

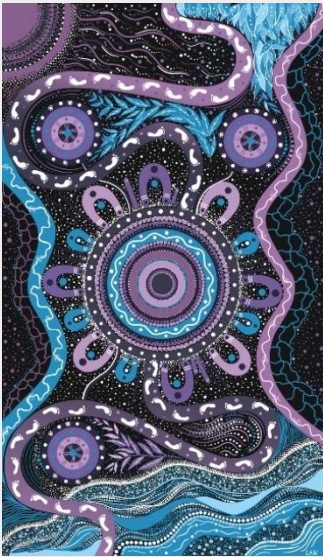
# DRAFT Implementation Assessment for Operations Enhancements

September 2025

Ref: IA-2025#04

Preliminary assessment of the changes, impacts and risks to implement a collection of minor works to make modest, tactical improvements to operational systems and processes





**We acknowledge the Traditional Custodians of the land, seas and waters across Australia. We honour the wisdom of Aboriginal and Torres Strait Islander Elders past and present and embrace future generations.**

**We acknowledge that, wherever we work, we do so on Aboriginal and Torres Strait Islander lands. We pay respect to the world's oldest continuing culture and First Nations peoples' deep and continuing connection to Country; and hope that our work can benefit both people and Country.**

'Journey of unity: AEMO's Reconciliation Path' by Lani Balzan

AEMO Group is proud to have launched its first [Reconciliation Action Plan](#) in May 2024. 'Journey of unity: AEMO's Reconciliation Path' was created by Wiradjuri artist Lani Balzan to visually narrate our ongoing journey towards reconciliation - a collaborative endeavour that honours First Nations cultures, fosters mutual understanding, and paves the way for a brighter, more inclusive future.

## Important notice

### Purpose

AEMO has prepared this document to provide preliminary information about the implementation of the WA Operational Enhancements initiative.

### Disclaimer

This document or the information in it may be subsequently updated or amended. This document does not constitute legal, business, engineering or technical advice. It should not be relied on as a substitute for obtaining detailed advice about the Electricity System and Market Rules, or any other applicable laws, procedures or policies or the capability or performance of relevant equipment. AEMO has made reasonable efforts to ensure the quality of the information in this document but cannot guarantee its accuracy or completeness.

Accordingly, to the maximum extent permitted by law, AEMO and its officers, employees and consultants involved in the preparation of this document:

- make no representation or warranty, express or implied, as to the currency, accuracy, reliability or completeness of the information in this document; and
- are not liable (whether by reason of negligence or otherwise) for any statements or representations in this document, or any omissions from it, or for any use or reliance on the information in it.

### Copyright

© 2025 Australian Energy Market Operator Limited. The material in this publication may be used in accordance with the [copyright permissions on AEMO's website](#).

### Version control

Version	Release date	Changes
1	15/09/2025	N/A



# Contents

1	At a glance	4
2	Introduction	5
2.1	Background	5
2.2	Purpose of the IA	5
2.3	Consultation and feedback	5
3	Overview	7
3.1	The Problem/Opportunity	7
3.2	Response	7
3.3	Energy System and Market Rules considerations	9
4	Impacts	10
4.1	Indicative impacts	10
5	Implementation	14
5.1	Indicative implementation timeline	14
5.2	Indicative implementation cost	14
5.3	Implementation risks	14
A1.	Glossary	16
A2.	Impact Rating Guidance	17

