement that includes their obligation to adhere to the budget review process, including controlled growth work planning, pre-filling review (i.e., presenting the proposed budget in various events, gathering stakeholders' comments), ISO-NE Budget filing, and preparation of Annual Work Plans.

ISO-NE prepares and publishes quarterly FERC fillings on capital spending to update FERC on the year-to-date and forecasted future spending by capital project, and the schedule of unamortized cost of ISO’s funded capital expenditures. There are also quarterly NEPOOL updates where ISO-NE discusses capital forecasts and reviews actual performance against operating budget with the NEPOOL Budget and Finance Subcommittee.

A.11 US: Pennsylvania-New Jersey-Maryland Independent System Operator (PJM ISO)

PJM Interconnection LLC is the first Regional Transmission Organization (RTO) in the United States. It currently acts as the Independent System Operator for the entirety of part of 13 states, namely, Pennsylvania, New Jersey, Maryland, Delaware, Ohio, Michigan, Illinois, Indiana, Virginia, West Virginia, North Carolina, Kentucky, a small part of Tennessee, along with the District of Columbia. PJM is under the regulator FERC. PJM has a total installed capacity of 196.38 GW in 2023, and peak demand of about 152.7 GW.

PJM is a not-for-profit membership organization. Its Members can participate in power pooling and the competitive wholesale market, and cast a vote in stakeholder processes.

Preparation

PJM’s Office of Interconnection prepares the annual operating and capital budgets and multi-year projections of expenses and capitals.

Content

The Finance Committee reviews PJM’s:

- Consolidated financial statements.
- Budgeted and actual capital costs
- Operating budgets and expenses
- Cost management initiatives

Funding period

The funding period process happens annually, typically from summer season to fall.

Assessment and approval

PJM will develop an annual expense and capital budget and would consult this with the Finance Committee. The Finance Committee carries out an initial review of PJM’s financial documents. Any feedback made by the Finance committee would be incorporated by the PJM management. Then, the Finance Committee would write a letter of recommendations to the PJM Board of Managers, who approves the revenue proposal. FERC will set the ceiling of the rates to be charged to customers according to PJM’s allowable revenue.

Treatment of opex and capex

Opex and Capex are specified as separate items in the budget proposal. However, they are both recovered through a fixed long-term rate paid by its members.

Treatment of uncertainty

PJM has the following provisions for budget over- or under-spending:

- Any excess revenue collected from the Members for the calendar quarter are refunded in the subsequent calendar quarter.
- If PJM has more expenses than revenue from fees, they are allowed to use up to $14 million from a long-term reserve previously funded by PJM’s members.

Incentives and penalties

PJM is a non-profit organization who recovers its expenses based on Transmission Tariff and rates billed to Members. Its budget is not under any incentive or penalty scheme.

Reporting and monitoring

PJM is required by the Operating Agreement to provide complete and transparent financial data and reporting to all members through the Finance Committee. This includes:

- unaudited and audited PJM financial statements
- quarterly and annual financial and operating reports
- budget and forecast data and results

A.12 US: California Independent System Operator (CAISO)

The California Independent System Operator (CAISO) is the Independent System Operator that manages the reliability of the grid and the wholesale electricity market operation for California and a portion of Nevada. CAISO is under the regulation of FERC and is governed by a Board of five Governor-appointed members.

In 2024, CAISO has a total generation capacity of 82,207 MW and peak demand of 48,323 MW.

Preparation

CAISO prepares the Grid Management Charge (GMC) revenue requirement.

Content

The GMC revenue requirement proposal has five components. Each item of each component is detailed in the proposal and includes a brief description, proposed budget, reason for its increase/decrease in comparison to last year, and graphical comparisons of historical budget allocations.

- Operations and Maintenance (O&M) budget
- Debt service
- Cash funded capital
- Other costs and revenues
- Operating costs reserve adjustment

Funding period

The funding process is done annually, with the process starting in August and ending in December.

Assessment and approval

CAISO held stakeholder meetings to gather feedback and incorporate it to the internal development process of the budget. The Preliminary draft would be presented to the follow up stakeholder meeting, and then to the Board. A Final Draft would be submitted to CAISO's Board of Governors for approval/decision where the Board will consider FERC's approved revenue cap.

