



Government of Western Australia
Energy Policy WA

Foundation Regulatory Frameworks

Consultation Summary Report

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Working together for a **brighter** energy future.

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1. Purpose

1.1 Energy Transformation Strategy

The Energy Transformation Strategy (the Strategy) was a program of works established by the Western Australian Government to respond to the energy transformation underway and plan for the State's future power system. The delivery of the Strategy was overseen by the Energy Transformation Taskforce (the Taskforce), under the independent Chairmanship of Mr Stephen Edwell.

The Strategy was delivered under three work streams:

- **Distributed Energy Resources (DER) Roadmap** – a plan to guide the better integration of all distributed energy resources, including solar panels, battery storage and electric vehicles into the power system, and ensure that the benefits are shared across the community;
- **Whole of System Plan** – a detailed study into the likely evolution and generation mix of the South West Interconnected System (SWIS), to guide future infrastructure investment and inform policy, regulatory and market development decisions; and
- **Foundation Regulatory Frameworks** – changes to elements of market and regulatory design to modernise and improve the operation of the Wholesale Electricity Market (WEM), including implementation of a constrained network access model and the introduction of security constrained economic dispatch.

Over its two year term the Taskforce delivered on its requirements across these three work streams. More information on the Strategy and the Taskforce can be found on the Energy Policy WA website at www.energy.wa.gov.au.

1.1.1 Energy Transformation Implementation Group

After the establishment of Energy Policy WA as a Sub-Department of the Department of Mines, Industry Regulation and Safety, the Energy Transformation Implementation Unit (ETIU) became a dedicated unit within Energy Policy WA.

ETIU led the design and implementation work delivered under the Strategy, and throughout the duration of the Taskforce:

- acted as the project lead for the three work streams delivered under the Strategy;
- was responsible for policy development and the drafting of legal instruments;
- reported regularly to the Taskforce on project delivery progress and major policy issues;
- coordinated extensive stakeholder consultation; and
- provided Secretariat support to the Taskforce.

Work Program Project Teams

Project teams under each of the three work streams comprised staff from Energy Policy WA and placements from Western Power and Synergy. The project teams worked closely with work program partners, in particular Western Power and the Australian Energy Market Operator (AEMO).

1.2 Purpose of this Paper

This Paper presents an overview of the work packages and stakeholder consultation process undertaken by the Foundation Regulatory Frameworks (FRF) work stream of ETIU.

FRF delivered a comprehensive work program to improve access to Western Power's network and implement improvements to the operation of the Wholesale Electricity Market (WEM). This

included substantial amendments to the WEM Rules and to the Electricity Networks Access Code 2004 (Access Code). These modifications were needed to meet the challenges and capture the opportunities presented by increasing levels of renewable generation in the SWIS.

Consultation with industry, Government and consumer stakeholders was critical to informing Taskforce decisions on elements of market and regulatory design. ETIU ensured that key stakeholder groups were effectively and appropriately engaged through formal consultative groups, working groups, project teams and one-on-one sessions, ensuring that the proposed changes were fit-for-purpose. The consequent decisions made by the Taskforce formed the basis for drafting the market rules and regulations to implement this element of the Strategy.

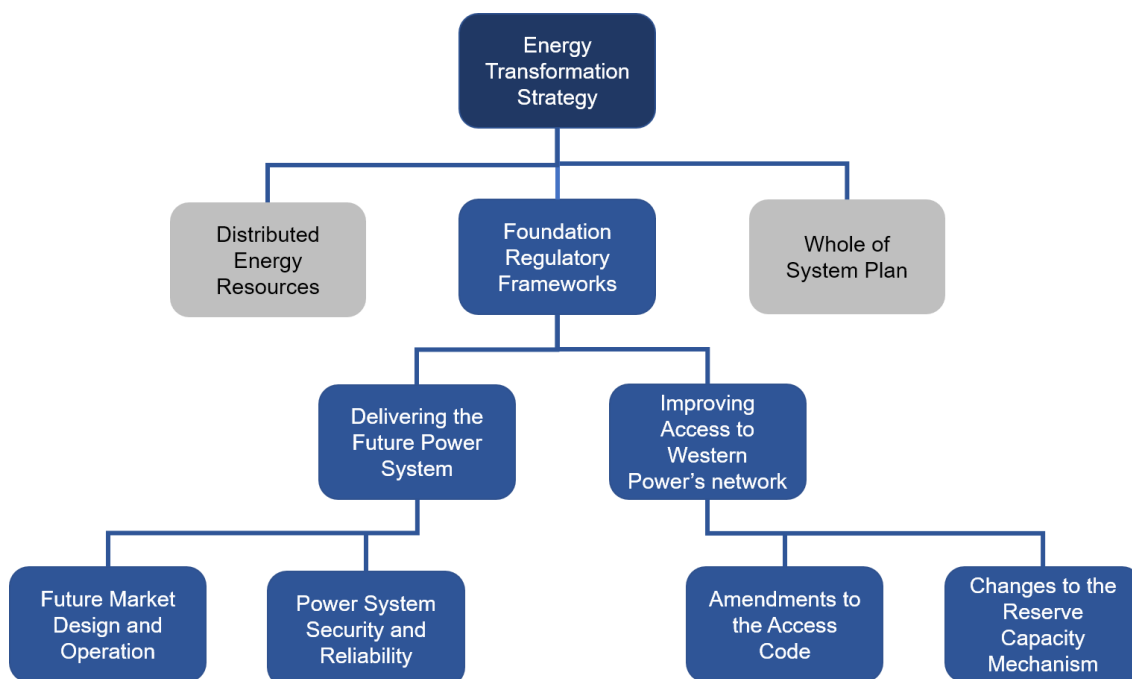
This Paper is intended to be used as a guide to the various stages and forms of consultation that were undertaken, and the Taskforce decisions and publications that were produced.

2. Foundation Regulatory Frameworks

Foundation Regulatory Frameworks (FRF) was responsible for delivering two work packages:

1. Delivering the Future Power System; and
2. Improving Access to the Western Power Network.

Figure 1: Foundation Regulatory Frameworks work streams



2.1 Delivering the Future Power System

Project Scope

The former Public Utilities Office (PUO) commenced work on many of the elements within the scope of FRF work stream as part of the former Government's Electricity Market Review (EMR). The EMR was launched to examine the structures of the electricity generation, wholesale and retail sectors within the SWIS. The key proposals under the EMR, including the proposed legislative changes to move to the national framework for network regulation, did not progress following a change in Government in March 2017.