# 1 At a glance

<b>Problem / challenge</b>	<p>AEMO's WA operational teams and Market Participants often identify opportunities to improve the systems they use to manage and interact with the power system and market. For example:</p> <ul style="list-style-type: none"> <li>• Automating actions to enable faster operational responses or improve productivity;</li> <li>• Providing clearer or faster real-time visibility of the power system behaviour and status;</li> <li>• Making systems and data easier to use or access; or</li> <li>• Strengthening processes in response to real-world experiences or evolving risks.</li> </ul> <p>Many of these improvements are relatively simple to implement. AEMO's investment governance framework is designed to deliver complex and more transformational initiatives and is unsuited to simple, low-cost enhancements that could otherwise be delivered quickly. A more streamlined implementation approach is therefore required for changes of this kind.</p>
<b>Proposed solution</b>	<p>AEMO initiated a 'minor works fund' called the WA Operational Enhancements Program in August 2024. The program was set up to provide funding and fit-for-purpose governance for modest, tactical improvements aimed at reducing risk, maintaining compliance and/or improving productivity. Several successful initiatives were delivered during FY25, which have improved the operational effectiveness of the WEM control room, as well as improvements to the Distributed Energy Resources (DER) Portal.</p> <p>Given the need for ongoing continual improvement as operation of the power system and market becomes increasingly complex, AEMO proposes to continue this program throughout FY26. The WA Operational Enhancements Program will be established as an annual dedicated fund. This minimises administrative overheads and allows for quick commencement of minor initiatives, up to a cap of \$500,000 per initiative, and subject to the approval of the WA Operations Department Group Manager. Minor initiatives are continuously reprioritised, ensuring that highest value opportunities are pursued and that resource contention, operational priorities and trade-offs are appropriately considered.</p>
<b>Timing</b>	Initiatives are identified and progressed on an ongoing basis.
<b>Estimated cost</b>	\$1.8 million in financial year 2025-26.
<b>Impact on market participants</b>	<p>The changes to be undertaken under the WA Operational Enhancements project will have no impact or only minor impacts on AEMO's external stakeholders. Examples include:</p> <ul style="list-style-type: none"> <li>• additional optional data streams from the Public Data Site – such as data related to AEMO's bilateral service procurement<sup>1</sup> and</li> <li>• simple changes to the WEMS Market Participant Interface (MPI)</li> </ul>

<sup>1</sup> See NCESS and SC Publication in Table 4 below



# 2 Introduction

## 2.1 Background

The WEM Reform Program and the ongoing energy transition has introduced a suite of new systems, processes, conditions and risks for our WA operational teams. As these new systems are bedded in and the energy transition evolves, AEMO continues to identify many opportunities to make incremental improvements to the systems used to manage the market and power system. These diverse improvements opportunities can be realised relatively quickly and efficiently, by adopting a streamlined approach to govern, fund and deliver these as portfolio enhancements works.

### 2.1.1 The requirement

AEMO needed to establish an ongoing ‘minor works’ fund and governance framework that is light touch, transparent, and allows enhancements to be delivered as and when they are required. The immediate focus for the project is on delivering enhancements that improve control room situational awareness, improve productivity, or improve the user experience for Market Participants.

## 2.2 Purpose of the IA

The IA is published to help participants understand what changes are being implemented, how it may affect them, and what they might need to do in response. This IA describes the WA Operational Enhancements Program and provides some examples of the types of minor initiatives we propose to implement.

## 2.3 Consultation and feedback

We value participant’s input and invite feedback on our proposed implementation approach. We are particularly seeking feedback on matters set out in Table 1. Please note the key dates set out in Table 2.

**Table 1 Specific feedback sought**

Chapter of this IA	Suggested feedback topics
Overview <b>Error! Reference source not found.</b>	<ul style="list-style-type: none"> <li>• Has AEMO fully considered the problem / challenge? Is there anything additional that needs to be factored into the solution?</li> <li>• Do you agree with AEMO’s proposed implementation approach? (i.e. light touch governance for the individual initiatives)</li> <li>• Is there precedent elsewhere you recommend we could learn from?</li> </ul>
Impacts	<ul style="list-style-type: none"> <li>• Noting that the individual initiatives have limited impact on other Rule Participants, are AEMO’s proposed arrangements for communicating the changes appropriate?</li> </ul>



Chapter of this IA	Suggested feedback topics
Implementation	<ul style="list-style-type: none"><li>• Have the key implementation risks been adequately captured? If not, what's missing or incorrect?</li></ul>

Comments should be sent via email to [majorprojects@aemo.com.au](mailto:majorprojects@aemo.com.au).

**Table 2 Indicative timings for the IA publication/consultation process**

Step	Due date
AEMO Draft IA distributed to Major Projects Working Group (MPWG) members	15/09/2025
AEMO provide MPWG with Briefing on Draft IA	19/09/2025
Deadline for MPWG feedback on Draft IA	03/10/2025
AEMO Final IA published	24/10/2025

## 3 Overview

### 3.1 The Problem/Opportunity

#### 3.1.1 Many minor operational changes required

The systems, business processes, and risks managed by AEMO's operational teams in the WEM have undergone rapid change over recent years. A key focus for AEMO is to improve control room situational awareness and the security of real time dispatch. This includes eliminating manual processing, where practicable. The teams within the WA Operations Department<sup>2</sup> regularly identify minor, tactical opportunities to better manage risks, ensure compliance with the ESM rules, or to improve productivity or efficiency. This has resulted in a list of opportunities for improvement, prioritised in terms of critical risk reduction and/or improvements in operational efficiency.