Treatment of opex and capex

O&M cost is often the largest component of the Revenue Requirement. For the GMC 2024, O&M is reported in three separate views:

- Process view – uses an activity-based costing system to detail costs incurred while supporting customers and stakeholders (e.g., strategic planning, information technology support services)
- Resource View – details the salary and benefit expenses, including comparison from the previous year's compensation allocation

- Function View – breaks down O&M into two high-level function of CAISO – Corporate Services and Operational Services

For Capex, projects are assessed through a Capital/Project Development process where the Portfolio Project Management model is used to map their initiatives. The GMC's cash-funded capital component would fund these projects. However, in case the capital component is unable to cover all costs needed for the capital project budget, the ISO can use its capital reserve to fund the deficit. This capital reserve fund has been slowly built and utilised to help stabilise the GMC revenue requirement.

Both Opex (as part of the Revenue Requirement) and Capex (capital project budget) are subject to the Board of Governor's approval, although managed separately.

Treatment of uncertainty

Operating Costs Reserve Adjustment is part of the GMC proposal which usually include:

- Change in O&M budget to ensure that there is a 15% reserve margin
- Adjustment on the return of the 25% debt service reserve collection
- True-up mechanism to account for the difference between the budgeted from the actual revenues and expenses.

The sum of this adjustment is added or subtracted from the O&M budget before the finalised Total Revenue Requirement.

Incentives and penalties

CAISO is a not-for-profit entity and thus not subject to any incentive. However, like the Participants under CAISO, CAISO itself may be subject to financial penalties by FERC, North American Electric Reliability Corporation (NERC) and/or Western Electricity Coordinating Council (WECC) once proven that it violated the NERC reliability standards.

Reporting and monitoring

As part of the GMC Process, CAISO publishes the following documents to report its performance from the previous year

- Quarterly Financial Reports
- Audited Annual Financial Statements
- Market Planning and Performance Forum Calendar
- Implementation Milestones
- Active, Completed, and Preliminary Project Listings

A.13 US: New York Independent System Operator (NYISO)

The New York Independent System Operator (NYISO) is the Market Operator and the Independent System Operator for the south-eastern portion of the state, including New York City and Long Island. NYISO has an expected 34,913 MW of available resources to meet 31,541MW of forecasted demand in 2024.

NYISO is a not-for-profit organization that is led by its own independent Board of Directors and regulated by FERC.

Preparation

NYISO prepares the budget proposal.

Content

NYISO presents the draft budget that contains the:

- detailed itemization of the projected cost per category, as well as comparison of the budget from last year's budget,
- budget highlights and key drivers with brief descriptions on why there has been a substantial increase/decrease,
- key priorities and projects for the year; and
- budget projection for the next 5 years.

Funding period

The funding process happens annually, starting from May through December.

Assessment and approval

NYISO prepares a draft budget to be presented to the Budget and Priorities Working Group (BPWG), while the Board of Directors (BOD) starts their high-level review of the budget summary. BPWG Chair will present the draft budget to the Management Committee who would vote on recommending the budget to the BOD. The NYISO board of directors would then approve the budget accordingly. FERC is the regulator that approves changes to NYISO's tariffs.

Treatment of opex and capex

Opex and Capex are separate line items in the budget proposal submitted by NYISO. However, both are recovered through surcharge collected from the Market Participants. Opex include employee compensation, while Capex are facility improvement, software and licensing, and hardware.

A separate Project Budget Recommendation is prepared by the BPWG to discuss other capital projects. This submission includes prioritizations, timeline, stakeholder scored points, market and enterprise project budget recommendation, and historic values that may fund upcoming project for the year.

Treatment of uncertainty

Any variance between approved budget and actual costs (over- or underspending) incurred by NYISO is published on the website annually. BPWG prepares this presentation along with a detailed explanation of the forecasted revenue vs actual revenue and the forecasted cost vs actual cost.

In case there is a budget surplus, NYISO can use a portion of it to make early repayments of outstanding debts. A portion of the surplus can also be allocated as a carryover amount for the next year.

Incentives and penalties

NYISO's budget is not under any incentive or penalty scheme.

Reporting and monitoring

NYISO is obligated to monitor all projects, including its spending, the cost relative to the approved budget, and its performance against the goals set. They are also required to be inclusive, transparent, and open about the budget processes, and thus the relevant budget-related documents are often published on the website.