Many elements of the EMR were able to be utilised by ETIU, with adjustments made to account for network regulation remaining with the Economic Regulation Authority.

The ETIU continued with implementing many of the proposed reforms to the WEM, focusing on the implementation of security-constrained economic dispatch and market arrangements, co-optimisation of energy and essential system services, and facility bidding for all Market Participants.

There were two separate, but interrelated projects under the Delivering the Future Power System work stream: Future Market Design and Operation, and Power System Security and Reliability.

2.1.2 Future Market Design and Operation

Significant modifications needed to be made to the design of the WEM to meet the challenges posed by increasing levels of renewable generation, and to capture the opportunities created by the rapid transformation of the energy sector. This involved the production of a number of large work packages which facilitated a sequential approach to design, consultation and implementation

for the delivery of the new WEM and associated market arrangements which are scheduled to take effect on 1 October 2022.

The Future Market Design and Operation project was focused on the design and implementation of a Security-Constrained Economic Dispatch market model to improve the operational efficiency and transparency of the Energy and Essential System Services (ESS) markets in the WEM, in the context of a constrained access framework for Western Power's network. This involved the following key market parameters:

- a security constrained market design;
- facility bidding for all market participants; and
- co-optimisation of energy and essential system services.

Links to Taskforce information papers addressing the relevant work packages can be found in Table 1 below.

Table 1: Future Market Design and Operation Taskforce Papers

Taskforce Information Paper	Date Released
Essential System Services Technical Framework	18 July 2019
Foundation Market Parameters	August 2019
Scheduling and Dispatch (Energy)	August 2019
Power System Constraints Equation Governance Framework	August 2019
Essential System Services Acquisition Framework – Frequency Control	August 2019
Frequency Control Technical Arrangements	August 2019
Foundation Settings for Market Settlement	September 2019
Scheduling and Dispatch (Essential System Services)	1 December 2019
Market Settlement – Implementation of five-minute settlement, uplift payments and ESS settlement	1 December 2019
Outage Planning and Management	7 February 2020
Registration and Participation Framework	28 February 2020
Supplementary ESS Procurement Mechanism	24 April 2020
Monitoring and Compliance Framework in the WEM	24 April 2020
Operational Planning and the PASA Framework	24 July 2020
Market Information	26 February 2021
Improvements to Market Power Mitigation Mechanism	31 March 2021
Power System Security and Reliability Standards Framework	April 2021
Non-Cooptimised Essential System Services Framework	May 2021

2.1.3 Power System Security and Reliability

The Power System Security and Reliability (PSSR) project made improvements to the PSSR regulatory framework to support the secure and reliable operation of the SWIS, acknowledging the changing generation mix and system load profile, as well as the move to a constrained network access model. It did this through:

- the re-design of the regulatory framework;

- amendments to system security standards;
- improved monitoring and compliance mechanisms; and
- improved governance arrangements to ensure standards can continue to evolve with the pace of technology evolution.

Links to the Taskforce Information papers addressing the relevant work packages can be found in Table 2 below.

Table 2: Power System Security and Reliability Taskforce Papers

Taskforce Information Paper	Date Released
Improving the Technical Rules Change Management Process	July 2019
Power System Security and Reliability Framework	July 2019
Frequency Operating Standards	November 2019
Operating States and Credible Contingency Events	28 February 2020
Generator Performance Standards	27 March 2020
Generator Performance Standards – Regulatory Framework, Monitoring and Rectification	24 April 2020
Generator Performance Standards – Compliance and Monitoring Transitional Arrangements	19 June 2020

Work beyond the scope of the work stream

The following work was beyond the scope of the Delivering the Future Power System work stream.

- The design and implementation of new market and dispatch systems to make the new market arrangements operational is being undertaken by AEMO and extends beyond the life of the Taskforce. Energy Policy WA will continue to work closely with AEMO throughout the project to ensure matters relating to the practicality of implementation are adequately considered in further amendments to the WEM Rules.
- While a critical input to the Delivering the Future Power System work stream, the development of system constraint information was developed collaboratively by AEMO and Western Power.
- Changes to primary legislation, including the *Electricity Industry Act 2004*, were not within the scope of the Taskforce in implementing this work stream of the Energy Transformation Strategy.

2.2 Improving Access to Western Power’s Network

In 2018, the former PUO progressed reforms to improve access to Western Power’s electricity networks in the SWIS. The previous network access arrangements did not make the best use of available network capacity and restricted access for new generators to the Western Power network.

The Improving Access to the Western Power Network project aimed to improve generator access to the grid through the adoption of a constrained network access regime, which provides more equitable access for generators while optimising use of the grid. The intent was to remove barriers to investment and facilitate access to the WEM for new low cost and low emissions generation technologies. By facilitating more efficient use of available network capacity, the reforms will also provide a greater return on investment in new and existing network infrastructure that is ultimately paid for by electricity consumers in the SWIS.

The move to a constrained model of network access and market dispatch provides for more economically efficient and secure production and supply of electricity to consumers.

This project delivered outcomes that are consistent with, and promote, the objectives of the WEM and involved two main elements: amendments to the Access Code and changes to the Reserve Capacity Mechanism (RCM).

2.2.1 Amendments to the Access Code

Technological change and evolving consumer preferences are rapidly transforming the landscape in which electricity network businesses operate. Against this backdrop, the Access Code had remained relatively unchanged since its inception. Significant changes to the Access Code were therefore required to support the delivery of each of the Strategy's three work streams.

Access Code changes were delivered in two stages:

- **Stage one** involved a broad review of the Access Code, with a major package of changes published in the [Government Gazette](#) on 18 September 2020. These changes sought to:
 - increase opportunities for new technologies;
 - maximise network utilisation; and
 - address regulatory uncertainty and improve the Access Arrangement process.
- **Stage two** involved changes to the Access Code to:
 - facilitate the constrained network access regime with required amendments to the Electricity Transfer Access Contract (ETAC), the Applications and Queuing Policy (AQP), and the Contributions Policy to clarify their operation;
 - align requirements for generator performance standards with the WEM Rules;
 - bring forward previously deferred revenue for Western Power; and
 - other minor amendments identified subsequent to the previous tranche of changes.