#### 3.1.2 The changes are unsuitable to be individual projects

Many of these opportunities require changes that cannot be implemented by a single business team but would be less efficient to deliver as individual projects. The types of enhancements on the opportunities list are relatively low cost and low complexity and should ideally be implemented quickly as and when the need arises. However, it is important to retain visibility and governance over what enhancements should be made, to ensure value for money and focus on priorities.

AEMO's investment governance framework is generally designed for larger, transformational projects, and would impose an unnecessary administrative burden and barrier to delivering these minor enhancements quickly. We therefore require a more streamlined method of governing, funding, and prioritising these minor operational enhancements.

### 3.2 Response

AEMO has determined that establishing a 'minor works fund' offers a way of managing simple operational enhancements efficiently, while still providing a degree of oversight and control over funding and project delivery. To test this, in August 2024, we initiated the WA Operational Enhancements Program.

The program provided a defined funding allowance to deliver small tactical improvements aimed at reducing risk and/or improving productivity. With oversight from AEMO's WA Reform Steering Committee, the program delivered several successful software releases during FY25, which have improved the operational effectiveness

---

<sup>2</sup> The WA Operations Department includes the following teams: WA Power System Operations, Real-Time Market Management; WA System Engineering; Energy Market Management; WA Operations Planning.

of the WEM control room, as well as improvements to DER Portal. The program also established a working list of further improvements identified by the operational teams.

We therefore propose to continue this model and establish the WA Operational Enhancements Program as an annual fund designed to deliver and provide oversight of ongoing minor improvements. In this way, work can be commenced quickly and with minimal administrative overhead, while ensuring priority and trade-offs are appropriately considered across the affected operational teams.

### 3.2.1 How it works

Key features of the WA Operational Enhancements Program are summarised below:

- Overall program funding is sought for each financial year, based on the working list of opportunities and business priorities.
- The value of individual changes is capped at up to \$500,000 per initiative. In practice, most changes have a value considerably below that threshold.
- The delivery teams draw down on the total funding allocation, subject to the approval of Group Manager – WA Operations.
- AEMO’s Investment Committee (via the WA Reform Steering Committee) has visibility of the project but isn’t required to give specific approval for each individual initiative.

Further detail on the process for selecting and delivering initiatives is summarised in the following table.

**Table 3 Stages of initiative selection and delivery within the WA Operational Enhancements Program**

Stage	Description
<b>Stage 1: Indicative List of Candidate initiatives</b>	A list of candidate initiatives is maintained. While not exhaustive, it is indicative of the opportunities for improvement. This is refined and prioritised in accordance with business need, capability, and risk. This does not preclude additional items being presented for assessment and endorsement – at which time, the candidate list will be reviewed and re-prioritised as necessary. Any new initiative request / demand can be added to this list.
<b>Stage 2: Assessment</b>	<p>The project manager works collaboratively with the WA Operations team to understand the problem or opportunity statement, possible solution options and funding ask. Then the following assessments are undertaken:</p> <ul style="list-style-type: none"> <li>• Selection criteria:                             <ul style="list-style-type: none"> <li>– New demand are assessed against the WA Operational Enhancements selection criteria.</li> </ul> </li> <li>• Business owner/technical owner discussion:                             <ul style="list-style-type: none"> <li>– A discussion with appropriate domain / product manager across Digital team to understand and agree any resource / capacity needs.</li> </ul> </li> <li>• Architecture &amp; cyber assessment:                             <ul style="list-style-type: none"> <li>– A discussion with the Architecture representative to confirm alignment with architecture strategy</li> <li>– A discussion with the Cyber representative to confirm cybersecurity artefacts and assessments.</li> </ul> </li> <li>• Finance assessment:                             <ul style="list-style-type: none"> <li>– A review with the finance team to discuss and endorse the assets being developed under this initiative.</li> <li>– Appropriate finance / entity codes.</li> <li>– Capitalisation assessment, noting minor works &lt;\$50k are Opex.</li> <li>– Benefits are identified and validated.</li> <li>– On-going Opex is identified and confirmed as appropriate.</li> </ul> </li> </ul>
<b>Stage 3: Approval</b>	The initiative is approved by the GM WA Operations.

Stage	Description
<b>Stage 4: Delivery</b>	Once approved, the scope and key milestones are included into the WA Operational Enhancements project, progressed and reported on as part of the standard monthly project governance cycle and governed through the WA Reform Program Steering Committee. Stakeholders are engaged through existing channels, noting it is expected that most of the initiatives will be internally focussed improvements and unlikely to materially impact external stakeholders.