The BPWG also meets regularly throughout the year to review the status of projects, budgetary spending, and revenue recovery.

The NYISO also publishes Actual vs Budget Status Report, Financial Statements, and Project Milestone updates on their website annually.

A.14 US: Midcontinent Independent System Operator (MISO)

The Midcontinent Independent System Operator (MISO) is a not-for-profit member-based entity that is both the Market Operator and the Independent System Operator for 15 US states and the Canadian province of Manitoba. MISO has an installed generation of 202 GW

MISO is governed by its independent Board of Director and is under the regulator FERC.

Preparation

MISO prepares the budget proposal.

Content

The ISO prepares the proposal that contains:

- Historical data on costs, rate, and efficiencies; as well as accomplishments or milestones of projects.
- Current Year's Budget drivers, their amount, percentage increase/decrease from previous year, and cost control efforts.
- Itemized Base Operating Expenses, Total Project Investments, and other details on Budget Drivers.
- Income Statements (redacted in the published version).

Funding period

The budget approval process happens annually.

Assessment and approval

The Finance Sub-committee will review the Preliminary budget. The Advisory Committee and Audit and Finance Committee will then be given a chance to review submit their formal comments. Stakeholder feedback would also be collected from the sectors. The MISO Board of Directors would then vote for approval of the budget proposal. The Tariff charged to Participants, from which MISO gets their revenue, is filled and approved by FERC.

Treatment of opex and capex

MISO's Budget consists of revenue less operating expense and capital expenditures. A huge portion of the budget is Opex, including labour and interest cost incurred from Project Investments. Capex accounts for the rest of the costs regarding Project Investments.

Opex and Capex are recovered in the same manner. However, Capital Project updates are more frequently published (quarterly, instead of annually) to provide transparency on the process. These quarterly updates include total amount of current projects, the progress of according to each one's schedule, and the basis for this schedule allocation.

Treatment of uncertainty

Part of the Budget Proposal report are slides on Efficiencies and Potential Budget Variances.

- Efficiencies and Cost Control Efforts are actions that could help the ISO in staying within the budget and keeping the tariff in reasonable rates.
- OPEX Potential Budget Variances are based on potential volatility in salaries and benefits and interest income due to changing interest rate and investment cash balances. CAPEX Potential Variances are based on interdependency of projects. Some projects may be reduced across areas, and this may be offset by accelerating the next priority projects.

Incentives and penalties

MISO is not incentivised or penalised by any financial arrangements. Moreover, the finance subcommittee has no decisional authority regarding any MISO financial matter. Only its members can provide input and recommendations to MISO.

Reporting and monitoring

The MISO website publishes Annual Report Audited Financials and Quarterly Capital Project Closeout.

MISO closely monitors financial performance throughout the year and revise financial forecasts based on the current available information.

A.15 Singapore: Energy Market Authority (System operator, PSO)

Singapore's Energy Market Authority (EMA) serves as both the Power System Operator (PSO) and the industry Regulator for the entire country. The PSO acts as a separate department who has its revenue requirement process outside the rest of EMA.

Singapore's electricity generation capacity is at 13,062 MW in 2023 while its peak demand for the same year is 7,861 MW.

Preparation

EMA prepares its own revenue requirement as the PSO.

Content

The content of the PSO's revenue requirement proposal is not specified.

Funding period

The PSO's funding is reassessed every 3 years.

Assessment and approval

The PSO's proposed expenditure and revenue requirements will be published to the website and declared open for public feedback and submission. EMA as the authority approve the revenue proposal. The specific review process is not mentioned.

Treatment of opex and capex

Although Opex and Capex are separate line items in the PSO's financial statements, they are similarly recovered through Market Participant fees.

Treatment of uncertainty

The Market Rules details the treatment of uncertainty for PSO's revenue. Any audited adjustment from the previous year is applied to the approved expenditure and revenue requirement, and thus changing the estimated PSO fees for the year. In hindsight,

- In case of under-recovery, the PSO shall increase Market fees
- In case of over-recovery, the PSO shall reduce the fees

Incentives and penalties

EMA is a government agency that serves as the market regulator. Its budget is not under any performance incentive or penalty scheme. Any reliability-related penalties are imposed on Market Participants.