Links to Taskforce information papers and other relevant material can be found in Table 3 below.

Table 3: Amendments to the Access Code - Taskforce Publications

Taskforce Information Paper	Date Released
Energy Transformation Strategy – Access Code Changes Consultation Paper	May 2020
Mark-up version – Proposed Amendments to the Electricity Network Access Code 2004	May 2020
Energy Transformation Strategy – Access Code Changes Stakeholder Submissions Paper	2 September 2020
Consultation Paper - Proposed Amendments to the Electricity Network Access Code	April 2021
Mark-up version – Proposed Amendments to the Electricity Network Access Code 2004 (Att A)	April 2021
ETAC Amendments – Proposed Amendments to the Electricity Network Access Code (Att B)	Draft Electricity Transfer Access Contract provided in April 2021
AQP amendments – Proposed Amendments to the Electricity Networks Access Code (Att C)	Draft Applications and Queuing Policy provided in April 2021
Contributions Policy amendments – Proposed Amendments to the Electricity Network Access Code (Att D)	Draft Contribution Policy provided in April 2021

2.2.2 Changes to the Reserve Capacity Mechanism

This project progressed amendments to the WEM Rules related to important reforms to the RCM to ensure that it continues to achieve its intended purpose to incentivise investment in sufficient reserve capacity in the SWIS.

This included a number of changes to deliver outcomes that are consistent with, and promote, the objectives of the WEM, including:

- the introduction of a new framework, a Network Access Quantity (NAQ) Framework, for assigning Capacity Credits to ensure the RCM continues to incentivise the investment needed to provide for a reliable power system;
- a new framework for integrating storage resources, including new arrangements for the registration and participation of storage facilities that enable their certification to provide capacity and accreditation to compete in essential system services markets; and
- other consequential changes to accommodate the new NAQ framework and storage participation under the RCM.

There is no longer a need to augment the network every time a new facility seeks to connect, and all facilities are dispatched according to a least cost merit order, subject to network constraints to maintain system security.

Links to Taskforce information papers relating to these work packages can be found in Table 4 below.

Table 4: Changes to the Reserve Capacity Mechanism Taskforce Papers

Taskforce Information Paper	Date Released
Information Paper - Network Access Quantity Framework Transitional Arrangements	1 October 2019
Information Paper - Allocation of Capacity Credits in a constrained network - Design Proposal	16 October 2019
Information Paper - Assigning Capacity Credits in a Constrained Network	20 February 2020
Storage Participation in the Reserve Capacity Mechanism	26 June 2020

3. Stakeholder Engagement

Stakeholder engagement was essential to ensuring that implementation of the Strategy delivered the intended benefits to the energy sector, consumers, and the wider Western Australian economy.

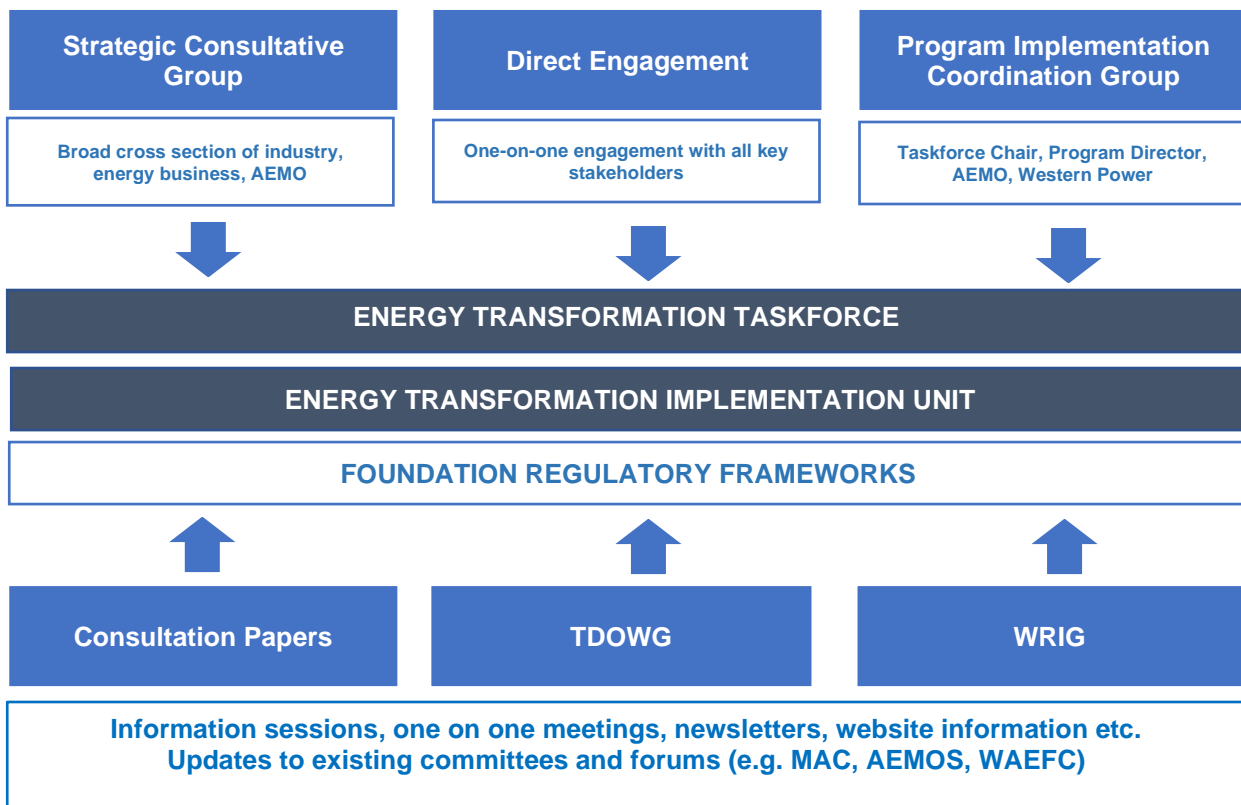
The Taskforce and the ETIU adopted a multi-levelled approach to stakeholder consultation. This ensured stakeholders were able to provide input at all FRF project stages, through multiple avenues. The approach taken to stakeholder consultation also recognised the tight timeframes within which the Strategy is being delivered.