### 3.2.2 Examples of minor enhancements

The working list of opportunities is a live document and will evolve during the year. Examples of minor enhancements identified for FY26 are:

- WEMDE user interface improvements and bug fixes.
- GSS uplift - extend GSS to allow dynamic ratings to be received for more accurate forecast intervals.
- Non-Capacity Credits Portal (NCCP) enhancement and bug fixes.
- Publishing new data sets for Non-Cooptimised Essential System Services (NCESS) and Supplementary Capacity (SC).

Further detail on the proposed enhancements and their expected benefits is provided in Table 4.

## 3.3 Energy System and Market Rules considerations

The changes delivered in FY25 as part of the WA Operational Enhancements project were initiated by AEMO to better manage its existing obligations, rather than being driven by changes to the ESM Rules. This will generally remain true of the initiatives delivered by the project in FY26. The only exception identified at the time of writing is a minor initiative to publish, on the public data site, data associated with NCESS and SC processes. This change is required to meet a new obligation, commencing 1 October 2025, for AEMO to prepare and publish on the website these two new data sets<sup>3</sup>.

<sup>3</sup> See new Clause 7.13.1FA, inserted by *Wholesale Electricity Market Amendment (Cost Allocation Reform) Rules 2024 (Schedule 2)*.  
AEMO must prepare and publish on the WEM Website, for each Trading Interval...:

- an estimate of the total quantity of energy (in MWh) by which Facilities reduced their consumption in accordance with the terms of a Supplementary Capacity Contract; and
- an estimate of the total quantity of energy (in MWh) by which Facilities reduced their consumption in accordance with the terms of an NCESS Contract.



## 4 Impacts

This section sets out AEMO’s assessment of the impacts of all changes on AEMO’s systems, our published documentation and on Market Participants, Western Power, Energy Policy WA and the ERA.

### 4.1 Indicative impacts

Consistent with their characterisation as minor initiatives, all the changes undertaken under the WA Operational Enhancements project give rise to no or minor impacts on AEMO’s external stakeholders. Table 4 below summarises the candidate minor initiatives currently shortlisted for delivery in FY26. For each initiative listed, the final three columns summarise impacts on:

- AEMO’s systems.
- Published documentation.
- External stakeholders (primarily other Rule Participants, EPWA and/or ERA).

To assist the interpretation of the system impacts summarised in Table 4, a simplified application architecture diagram is also provided. Shaded in green on the diagram are those components that may be impacted by any of the candidate minor initiatives. In other words, the green shading highlights those components that will be impacted assuming all the candidate minor initiatives proceed. Note that in practice, some initiatives may not proceed, and the diagram may overstate the breadth of components ultimately impacted.

Where appropriate, the changes listed in the table include references to relevant parts of the diagram by citing the two and three letter codes listed in brackets after the name of each component in the diagram. These references are prefixed in the table with the symbol “#” to distinguish their function.

Table 4 Summary of candidate initiatives

Status	Title	Release date <sup>4</sup>	Benefit	Scope	Impacts on...		
					AEMO systems	Pub'd docs	External stakeholders
Closed	WEMDE UI 2.5	20 Mar '25	Risk Reduction; Compliance	Introduced new dashboard with improved user interface and functionality that was descoped for WEM Reform Go Live	WEMDE UI (#DI)	N/A	N/A
Closed	WEMDE UI 2.6	3 Jun '25	Risk Reduction; Compliance	Repair incorrect data streams and ineffective UI design; introduced ability to temporarily block constraint equations causing unintended co-optimised outcomes.	WEMDE UI; WEMDE (#DI)	N/A	N/A
Closed	WEMDE UI 2.7	27 <sup>th</sup> Aug '25	Risk Reduction	Address issues with WEMDE auto-correct functionality designed to reduce the impact of differences between forecasted and actual Unscheduled Operational Demand.  Increased data density of the Dashboard, introduced functionality for controllers to override DPV inputs and the ability to manage key WEMDE parameters.	WEMDE UI; WEMDE (#DI)	N/A	N/A
Execution	GSS Uplift	TBC (~late October)	Productivity Improvement; Market efficiency	Extend GSS to allow dynamic ratings to be received for more accurate forecast intervals. Leverage Dynamic Line Ratings change to enhance the GSS system with additional bug fixes and minor enhancements	WEMDE inputs (#DI)	N/A	N/A
Execution	Non-Capacity Credits Portal (NCCP) Enhancement	28 Aug '25	Risk Reduction; Productivity	Enhancements to the Non-Capacity Credits Portal (NCCP) for activating supplementary capacity. The changes undertaken here concern functionality for AEMO internal teams and no material externally-impacting changes are expected.	NCCP (not shown in diagram) <sup>5</sup>	N/A	N/A
Execution	NCESS and SC Publication	NCESS (1 Oct '25); SC (Dec '25)	Compliance	The Cost Allocation Review (Schedule 2) gazette has a new obligation, commencing 1 October 2025, for AEMO to prepare and publish on the website 2 new data sets for each Trading Interval (for NCESS and SC). See <b>new Clause 7.13.1FA</b> . AEMO will implement this on the Public Data Site.	Public Data Site (#PU)	N/A	stakeholders may choose to consume new datasets from the Public Data Site. <sup>6</sup>