Reporting and monitoring

The Market Rules require the PSO to publish finalised expenditure, revenue requirement, and schedule of fees on EMA's website. Aside from this, PSO also produces annual reports that include their detailed and audited financial statements.

A.16 Singapore: Electricity Market Company (Market operator, MO)

The Energy Market Company (EMC) manages and oversees the trading in the National Electricity Market of Singapore (NEMS). All electricity in the entire country is bought and sold through the EMC, which is a 100% owned subsidiary of Singapore Exchange (SGX Group). Despite being owned by a for-profit company, EMC still earns a regulated return.

EMC is governed by the Market Rules, Market License, Electricity Act, and Codes of Practice, and is under the regulation of the Authority (EMA).

Preparation

Electricity Market Company (EMC) prepares the budget proposal.

Content

The Public version of the budget proposal consists of:

- National Electricity Market of Singapore (NEMS) Budget and Budget Assumptions per category
- Comparison of Forecasted budget and Actual Budget from previous year (per category)
- NEMS Capital Expenditure
- Calculation of the Variable fee, and the value of Fixed Fee.

Funding period

EMC's funding is processed and approved annually.

Assessment and approval

EMC publishes the Budget and Fees on their website as an invitation to the public to make feedback and submissions to the Rule Change Panel (RCP). RCP reviews the budget and writes a report to the EMC Board. This report is considered in finalizing the Budget and Fees. The Electricity Markets Authority (EMA), as the market regulator, reviews and approves the proposal, as well as the amount to be recovered through market fee collection.

Treatment of opex and capex

Opex and Capex are listed as separate items in the financial statements. However, both are recovered through Market Fees. Opex include manpower, depreciation, technology, market operator license fees, rent expenses, and other. Capex are costs related to furniture, equipment, Internal and NEMS systems, Provision for Rules Change Panel (RCP) Requests, and EMA Directed Projects.

Treatment of uncertainty

An annual adjustment to the price cap is applied to the revenue to account for exogenous costs and deviation between forecasted and actual revenue collected from Market Fees.

Incentives and penalties

EMC is regulated by the EMA and is not under any incentive or penalty scheme. Moreover, SGX's acquisition of EMC does not affect its model of cost plus budgeting.

Reporting and monitoring

The Market Rules require EMC to:

- Submit proposed expenditure, revenue requirements and a schedule of fees to the EMA in no less than 60 days prior to the beginning of the fiscal year
- Publish the approved expenditure, revenue requirement, and schedule of fees in their website.

Not other reporting or monitoring requirements are specified in the Market Rules.

Appendix B. Independent Panel Terms of Reference

Terms of Reference Independent Panel

Background

Following the review of the Allowable Revenue Framework in 2025, the Coordinator of Energy (Coordinator) established the Independent Project Plan Assessment Panel (the Panel). The Panel will provide independent, expert scrutiny of the Australian Energy Market Operator's (AEMO) project plans and associated costs related to its functions under the Electricity System and Market (ESM) Rules and the Gas Services Information (GSI) Rules.

These Terms of Reference set out the Panel's appointment, composition, and operation, and should be read alongside [placeholder for any relevant ESM Rule references or ERA regulatory guidelines].

Role of the Panel

The Panel provides independent scrutiny

The Panel provides external, independent, executive-level scrutiny of AEMO non-Business-as-usual(non-BAU) expenditure on behalf of stakeholders before significant funding is committed.

As part of this role, the Panel:

- Reviews AEMO project plans against AEMO's Project Governance Framework and the ERA's project governance guidelines, and assesses whether:

the project scope is appropriate and efficient for the required reform activity;

BAU and non-BAU expenditures are appropriately identified in line with any requirements in the ERA guideline;

AEMO has applied best-practice methods to estimate project time and cost; and

planned costs and timeframes align with good industry practice and support the State Electricity Objective.

- Publishes a review report for each submitted project plan, including:

a list of information used in the review (beyond the project plan itself);

the Panel's assessment and recommendations based on the above considerations;

comments on specific budget items or delivery timelines, as necessary; and

conclusions and recommendations, with any commercially sensitive or confidential information redacted.

- Evaluates AEMO's delivery performance by:

reviewing project reports to assess them against approved plans; and

publishing annual performance reports on AEMO's delivery against approved project plans.

Important note: The Panel is not an approval body and does not perform a bottom-up evaluation of individual cost items. However, it may review specific items by exception as part of its assessment of project estimates.