Key channels of engagement with stakeholders included:

- senior-level working and consultation groups including the Program Implementation Coordination Group (PICG) and the Strategic Consultative Group (Consultative Group);
- work stream level working groups including the Transformation Design and Operation Working Group and the WEM Reform Implementation Group;
- presentations to stakeholder groups established by other organisations;
- regular public and targeted workshops and briefing sessions;
- one-on-one meetings;
- written public consultation processes;
- the publication of Taskforce Information Papers and other important information in a dedicated place on the Energy Policy WA website;
- email communications; and
- the Taskforce’s monthly newsletter.

Each of the senior-level and work stream level working groups are discussed in detail below.

Figure 2: Summary of stakeholder engagement channels



3.1 Senior-Level Consultation Groups

Two formal, senior-level groups assisted in the delivery of the Strategy.

3.1.1 Program Implementation Coordination Group

A key focus of the FRF work stream was to implement changes to existing network, system operation, and WEM arrangements in the SWIS. It was therefore essential for the Taskforce to work collaboratively with Western Power and AEMO in designing changes that were fit-for-purpose.

The PICG was established to facilitate the collaborative, coordinated and timely implementation of the Strategy's work program. The group focused on work program coordination at a strategic level, including ensuring each organisation has sufficient resources directed to the delivery of the Strategy. Over the course of the Taskforce the PICG met every month, or more frequently where needed.

Membership of the PICG included:

- the independent Chair of the Taskforce;
- the Coordinator of Energy;
- a senior representative of Western Power;
- a senior representative of AEMO; and
- occasional representation from Synergy.

3.1.2 Strategic Consultative Group

The Consultative Group was established by the former PUO in August 2018 to provide feedback and guidance at a strategic, whole of program level on its WEM reform work program. With the establishment of the Taskforce in May 2019, the WEM Reform Program became part of the Taskforce's FRF work stream.

Recognising the vital role of energy sector stakeholders in the delivery of the Strategy, the Taskforce chose to retain the Consultative Group and expand its scope and membership to support the Taskforce in the delivery of the Strategy.

Throughout the duration of the Taskforce, the Consultative Group engaged directly with the Taskforce Chair, and provided strategic advice and feedback on the initiatives led by the Taskforce, including:

- the timing of the initiatives, including consultation, design, and implementation;
- the scope of the initiatives; and
- risks associated with implementation of the initiatives.

The Consultative Group was purely a consultation body, with the Minister retaining authority for determining the scope and direction of policy matters pursued under the Strategy, on the advice of the Taskforce.

Consultative Group members were expected to provide advice consistent with the Government's overarching objectives for the sector, as outlined in the Strategy, and represent different perspectives of individual members and their organisation, a class of market participant (such as large customer, generator, etc.) or the electricity industry as a whole.

Industry representatives are outlined in Table 5 below:

Table 5: Consultative Group Membership

Position	Organisation
Market and System Operator	Australian Energy Market Operator
Network and Integrated Service Providers	Horizon Power Western Power
Generators/Retailers	Alinta Energy Southern Cross Power Holdings Synergy
Large Customer representative	Simcoa Operations
Industry Peak Bodies	Australian Energy Council Clean Energy Council WA Independent Power Association

3.2 Work stream Level Working Groups

The ETIU established two working groups to seek technical input from relevant stakeholders on specific FRF work stream projects.

3.2.1 Transformation Design and Operation Working Group

The Transformation Design and Operation Working Group (TDOWG) was established by the ETIU in August 2019. The working group provided a forum for stakeholders to offer expert and detailed technical input into projects under the Strategy, with a particular focus on projects being delivered as part of the FRF work stream.

The TDOWG replaced the former:

- Market Design and Operation Working Group (MDOWG); and
- Power System Operation Working Group (PSOWG).

MDOWG and PSOWG were originally established under the Market Advisory Committee to support the PUO and the Rule Change Panel on the WEM and constrained access reforms. They were disbanded in July 2019.

While TDOWG was not a decision-making body, it was essential to developing sound policy recommendations and ensuring legal drafting was fit-for-purpose.

TDOWG meetings were initially held face-to-face, but during the COVID-19 pandemic meetings moved to interactive virtual forums via Microsoft Teams. This forum had the added benefit of allowing any interested person to attend, rather than the previous limits placed on the number of attendees due to available meeting space. Presentations were made by ETIU, AEMO, Western Power and expert consultants, with input requested verbally and in writing from TDOWG members. For more contentious or technically complex areas, there were multiple TDOWG meetings held on the same topic. Minutes and slides from TDOWG meetings were published on the Energy Policy WA website.

Informed by feedback and consultation through the TDOWG and other consultation processes, the Taskforce made decisions and recommendations to Government regarding implementation of the Strategy.

While the Taskforce concluded on 19 May 2021, design and implementation work related to WEM reforms will continue until the new WEM is fully operational. TDOWG will continue to be utilised as a forum for stakeholders to provide feedback and offer technical input.

TDOWG Meetings

As Chair, ETIU encouraged broad industry and stakeholder representation at TDOWG meetings. TDOWG meetings occurred regularly, with a total of 36 meetings held throughout the two year duration of the Taskforce.

A summary table of TDOWG meetings and topics to date with links to relevant minutes and presentation slides can be found in Table 6 below. Links to the minutes and slides for all future TDOWG Meetings can be found at the following link on the Energy Policy WA [website](#).