<sup>4</sup> Release dates prior to 12 Sept are the actual dates that releases occurred. Release dates after 12 Sept are planned release dates and subject to change.

<sup>5</sup> The Non-Capacity Credits Portal (NCCP) is a business-to-business digital platform to manage Supplementary Capacity (SC) and Non-Co-Optimised Essential System Services (NCESS) contracts. Access to the NCCP is provisioned as required to contract counterparties. The NCCP is not represented on the standard AEMO application architecture used for Implementation Assessments.

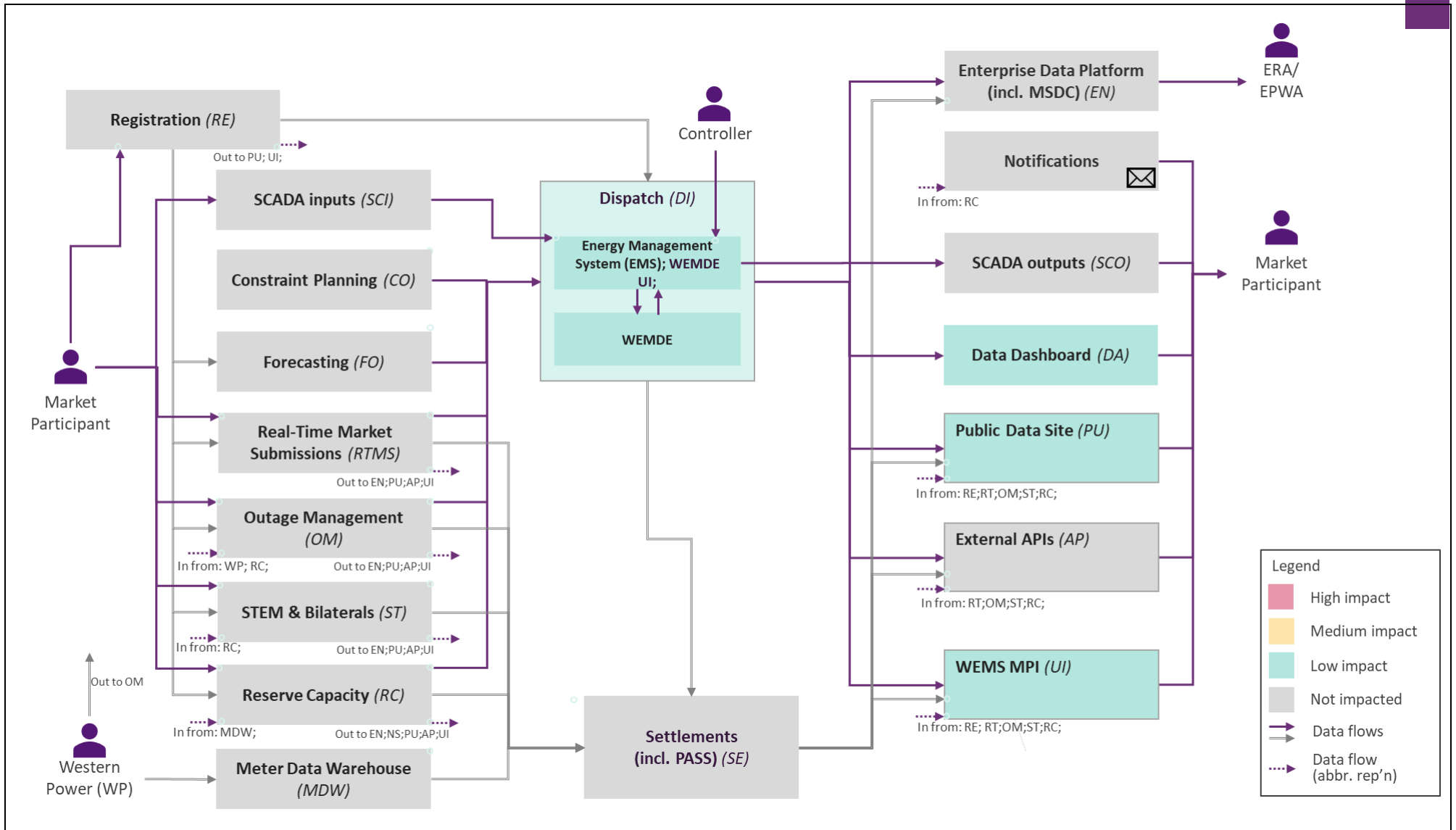
<sup>6</sup> AEMO will notify the market when it starts publishing the NCESS and SC data to the PDS by issuing a Market Advisory.