Panel Reports are not binding

The Panel reviews AEMO project plans and provides recommendations. While AEMO is not required to follow these recommendations, it must explain its rationale if it chooses not to do so before approving the project plan.

The Panel should focus on recommendations that enhance project delivery efficiency, transparency and accountability in AEMO's planning and expenditure approval processes. This will include:

- the outcomes of the assessment undertaken under section 2.1;
- any recommended improvements to AEMO's project planning methodology for future use; and
- any recommendations for further specified work before project commencement.

Panel activities

The Panel is independent, and may carry out its activities, including the development and submission of its reports, in the way it considers appropriate.

The Panel is encouraged to make use of virtual meetings as much as possible.

Preparation of project plans review reports

AEMO may collaboratively develop project plans with the MAC's Major Projects Working Group. The Panel is not involved in the development of project plans but should keep itself informed about upcoming projects and programmes to help plan its review activity.

Once AEMO has submitted project plans to the Panel, Panel Members will review the material, identifying queries and clarifications. The Panel may then seek additional information from AEMO in writing. Panel requests should allow AEMO to focus on clarifying queries, rather than presenting each project plan. Minutes from meetings with AEMO must be published with the relevant Panel report.

Requested information may include more detail on project implementation scope, timeline, risks, costs, benefits, and implementation plan. Requests should be focused on providing sufficient information for the Panel to meet its objectives (see section 0), and for later monitoring of AEMO delivery.

The Panel will assess project plans with reference to AEMO's Project Governance Framework, the ERA's project governance guidelines, and Members own expertise.

Preparation of monitoring reports

Each quarter, AEMO will publish project status updates, providing information on progress of approved projects. Once per year, during the January review window, the Panel must review those status updates and prepare a report on AEMO's performance against the project plans.

This report must provide statistics on the number and proportion of projects and project expenditure that has been delivered ahead of, on, or behind schedule, and under, on, or over budget. The Panel may seek additional information from AEMO on the reasons for time and cost differences, and must provide its opinion on whether the changes are reasonable and efficient, and any recommendations for AEMO's project management processes.

Timing of Panel activity

The Panel will operate on a part-time basis, meeting in two windows each year to review project submissions, with additional meetings convened as required by the Chair.

The Panel is expected to carry out the bulk of its work in two assessment windows each year. Each assessment window should include at least one Panel meeting during which the Members will discuss and agree their assessment of the current set of project plans.

AEMO will submit project plans to the Panel twice annually, by 14 March and 14 September. In general, project plans must be submitted at least five months prior to commencement – i.e. a project due to begin in July must be submitted by the preceding January.

In some cases, projects may need to start earlier. For example, a project that implements a rule change to address a manifest error may need to be reviewed and approved out of cycle. The Coordinator may request that the Panel convenes to review an urgent out-of-cycle project plan.

The Panel may also convene outside the assessment windows to plan for upcoming assessment windows.

The Panel must aim to review and publish reports for each project plan by 1 April and 1 October respectively for in-cycle projects, or within six weeks of the submission deadline for out of cycle projects..

If a project does not proceed according to plan (e.g. it is forecast to be over budget, or delivered later), AEMO must submit a revised project plan in the next Panel assessment window. The Panel must review the revised plan and issue an updated review report, if it requires any revisions to its assessment or recommendation.

Information gathering powers

Under the ESM Rules, the Panel may require AEMO to provide additional information to support the Panel's assessment of a specific project plan. AEMO must respond to requests for further information, justifications and clarifications within a week of the request. The Panel may extend this deadline by a commensurate period up to a total of three weeks (21 calendar days) for any project plan assessments report.

The Panel is expected to use this power by exception, rather than as a standard practice, as

- project plans will provide detailed information in line with ERA regulatory guidelines; and
- usually, the most efficient means for the Panel to raise questions and ask for clarification will be by meeting with AEMO.

In the first instance, the Panel is expected to rely on these practices to inform their assessment, with the power to request information used only as a last resort, and only when it considers that the information required is critically important to inform its assessment of the project plan.