Table 6: TDOWG meetings and relevant material

TDOWG	Date	Topics Covered	Links
Meeting 1	12 August 2019	Capacity Credits in a Constrained Network, Essential System Services (Frequency Control, Regulation, Contingency Response, Procurement, Cost Recovery, Monitoring or review)	Slides Minutes
Meeting 2	9 September 2019	Settlement, Outage Management, SWIS Regulation Requirements, Capacity Credits in a Constrained Network	Slides Minutes
Meeting 3	22 October 2019	Allocation of Capacity Credits in a Constrained Network, Technical Rules Change Management	Slides Minutes
Meeting 4	19 November 2019	ESS Scheduling and Dispatch (including ESS accreditation, storage and DER participation)	Slides Minutes
Meeting 5	25 November 2019	Proposed Changes to the Access Code, Market Settlement, 5-minute Settlement, Uplift Payments	Slides Minutes
Meeting 6	17 December 2019	Capacity Credit Allocation in a Constrained Network Update, Outage Management Update	Slides Minutes
Meeting 7	21 January 2020	Reserve Capacity Mechanism Design Parameters	Slides Minutes
Meeting 8	12 February 2020	Registration and Participation Framework, Operating States and Credible Contingency Events	Slides Minutes
Meeting 9	10 March 2020	STEM, Monitoring and Compliance, Generator Performance Standards, Supplementary ESS Procurement, Commissioning Plan and Process	Slides Minutes
Meeting 10	6 April 2020	Generator Performance Standards, Commissioning plan and process, rule drafting plan	Slides Minutes
Meeting 11	29 April 2020	RoCoF safe limits, Storage Participation in the RCM, Development of Market Procedures	Slides Minutes
Meeting 12	30 April 2020	DER Roadmap Update, DER Roadmap WEM Rule Amendments	Slides Minutes
Meeting 13	9 June 2020	Operational planning and PASA, GPS compliance and monitoring, Network Access Quantities	Slides Minutes
Meeting 14	16 June 2020	WEM Rules Chapter 3A, Appendix 12 (GPS)	Slides Minutes
Meeting 15	June 2020	Network Access Quantities, Prioritisation Order for existing and new facilities	Slides Minutes
Meeting 16	29 July 2020	Frequency Operating Standards, Operating States, Contingency Events Framework, ESS Framework	Slides Minutes
Meeting 17	5 August 2020	Supplementary ESS Procurement Mechanism (SESSM)	Slides Minutes

Meeting 18	10 August 2020	Short Term Energy Market	Slides Minutes
Meeting 19	13 August 2020	Scheduling and Dispatch (part 1)	Slides Minutes
Meeting 20	19 August 2020	Scheduling and Dispatch (part 2)	Slides Minutes
Meeting 21	26 August 2020	Scheduling and Dispatch (part 3)	Slides Minutes
Meeting 22	28 August 2020	DER orchestration Roles and responsibilities, NAQ framework, Storage participation in RCM	Slides Minutes
Meeting 23	9 September 2020	Generator Performance Standards Transitional Rules	Slides Minutes
Meeting 24	22 October 2020	WEM Rules consultations, Tranche 1 & 2, Draft WEM Procedures, Monitoring and compliance framework, Operational Planning and PASA	Slides Minutes
Meeting 25	27 October 2020	SCADA, outage management, decommitment, commissioning tests	Slides Minutes
Meeting 26	30 October 2020	Market Settlement – Part 1 (settlement timelines, schedule, calculations)	Slides Minutes
Meeting 27	2 November 2020	ESS Settlement (RoCoF, SESSM refunds)	Slides Minutes
Meeting 28	4 November 2020	RCM Rules, storage and hybrid facilities, future of WOSP, changes to reserve capacity auction, settlement changes	Slides Minutes
Meeting 29	5 November 2020	RCM Implementation challenges and options, AEMO implementation activities, WEM Procedure changes	Slides Minutes
Meeting 30	6 November 2020	RCM Amending rules – Network Access Quantities	Slides Minutes
Meeting 31	18 November 2020	System Restart, Transitional arrangements for registration and participation	Slides Minutes
Meeting 32	7 December 2020	ETIU Summary of stakeholder feedback on Amending WEM Rules (registration, monitoring and compliance, operational planning and PASA, outage management and commissioning tests, market settlement, RCM)	Slides Minutes
Meeting 33	20 January 2021	WEM Rules update, forward schedule of amending rules, Market Information Framework	Slides Minutes
Meeting 34	23 March 2021	ESS Accreditation, PSSR Standards Framework, UFLS Scheme	Slides Minutes UFLS
Meeting 35	19 April 2021	Market Power Mitigation, Operating Protocol	Slides Minutes
Meeting 36	6 May 2021	Non-Cooptimised Essential System Services framework, Forced Outage refunds and availability declarations.	Slides Minutes

3.2.2 WEM Reform Implementation Group

The WEM Reform Implementation Group (WRIG) was established by the ETIU in March 2020. It was an expert stakeholder forum requiring participation and input from relevant industry participants on implementation of the FRF work stream of the Strategy.

The WRIG assisted the implementation of the new WEM by:

- developing a [Joint Industry Plan](#) for the transition to new market arrangements, including ongoing status assessment reporting;
- identifying and managing key program risks, assumptions, issues and dependencies; and

- resolving challenges to the implementation of the new WEM, including developing transition arrangements.

As the Chair of the WRIG, ETIU encouraged industry participation through WRIG forums. Additional sub-groups were formed to discuss specific technical matters, including development of IT systems and interfaces. Sub-group meetings were attended by technical and subject-matter experts representing industry stakeholders and chaired by AEMO, with key input from Western Power.

Given the nature of the discussions and objectives of the WRIG, members were expected to have a detailed understanding of both their organisations implementation program and how it fits in the overall program of activity required to implement the reforms.

The WRIG was responsible for maintaining up to date versions of:

- a [Milestone Log](#) (last updated 25 June 2021); and
- [the Joint Industry Plan](#).

A summary table of WRIG meetings and topics with links to relevant minutes and presentation slides can be found in Table 7 below. Links to the minutes and slides for all future TDOWG Meetings can be found at the following link on the Energy Policy WA [website](#).