Status	Title	Release date <sup>4</sup>	Benefit	Scope	Impacts on...		
					AEMO systems	Pub'd docs	External stakeholders
Execution	Parameter update framework	TBC (~late October)	Risk Reduction; Productivity	Address limitations in current arrangements for AEMO staff to update WEMDE / WEMDE UI parameters via database scripts. Formalise the process / workflow for updating these parameters through a common UI.	WEMDE; WEMDE UI (#DI)	N/A	N/A
Planning	Tech Parameters Enhancements	TBC	Risk Reduction; Productivity; Service Satisfaction	Make fundamental market data more easily available to Market Participants and non-Market Participants, to enable self-service and improve transparency of available data. <b>The improvements planned to date concern the publication of Thermal Limit Advice, provision of key PDS Data in CSV format and refinements to the reporting of ST PASA data.</b>	Public Data Site (#PU? WEM Data Dashboard (#DA)	N/A	Stakeholders may choose to consume new/modified data from the Public Data Site / Data Dashboard <sup>7</sup> AEMO expects to seek feedback on some improvement proposals – e.g. CSV publishing for the PDS.
Planning	Lack of Reserve (LOR) Determination Enhancement	TBC	Risk Reduction; Productivity; Service Satisfaction	Deliver improvements to the frontend UI for controllers to view LOR conditions and backend changes to manage calculation of LOR thresholds enabling a full audit history of inputs used in LOR determination.	WEMDE UI (#DI)	N/A	N/A
Backlog	Balancing Market Archive	TBC	Productivity; Service Satisfaction	Improvements to the WEMS Market Participant Interface (MPI) to create a clearer user experience. For example, AEMO will archive balancing market functionality (removing this content from primary screens, while continuing to support access to the historical information through dedicated screens). This includes: removing the empty load forecast/real time generation graph, renaming things to be clearer and removing / modifying the ticker at the base of the screen.	WEMS MPI (#UI)	WEMS MPI User Guides	Become familiar with minor changes to the user interface. <sup>8</sup>
Backlog	DPV input override	TBC	Risk Reduction; Compliance	Provide ability for controllers to override erroneous DPV inputs.	Forecasting (#FO); WEMDE UI (#DI)	N/A	N/A
Backlog	Market advisories	TBC	Risk Reduction; Compliance	Deliver a new Market Advisory system integrated within WEMDE UI that will provide additional features and a stringent workflow to better ensure Market Advisories are compliant, timely and accurate.	Forecasting (#FO); WEMDE UI (#DI)	N/A	N/A

<sup>7</sup> AEMO will notify the market when any of these changes takes effect by issuing a Market Advisory.

<sup>8</sup> AEMO will notify the market when any of these changes takes effect by issuing a Market Message, publishing Release Notes, and updating the WEMS MPI User Guide on release to Pre-Production and issuing a Market Advisory on release to Production.

Figure 1 Overview of impacts to AEMO systems



Note: components impacted by any of the candidate minor initiatives identified in Table 4 above are coloured as if the relevant minor initiative is committed to proceed. Cross references to this diagram in Table 4 will combine prefix '#' with the letter code included in brackets at the end of each component name in this diagram.



# 5 Implementation

This section provides a high-level summary of the timeline and cost to implement the initiative and sets out the main implementation risks.

## 5.1 Indicative implementation timeline

In accordance with the flexible arrangements established for the Operational Enhancements Program, AEMO will plan specific releases around one or two months in advance and may only confirm these timings several weeks in advance. For this reason, no implementation timeline is provided here.

Given that the releases will all be small in scope and have minor impacts on external stakeholders, AEMO intends to notify the market of these releases via the standard process. That is, AEMO will notify the market by issuing a Market Message and release notes prior to the release to Pre-Production and then issue a Market Advisory prior to the release to Production. In instances where the change warrants additional explanation or engagement, a meeting of the WA Reform Implementation Group (WRIG) or Industry Testing Forum (ITF) will be held.