The Panel should avoid requesting information that:

- AEMO would not be expected to have available in the ordinary course of business. For example, project duration estimates could be expected to be supported by comparisons to similar projects, dependencies on other activity, and availability of key expertise, but probably not a day-by-day GANTT chart of planned project activities.
- AEMO would not be expected to use in the estimation of project costs and timelines. For instance, project labour costs could be expected to be supported by staff grades, hour estimates, and expected salary or contractor cost ranges, but not individual salary data for specific team Members.

Energy Policy WA support

Energy Policy WA, on behalf of the Coordinator, will support the Panel to carry out its functions, by:

- providing a secure document hub for the Panel's documents with controlled access;
- providing secretariat support:

issuing meeting invitations;

finalising the agenda for each meeting with the Chair;

capturing and distributing key actions following each meeting;

capturing minutes of meetings with AEMO and stakeholders;

- supporting the Panel to communicate and engage more broadly with stakeholders about its work; and
- providing liaison with the Coordinator and the rest of Energy Policy WA through the Director, Wholesale Markets.

The drafting of Panel reports is reserved to Panel Members and will not be carried out by Energy Policy WA.

Confidentiality

While most information reviewed by the Panel will be publicly available, some information may relate to estimated costs for outsourced vendors. Sharing this information could compromise future AEMO procurement activity.

To maintain the integrity of the review process and protect commercially sensitive information:

- All Panel Members must sign a confidentiality agreement prior to the commencement of their contracts.
- Members must treat external vendor costs or procurement strategies provided in a project plan as confidential, unless explicitly advised otherwise.
- Members must treat information that relates to cyber security as confidential, unless explicitly advised otherwise.
- AEMO may request that the Coordinator determines that specific information in, or associated with, a project plan is confidential and provide reasons for its request. Members must treat any information determined to be confidential by the Coordinator as confidential.
- Members may treat all other information in a project plan as non-confidential.
- Confidential information must not be disclosed to any third party without prior written consent from the Coordinator.
- Members must ensure that any documents, data, or communications related to their work are stored securely and accessed only by authorised individuals.
- Breaches of confidentiality may result in removal from the Panel and other actions as deemed appropriate by the Coordinator.

Budget

The Panel will be funded through Market Fees, with costs incorporated into the Coordinator's fee structure.

Panel costs will be managed as part of Energy Policy WA's budget. The Panel will not have its own budget.

Panel composition

Appointment

The Panel will consist of between three and five Members.

Panel Members will be appointed by the Coordinator based on the selection criteria set out in section 0.

The Coordinator will publish a request for expressions of interest for persons to apply to become a Member as vacancies arise or are due to arise. The request will include information about the requisite qualifications and experience required to become a Member, and the application and selection process.

Expressions of interest may be accompanied by letters of support from stakeholders and industry bodies, but applicants do not need to be nominated to apply.

A successful applicant will be appointed as a Member in their individual capacity and is not permitted to nominate an alternative representative to attend meetings on their behalf.

Member selection criteria

Panel Members must be independent, able to provide a high level of relevant expertise, and have experience representing consumer interests.

Members need not be based in Western Australia.

Members must be independent

Panel Members must be independent to ensure the integrity and impartiality of the Panel's advice and assessments.

A person is considered independent if they are free from any business, financial, or other relationships that could materially interfere with—or could reasonably be perceived to materially interfere with—their ability to exercise objective and independent judgment.

The Coordinator will assess the independence of each Member prior to appointment and may review this status at any time during the Member's term. Any actual, potential, or perceived conflicts of interest must be declared and managed in accordance with the Panel's conflict of interest provisions. If a conflict of interest is confirmed, the Member will be expected to resign from the Panel.

Members must have relevant expertise

Panel Members must be well-recognised experts in their fields.

The Panel will consist of Members with skills and experience in:

- Economics, finance or commerce.
- Energy market design and development.
- Technical expertise (e.g. engineering) in an energy-related field.
- IT development and delivery, with a focus on energy market projects.
- Project management and governance.

Members must have experience representing consumer interests

Panel Members must have experience representing the interests of end-consumers of energy. This may be explicit (for example, membership on a consumer representative body or work for an energy consumer) or implicit (for example, experience developing policy that addresses consumer needs).

Conflicts of Interest

A conflict of interest or duty arises when a Panel Member engages in an activity or holds an interest that may compromise, or be perceived to compromise, their independence, objectivity, or judgment in fulfilling their responsibilities.