Table 7: WRIG meetings and relevant material

WRIG	Date	Topics Covered	Links
Meeting 1	16 March 2020	AEMO Implementation – Delivery Team and solution design overview, Implementation Planning Workshop	Slides Minutes
Meeting 2	7 May 2020	Joint Industry Plan, Market and Power System Procedures	Slides Minutes
Meeting 3	9 July 2020	Joint Industry Plan – AEMO and EWP Updates, WEM Procedures	Slides Minutes
Meeting 4	27 August 2020	Joint Industry Plan – AEMO Implementation and Drafting and Plan Updates	Slides Minutes
Meeting 5	1 October 2020	Joint Industry Plan, WEM Procedures, Transitional ESS Accreditation , Limit Advice Requirements , Developing Limit Advice , Constraint Formulation	Slides Minutes
Meeting 6	29 October 2020	Joint Industry Plan, Communication and Control Requirements , Congestion Information Resources	Slides Minutes
Meeting 7	26 November 2020	WEM Procedure – Dispute Resolution Mechanism , Generator Monitoring Plans , Requirements for Existing Transmission Connected Generating Systems , Generator Model Submission and Maintenance , Synergy WEM Market Readiness	Slides Minutes
Meeting 8	17 December 2020	Limit Advice Requirements , Constraint Formulation Feedback , Credible Contingency Events , Data and IT Interface Requirements , Developing Limit Advice Feedback , Limit Advice Requirements Feedback	Slides Minutes
Meeting 1 (2021)	28 January 2021	Joint Industry Plan, WEM Procedures, response to stakeholder feedback on Generator Monitoring Plans	Slides Minutes
Meeting 2 (2021)	28 February 2021	Joint Industry Plan, Response to feedback on Contingency Events , Dispute Resolution Mechanism for Existing Transmission Connected Generating Systems	Slides Minutes

Meeting 3 (2021)	25 March 2021	Joint Industry Plan, WEM Procedures, SCADA and Control Requirements , ESROI WEM procedure , ESR Metering	Slides Minutes
Meeting 4 (2021)	29 April 2021	Joint Industry Plan, Communications and Control Systems	Slides Minutes
Meeting 5 (2021)	27 May 2021	Joint Industry Plan update, AEMO - Indicative Facility Class and RCM Facility Class WEMP , AEMO - Feedback Technical Specification for Registered Facilities , AEMO - Credible Contingency Events Update	Slides Minutes
Meeting 6 (2021)	24 June 2021	Joint Industry Plan Update, AEMO - MT and ST PASA Modelling Concepts and Scenarios , AEMO - Feedback Electric Storage Resource Obligation Intervals , settlement enhancements go0live update, market readiness update and survey process	Slides Minutes

4. Consultation Process

Over the life of the Taskforce, industry stakeholders were invited to engage and provide feedback on Amending WEM Rules packages and extracts, draft WEM Procedures, proposed changes to the Access Code and other relevant material. The content and timeframes of these consultation packages is detailed below.

4.1 Amending WEM Rules Packages

The Taskforce released 32 Information Papers outlining the policy decisions and design parameters of the new WEM, the Reserve Capacity Mechanism (RCM) and the Power System Security and Reliability (PSSR) framework. These key components of the FRF work stream were primarily implemented through the Tranche 1, 2 and 3 Amending WEM Rules packages. A number of other discrete and consequential Amending WEM Rules packages were also consulted on and gazetted.

Stakeholders were consulted throughout the drafting process and were given an opportunity to provide written feedback on each discrete package of Amending Rules. Following consultation and incorporation of industry feedback by ETIU, each package of Amending WEM Rules was endorsed by the Taskforce and provided to the Minister for Energy for approval and subsequent publication in the Government Gazette.

WEM Rules – Consolidated Companion Version

A Consolidated ‘Companion’ version of the WEM Rules has been developed that incorporates the Amending Rules that have been made by the Minister for Energy to give effect to the Strategy but have not yet commenced. The Consolidated Companion Version current as at 1 July 2021 and any future versions can be found at the following link on the Energy Policy WA website: [WEM Rules – Consolidated Companion Versions](#).

Table 8: Tranches of Amending WEM Rules

Amending WEM Rules Package	Design Features included	Date Gazetted
Tranche 0	Governance of constraints Technical Rules Change Management Process	11 June 2020 25 June 2020
Tranche 1	Generator Performance Standards Framework Frequency Operating Standards and Contingency Events Frameworks	24 November 2020
Tranche 2	Foundation Market Parameters (incl. STEM) Frequency Co-optimised ESS Energy and ESS Scheduling and Dispatch Market Settlement Supplementary ESS procurement mechanism Outage planning and PASA Monitoring and Compliance Transitional arrangements for registration	24 December 2020
Tranche 3	Reserve Capacity Mechanism (RCM) Prioritisation and Network Access Quantities Framework Participation of storage/hybrid facilities in the RCM	24 December 2020
Tranche 4A	Transitional Arrangements (e.g. ESS Accreditation)	27 May 2021

	Changes and Rules commencement to facilitate 2021 RCM cycle etc.	
Tranche 4B	UFLS & System Restart Remaining changes to facilitate 2021 and 2022 RCM cycles Changes and Rules commencement to facilitate 2022 RCM cycle	Current anticipated date - August 2021
Tranche 5	Non-Cooptimised ESS Framework Market Information Framework Reliability Standards Framework Participation and Registration framework Intermittent Loads	Current anticipated date – December 2021

The commencement schedule for the above Tranches of Amending WEM Rules can be found at the following link on the Energy Policy WA [website](#).

4.1.2 Tranche 0 Amending WEM Rules

Governance of Constraint Equations

On 5 December 2019, draft Amending Rules were released for the governance of Constraint Equations. The Amending Rules outlined the framework that will govern the development, use and regulation of constraint equations that are required for the new network access and security constrained economic dispatch arrangements planned to be implemented in the WEM from 1 October 2022. A drafting workshop was held with TDOWG on 11 December 2019 and stakeholders were invited to provide written submissions by 31 January 2020. The Rules were revised following stakeholder consultation and were gazetted on [11 June 2020](#).

Technical Rules Change Management

The Technical Rules Change Management project made amendments to the change management framework for the Technical Rules to permit any interested party to submit a change proposal for consideration by the Economic Regulation Authority (ERA). It also undertook modifications to improve the timeliness, efficiency and equity of the Technical Rules change process. Proposed Amending WEM Rules were released for consultation and were gazetted on [25 June 2020](#).

4.1.3 Tranche 1 Amending WEM Rules

An exposure draft entitled Proposed Amending WEM Rules – Tranche 1 was released on 24 July 2020 and set out the Foundation Market Parameters, new arrangements for the Short Term Energy Market (STEM), the ESS framework, the Supplementary ESS Procurement Mechanism, the framework for Generator Performance Standards (GPS), Frequency Operating Standards, Operating States and Contingency Events.