## 5.2 Indicative implementation cost

The funding allocation for operational enhancements in FY26 is \$1.8 million. Work on the identified list of enhancements has been approved to proceed up to that amount and subject to the controls described in Section 3.2. Further funding of \$2.3m and \$2.5m has also been earmarked for FY27 and FY28 respectively to continue the work on small initiatives to improve operational systems and processes. These allocations remain subject to continuous review, as for the other initiatives represented on the [WEM Implementation Roadmap](#).

As the project progresses, AEMO will report the approved budget (including contingency) and subsequent forecasts for the project established to implement the changes described in this IA, as part of our reporting on the [WEM Implementation Roadmap](#). As implementation of the changes detailed in this IA has already commenced, please refer to the following project included on the Roadmap: P33900 WA Operational Enhancements.

## 5.3 Implementation risks

Risks identified by AEMO through this IA arising from the changes associated with the Operational Enhancements project are outlined in the following table.



**Table 5 Initial assessment of implementation risks**

Identified risk	Current rating	Mitigation strategies	Residual rating
Due to the reliance on subject matter experts (SMEs) to support specific initiatives, there is a risk that the project will be unable to engage the necessary SMEs in a timely manner.	High	<ul style="list-style-type: none"> <li>• Ongoing monitoring, working with teams and SMEs on availability and scheduling</li> <li>• where limited availability of specific SMEs makes it necessary, put the item on hold and pivot to the next item on the prioritised list of minor initiatives</li> </ul>	Low
Cyber security assessments may be required, which can be expensive and time consuming (proportional to the budget/schedule for a small initiative).	Medium	<ul style="list-style-type: none"> <li>• As above – monitor, work with teams, pivot to other work.</li> <li>• Maintain regular contact with cyber security team.</li> <li>• Schedule releases around concurrent projects or activities (one assessment per release rather than per project).</li> </ul>	Low
Contention for access to integrated environments is likely to result in delays (regulatory-driven releases typically trump minor, discretionary releases). Impact of deprioritisation can be proportionally large for initiatives with short delivery timelines.	Medium	<ul style="list-style-type: none"> <li>• As above – monitor, work with teams, pivot to other work</li> <li>• Maintain regular contact with Environment Manager</li> </ul>	Low

# A1. Glossary

**Table 6 Glossary of terms and acronyms used in this IA**

Term	Definition
AEMO	Australian Energy Market Operator: The entity responsible for operating the Wholesale Electricity Market and managing power system security in the SWIS. (ESM Rules, Clause 2.1A)
WEM Data Dashboard	A set of visualisations hosted on the AEMO website presenting key market data for the benefit of participants and stakeholders. See <a href="https://www.aemo.com.au/energy-systems/electricity/wholesale-electricity-market-wem/data-wem/data-dashboard">https://www.aemo.com.au/energy-systems/electricity/wholesale-electricity-market-wem/data-wem/data-dashboard</a>
DER	Distributed Energy Resources: Small-scale units of generation or storage that are connected to the distribution network, including solar panels, batteries, and electric vehicles. (ESM Rules, Clause 3.24)
DPV	Distributed Photovoltaic: Small-scale solar generation units connected to the distribution network.
ESM Rules	Electricity System and Market Rules. The WEM and the SWIS are governed by the Electricity System and Market Rules. See <a href="https://www.wa.gov.au/government/document-collections/electricity-system-and-market-rules">https://www.wa.gov.au/government/document-collections/electricity-system-and-market-rules</a>
FSA	Future State Architecture: Target architecture or strategic blueprint for AEMO systems and technology.
GSS	Grid System Service: A data integration and delivery framework that collects, processes, and distributes SCADA and related operational data to support real-time dispatch (e.g. WEMDE), settlement, and historical analysis.
IA	Implementation Assessment: a summary of AEMO's proposed or settled approach to implementing an initiative, to explain the changes or the benefit of external stakeholders.
ITF	Industry Testing Forum: Stakeholder group for management and coordination of industry testing.
LOR	Lack of Reserve is a classification used by AEMO to indicate that reserves of generation are below predefined thresholds or LOR levels. Each LOR level corresponds to a probability that AEMO may issue a Low Reserve Condition Declaration in relation to a specified period of time. Such declarations are frequently the trigger for market responses or interventions.
Market Advisory	A formal notice issued by AEMO to inform Market Participants and Network Operators of events, delays, directions affecting market operations and software changes in Production. (ESM Rules, Clause 7.11.1)
Market Message	An email issued by AEMO to market participants about upcoming changes or releases. Is used where the ESM Rules do not specify that a Market Advisory is required.
MPI	Market Participant Interface: The primary user interface/portal through which market participant users interact with WEM systems. Also referred to as the Wholesale Electricity Market Systems Market Participant Interface (WEMS MPI)
MPWG	Major Projects Working Group: A consultative forum for engagement with industry stakeholders regarding the work program of AEMO's WA Reform Program - the delivery vehicle for AEMO's WA-focussed projects.
MSDC	Market Surveillance Data Catalogue: A catalogue of data used for monitoring and analysing market performance and compliance. (ESM Rules, Clause 10.6)
NCESS	Non-Co-optimised Essential System Services: Essential services procured outside the co-optimised market dispatch process, typically through contracts. (ESM Rules, Clause 3.11A)
Public Data Site	AEMO's online portal for publishing market and system data to stakeholders. Also called the Market Data Site. See <a href="https://data.wa.aemo.com.au/">https://data.wa.aemo.com.au/</a>
SC	Supplementary capacity: Additional capacity procured to address shortfalls in Reserve Capacity. (ESM Rules, Clause 4.24)
SRC	Supplementary Reserve Capacity - the previous name for Supplementary Capacity
WEM	Wholesale Electricity Market: The market for the wholesale sale and purchase of electricity in the SWIS. (ESM Rules, Clause 1.1.2)
WEMDE	WEM Dispatch Engine: Core software system for dispatching generation and manage essential system services in the WEM.
WRIG	WA Reform Implementation Group: Stakeholder group for governance and consultation on WA market reform.