Panel Members must avoid any actual, potential, or perceived conflicts between:

- their obligations as a Member of the Independent Panel; and
- their personal interests, external business activities, or duties to third parties.

Members must not place themselves in a position that could lead to:

- an actual or potential conflict of interest or duty; or
- a reasonable perception of such a conflict.

Panel Members must not use:

- their position on the Panel; or
- information obtained through their role on the Panel

for personal gain, the gain of others, or to influence or undermine the work of the Panel.

Any actual or perceived conflicts of interest must be declared as soon as possible to the Coordinator, either in writing or during a Panel meeting. The Coordinator will determine the appropriate course of action, which may include the Member standing down from the Panel.

Chair

The Coordinator will select a Member to serve as Chair. The Expression of Interest may ask applicants to indicate their interest in being Chair, and describe the selection criteria and selection process.

Member term

Each Member will be appointed for a term of up to three years but can be reappointed.

To support continuity and renewal of the Panel, the Coordinator may specify staggered terms for Panel Members in the Expression of Interest process.

Termination of Members

A Member may be removed from the Panel by the Coordinator if they engage in improper conduct, have a confirmed actual, potential or perceived conflict of interest, or fail to contribute meaningfully to the Panel's work during their term.

The Coordinator will have absolute discretion in determining whether any of the above conditions for a member termination have been met.

Replacement of Members

If a Member resigns, is terminated, or is otherwise unable to carry out their role as a Member during their term, the Coordinator may:

- appoint a replacement from amongst unsuccessful applicants from the most recent Expressions of Interest process;
- call for Expressions of Interest for a replacement; or
- not replace the Member (provided there continues to be at least three Members).

The Coordinator may specify the term of the appointment to be either the remainder of the term of the replaced Member or such other term determined by the Coordinator.

Member responsibilities and remuneration

Responsibilities of Panel Members

To support the Panel's role in providing independent, expert scrutiny of AEMO's project plans and costs, Members are expected to:

- bring relevant expertise and experience to contribute meaningfully to assessments of prudence and efficiency in AEMO's project proposals;
- prepare thoroughly for each meeting by reviewing all distributed materials, including business cases and supporting documentation;

- engage in discussions with a focus on the broader objectives of the ESM Rules and GSI Rules, and the perspectives of all relevant stakeholders (including market participants, consumers, and prospective investors);
- where appropriate, provide evidence to support the Panel's assessments and recommendations;
- complete tasks assigned by the Chair, which may include preparing discussion papers, conducting targeted analysis, or drafting Panel reports; and
- maintain a high standard of professional conduct, supporting the Panel's role in reinforcing reputational incentives and upholding the integrity of the Allowable Revenue framework.

Responsibilities of the Chair

The role of the Chair is to:

- coordinate Panel Members to review project plans and draft Panel reports;
- manage the Panel to:

ensure effective contribution by Members;

ensure good process is followed including coordinating meetings;

seek consensus in the Panel reports; and

complete required work in the specified timeframes;

- ensure the Panel has an efficient and effective relationship with the Coordinator; and
- agree the Panel budget with the Coordinator.

Time Commitment

The Panel is expected to carry out most of its work during the two review windows each year, with minimal effort required outside those times unless the Coordinator requests an out-of-cycle review. Time commitments are not expected to exceed 400 hours per year per Member, and up to 500 hours per year for the Chair.

Remuneration

Members will be remunerated for work performed based on their contract with the Coordinator.

Work includes time spent in: Panel meetings; reading and analysing any materials provided; writing advice, presentations and reports; engaging with the Coordinator, AEMO, and other stakeholders; and other activities necessary to carry out the Panel's work.

The Coordinator will reimburse Members for all reasonable out-of-pocket expenses, including travel, incurred by the Panel where pre-approved by the Coordinator and consistent with WA Government expenditure policies.

Terms and Conditions

Panel Members will be contracted by Energy Policy WA and subject to the General Conditions of Contract that apply to contractors, including confidentiality and conduct requirements.

Amendment of these Terms of Reference

The Coordinator may revise these Terms of Reference during the term and will consult with the Panel prior to making any changes during the term.

Contact Details

Rule Participants and other stakeholders may contact the Panel Secretariat at energymarkets@deed.wa.gov.au. Documentation and information related to the Independent Panel will be published on Energy Policy WA's website.

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