Industry feedback received through this consultation process was then incorporated into the formal Tranche 1 and Tranche 2 Amending Rules packages for an additional round of consultation and subsequent gazettal.

The revised “Tranche 1” Amending Rules comprised:

- a revised suite of Generator Performance Standards (Appendix 12) for the SWIS and related connection, monitoring and compliance framework (Chapter 3A);
- changes to allow for existing generators to develop a set of registered performance standards and monitoring plans (changes to Chapter 1);
- clarified Frequency Operating Standards for the SWIS (Chapter 3B), relocated from the Technical Rules to the WEM Rules and changes to the Technical Envelope;
- a new framework for classifying and managing Contingency Events; and

- administrative changes to the WEM Rules to improve their clarity (mostly through changes to naming conventions).

Stakeholders were invited to provide written feedback on the [Tranche 1 Rules](#) by 28 August 2020, with a second week-long consultation then closing on 19 October 2020. The Tranche 1 Amending Rules were gazetted on 24 November 2020 and are available on the Energy Policy WA [website](#).

4.1.4 Tranche 2 Amending WEM Rules

The majority of Amending Rules related to the new design of the WEM, the RCM and the PSSR framework were encompassed in Tranches 2 and 3. This was a major milestone in the implementation of the Energy Transformation Strategy and was a culmination of extensive policy design and consultation over 2019 and 2020.

The Tranche 2 Amending Rules contained amendments to address stakeholder feedback to the exposure draft Amending Rules (previously called Tranche 1) released on 24 July 2020 and draft rules to implement the following core operational components of the new WEM:

- revisions to the draft Amending Rules on Foundation Market Parameters, STEM, SESSM and Scheduling and Dispatch;
- a WEM Monitoring and Compliance framework;
- an Operational Planning and Projected Assessment of System Adequacy (PASA) framework;
- new outage management and commissioning test framework;
- new WEM settlement rules;
- a suite of minor administrative amendments to improve the clarity and readability of the WEM Rules:

Stakeholders were invited to provide written submissions on the [Tranche 2 draft Amending Rules](#) by 16 November 2020. The final Tranche 2 and Tranche 3 Amending Rules were gazetted on 24 December 2020 and are available on the Energy Policy WA [website](#).

The majority of the WEM Rules implementing the detailed design of the new WEM arrangements, including the security-constrained economic dispatch arrangement and new FCESS markets, are currently due to commence at Market Start on 1 October 2022.

4.1.5 Tranche 3 Amending WEM Rules

Tranche 3 of the draft Amending Rules provided for several key reforms to the RCM as well as changes to the WEM Rules to provide for future iterations of the Whole of System Plan (WOSP). The Tranche 3 Amending Rules included:

- the introduction of the NAQ Framework;
- the treatment of how storage resources (including hybrid facilities with storage) will be accredited;
- consequential changes to the RCM to support the implementation of the new security constrained market design;
- alignment of Reserve Capacity Settlement to a weekly settlement process; and
- a governance framework for the development of future WOSPs.

Stakeholders were to provide written submissions on the [Tranche 3 draft Amending Rules](#) by 23 November 2020. The final Tranche 2 and Tranche 3 Amending Rules incorporating stakeholder feedback were gazetted on 24 December 2020 and are available on the Energy Policy WA [website](#).

4.1.6 Tranches 4A and 4B Amending Rules

System Restart Services and Transitional Arrangements

Two additional exposure drafts of Amending Rules were presented to TDOWG on 19 November 2020 with stakeholders asked to provide comment by 23 November 2020. These extracts and relevant feedback were later incorporated as part of the Tranche 4A and 4B Amending Rules packages.

The [extract of System Restart Services draft Amending Rules](#) provided for clauses to clarify obligations for AEMO and Rule Participants in relation to the development of the System Restart Standard and enactment of the System Restart Plan and the procurement of System Restart Services, and clauses to clarify cost-recovery arrangements for entities in relation to these services.

The [extract of Transitional Arrangements Amending Rules](#) provided for specific Transitional Provisions for registration, the Rule Participant classes in the WEM and the Facility Technology Types and Facility Classes that will exist in the WEM.

Tranche 4A Amending Rules

ETIU introduced new sections and amendments to the WEM Rules to support the transition to the new ESS framework and made further amendments to several sections of the WEM Amending Rules gazetted on 24 December 2020 to facilitate the operation of the 2021 RCM.

The following sets of rules were separately consulted on through TDOWG and then included together as the Tranche 4A Amending WEM Rules for approval by the Minister:

- amendments to the RCM to clarify the operation of certain clauses, address omissions and/or correct typographical errors;
- specific Transitional Provisions for Registration of participants for the 2021 and 2022 Reserve Capacity Cycles;
- new Transitional provisions for the ESS Framework to enable rule participants to accredit their technical ability to ride-through certain safe limits to assist with maintaining power system security and to require all existing facilities accredited to provide ancillary services to re-accredit to provide ESS in the new co-optimised ESS markets
- head of power for the Operating Protocol between AEMO and Western Power, which describes how each entity operationalises certain shared responsibilities under the WEM Rules related to PSSR.

The Tranche 4A Amending WEM Rules were gazetted on 27 May 2021 and can be found on the Energy Policy WA website.

Tranche 4B Amending Rules

On 16 June 2021, Energy Policy WA released an exposure draft of the [Tranche 4B Amending Rules](#). This package contained draft rules related to:

- Under Frequency Load Shedding requirements;
- rule change management for WEM Technical Standards;
- Transitional rules for Automatic Generation Control dispatch;
- Generator Performance Standards;
- various matters related to the RCM;
- aligning the new availability declarations process with the RCM;
- aligning the electric storage constraints opt-in process for storage facilities with the RCM; and
- the treatment of voluntary reduction of capacity credits by demand side programs.

The consultation period ended on 30 June 2021 and public submissions can be found on the Energy Policy WA [website](#). Where feedback was incorporated, and the draft rules are awaiting gazettal and once gazetted will be available at this [link](#).