## A2. Impact Rating Guidance

AEMO's approach for rating impacts from No Impact, Low, Medium or High applies a predefined matrix of impact types, summarised in the table below (see next page).

**Table 7 Impact assessment guidance**

Dimension considered	Question	High	Medium	Low	None
<b>Impact on documentation</b>	What is the change to a given internal process, WEM Procedure or technical document that AEMO must maintain and/or publish?	Major changes to documentation. E.g. creating a significant new document (or extensively rewriting existing). E.g. document drafting and review extensively involves multiple AEMO teams.	Moderate changes to an existing document. E.g. addition, elimination or reorder of multiple process steps. E.g. document drafting and review involves multiple AEMO teams to some extent.	Minimal change to an existing document. E.g. addition, elimination or reorder of small number of process steps. E.g. document drafting and review is primarily carried out within a single AEMO team.	No changes to documentation
<b>Systems impact – market applications (internal only)</b>	How extensively will the change affect the underlying market applications?	Involves a major change to, or addition of, a market application. E.g. introduction of a new application or decommissioning of existing system	Moderate change to existing market applications. E.g. introducing many new features or significantly increasing non-functional requirements	Minor change to existing market applications. E.g. adding one or several minor new features. E.g. expanding system functionality with only minor adjustments to the application’s data and processing frameworks.	No change market applications
<b>Systems impact – user interfaces (internal and external)</b>	How is the change affecting user interfaces? How easily will the change be integrated by users?	Major changes to user interface(s) e.g. introduction of significant new or decommissioning of existing UI tabs. E.g. many users may not understand the UI without training.	Moderate change to existing interfaces. E.g. significantly expanded range of controls within an existing UI tab. E.g. many users will understand the UI relatively quickly on their own, but without training, some many not.	Minor change to existing interfaces. E.g. small addition of controls within an existing UI tab. E.g. almost all users will understand the UI quickly on their own, even in the absence of training.	No change to user interfaces
<b>Systems impact – system to system interfaces (internal-internal and internal-external)</b>	How is the change affecting the interactions between systems? How easily will changes be accommodated by systems up or downstream?	Major systems interface change. E.g. entirely new machine interface, with unfamiliar data schema or transfer formats must be negotiated or understood. E.g. upstream or downstream limitations significantly constrain or complicate the implementation of the core application changes.	Moderate systems interface change. E.g. the change involves significantly expanding the number of parameters or data-streams to be exchanged, but closely follows established patterns, formats and schemas. E.g. upstream or downstream systems require many changes, but these closely follow established patterns, logic or structures.	Minor system interface change. E.g. the change involves adding a small number of parameters or data-streams, adhering to established patterns, formats and schemas. E.g. upstream or downstream systems require several minor changes.	No system to system interface impacts