4.1.7 Tranche 5 Amending Rules

The Taskforce approved the high level design and released information papers on the following key components of the new WEM:

- the Market Information Framework;
- the Non-Cooptimised ESS Framework;
- the Reliability Standards Framework;
- the Participation and Registration Framework; and
- Intermittent Loads.

Energy Policy WA will progress with finalising the detailed design and drafting of the rules for the above areas to be included within the Tranche 5 Amending Rules package by the end of 2021.

The Taskforce additionally outlined its support for Energy Policy WA to continue to work towards a centralised framework for PSSR Standards as outlined in its paper published in April 2021.

4.1.8 Market Power Mitigation Framework Mechanisms

Implementation of the Strategy has led to fundamental changes to the design of the WEM, which required a holistic assessment of existing market power mitigation mechanisms. In undertaking this review ETIU identified the need for enhancements to these mechanisms to ensure they continue to be fit for purpose in the context of the new market.

The goal of market power mitigation is to recreate the maximally efficient outcome of a competitive market. ETIU released a consultation paper on the [Proposals for Changes to Market Power Mitigation Mechanisms](#) with an accompanying TDOWG session. Stakeholders were invited to provide written feedback by 28 April 2021.

Stakeholder submissions indicated a mixed level of support for different components of the high level design. All public submissions and additional consultation material are available to read on the Energy Policy WA [website](#).

On the final Taskforce meeting of 14 May 2021, the Taskforce approved some aspects of the design as proposed in the March 2021 Consultation Paper, while recommending that Energy Policy WA develop the remaining aspects of the detailed design of the market power mitigation regime in consultation with stakeholders through TDOWG. The high-level framework and implementation process is outlined in the [Taskforce information paper](#) as released on 21 May 2021.

Energy Policy WA will need to develop a detailed plan for implementation of the regime in consultation with the Economic Regulation Authority and AEMO in the latter half of 2021. This plan will include preparation of the draft Amending Rules, which were originally intended for inclusion within Tranche 5 but is now intended to be finalised as its own package at the beginning of 2022.

4.2 Proposed Changes to the Access Code

In February 2018, the former PUO began the [formal consultation process](#) on the proposed approach to implementing constrained access for Western Power's network. Changes to the legal framework governing connection and access to the Western Power network were later progressed by ETIU to support the delivery of the Strategy.

4.2.1 Stage 1 - Access Code Changes

Stage 1 of the Access Code amendments were implemented to increase opportunities for new technologies, to maximise the utilisation of Western Power's network, and to improve the network access arrangement process to provide regulatory certainty for Western Power and the Economic Regulation Authority. This included amending the change management process for Western Power's Technical Rules.

Stakeholders were invited to attend several virtual industry forums where the changes were presented by ETIU, with a final forum held on [20 May 2020](#). In May 2020, the Taskforce also released a consultation paper on the proposed Access Code changes, along with the proposed Amendments to the Access Code for final Stakeholder comment.

Stakeholders had access to a suite of supporting material that can be found on the Energy Policy WA [website](#) including the following:

- Energy Transformation Strategy – [Access Code Changes Consultation Paper](#);
- [Maximising Network Utilisation](#); and
- [Improving the access arrangement process](#).

The Taskforce received 10 public submissions, which were published on the Energy Policy WA website, and also released an [Access Code Stakeholder Submissions Summary Paper](#). The Electricity Networks Access Code Amendments (No. 2) 2020 were approved by the Minister and published in the *Government Gazette* on [18 September 2020](#).

4.2.2 Stage 2 – Access Code Changes

Stage 2 of the Access Code changes involved amendments to complete implementation of the constrained network access regime in the SWIS in addition to consequential changes including:

- bringing forward the recovery of Western Power's deferred revenue from its second Access Arrangement;
- changes to align the Access Code with the requirements for generator performance standards under the WEM Rules; and
- amendments to the Electricity Transfer Access Contract (ETAC), the Applications and Queuing Policy (AQP), and the Contributions Policy to clarify their operation in the context of a constrained network access regime.

The Taskforce released a [Consultation Paper](#) on the Proposed Amendments and provided stakeholders with updated drafts of the ETAC, AQP and Contributions Policy. A virtual industry forum was held on [13 May 2021](#) and stakeholders were invited to provide written or verbal feedback on the [Stage 2 amendments](#) by 28 May 2021.

Following incorporation of industry feedback, the Electricity Networks Access Code Amendments 2021 were approved by the Minister and published in the *Government Gazette* on 29 July 2021.

The updated AQP, ETAC, and Contributions Policy will apply as 'transitional' documents from 30 July 2021 (being the date that the Access Code amendments were gazetted) until the commencement of Western Power's fifth Access Arrangement when the ERA approved versions of these documents will apply.

The [Unofficial Consolidated Version](#) of the Access Code is maintained by Energy Policy WA and the most recent version can be found on the Energy Policy WA [website](#).

4.3 Proposed Changes to the Metering Code

The majority of the changes to market settlement were implemented through amendments to the WEM Rules, however amendments to the *Electricity Industry (Metering) Code 2012* (Metering Code) were required to implement changes to settlement under the new WEM including:

- a weekly settlement timeline, commencing on 1 October 2022; and
- five-minute settlement intervals, commencing on 1 October 2025.

The reduction in dispatch interval from 30 minutes to 5 minutes will provide dispatch information closer to real time, enabling Market Participants to adjust dispatch positions more swiftly to reflect physical facility limitations.

ETIU held a virtual industry forum about the proposed changes, and invited stakeholders to provide written submissions on the proposed amendments to the Metering Code by 1 February 2021, informed by the following:

- [Consultation Paper - Proposed changes to the Metering Code;](#)
- [Proposed Amendments to the Metering Code; and](#)
- [Metering Code Industry Forum - Slides.](#)

The changes to the Metering Code were published in the Government Gazette in August 2021 and the consolidated version can be found on the Energy Policy WA [website](#).

4.4 Draft WEM Procedures – Consultation Packages

A large number of WEM Procedures to support changes to the WEM Rules were presented to WRIG and consulted on by AEMO, Western Power and the Coordinator of Energy over the duration of the Taskforce. WEM Procedures will continue to be drafted, updated and revised through WRIG and a complete list can be found on the [Consultations and Reviews](#) page on the Energy Policy WA Website.



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