

# RoPE – Project Status

APCWG status update

# Settlements Work Program

## POMAX and RoPE

- The Reduction of Prudential Exposure (RoPE) project is part of AEMO's Settlements work program which was discussed in detail in AEMO's Allowable Revenue 5 submission.

### RoPE Phase 1 – RC\_2017\_06

Implementation of **rule change** RC\_2017\_06 which amends the Individual Reserve Capacity Requirement (IRCR) calculation, Capacity Credit Allocation and associated settlement & prudential processes.



### RoPE Phase 2 – Outstanding Amount Improvements

Implement **market procedure changes** that:

- Delivers more accurate OA based on daily estimated settlements.
- Provides foundation for settlement system replacement.

### Settlement System Enhancements

Extend settlement calculation engine delivered under RoPE Phase 2 to decommission the POMAX Settlement application which is end of life and transition to an in house support model.

### POMAX Metering Upgrade

As part of software asset lifecycle management upgrade product to ensure the currency of software.

### WEM Reform

Improved settlement and prudential outcomes that will be delivered by ETIU and AEMO through the WEM Reform program.

July 2018 – May 2019

June 2019 – August 2020

2020 – 2021

2021 – 2022

# Costs & Benefits

## BENEFITS

The current OA prescribed in the Market Procedure is compliant with the WEM Rules however implementation of a dynamic OA deliver a fit for purpose and effectiveness prudential framework.

The current OA calculation is based on settlement outcomes that are up to 70 days old and ignores real-time changes to trading behaviour, increasing the risk of significant default levies. New calculation will reduce the risk of significant default levies

Current OA may overestimate or underestimate actual exposure by up to \$25M. Overestimation ties up Market Participants' security unnecessarily. Underestimation increases risk of default levies.

More accurate OA will **ensure financial efficiency of the prudential framework by requiring prudential security only when needed.**

The dynamic OA will estimate settlement outcomes based on operational data. This will **provide market participants with more accurate forecast settlement estimates in real time.**

These changes will deliver a new system that will undertake significant foundation work to **aid the transition to an AEMO internal settlement system in a future project, decreasing reliance on external vendors.**

A more accurate OA will **provide a robust basis to amend Credit Limit in future once performance of OA calculation is well understood.**

## COSTS

AEMO undertook a competitive tender.

- Two of three submissions were evaluated as conforming to requirements.
- AEMO considered the lowest cost conforming vendor best met the requirements.

AEMO has budgeted the following costs in accordance with internal cost estimation frameworks:

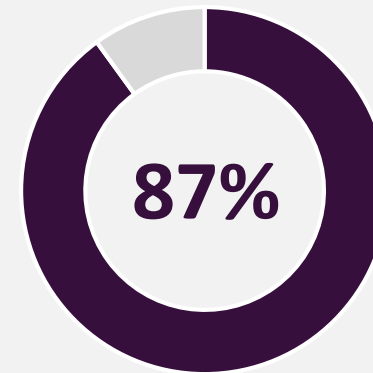
- External Vendor: \$1.7M
- Internal Labour: \$0.9M
- Hardware: \$0.3M
- Contingency: \$0.3M

Current estimates at completion are within approved Allowable Revenue 5 funds.

# Project Status

- RoPE phase 2 is developing a new Prudential system to determine a dynamic estimate of a Market Participants' Outstanding Amount.
- The new Prudential system will integrate all of the settlement calculations of the WEM Rules in a new framework.
- New Prudential system will become the basis for Market Participants and AEMO to determine the Outstanding Amount from the effective date of the Market Procedure: Prudential Requirements.

## Progress



### Execution Stage

#### ROPE

- Development of all STEM and NSTEM Settlement Calculations complete.
- Integration testing of estimation methodology progressing
- Independent certification of calculations progressing.
- Development of API and user interface progressing

## Count Down

### Parallel Testing

**2 July 2020  
onwards**

### Go-Live

**1 August 2020**

### System:

Market Trial: 18 June 2020  
Production (Parallel Testing): 2 July 2020  
Production (Go Live): 1 Aug 2020

### Market Procedure:

APCWG: 21 May 2020  
Consultation closes: 15 July 2020  
Procedure effective: 1 Aug 2020

*All dates above may change*

# Key Dates and Upcoming Activities

✓ RC\_2017\_06 Approved: 27 June 2018

🔗 RoPE Phase 1 Commences: June 2018

\$ Allowable Revenue 5 Approved: June 2019

🔗 RoPE Phase 1 Completes (Rules, Procedure and System Effective): 1 June 2019

🔗 RoPE Phase 2 Commences: June 2019

📄 **Procedure:** Procedure Change Working Group: 21 May 2020

🤝 **RoPE Working Group:** Showcase 12 June 2020

🔗 **System:** Market Trial Deployment: 18 June 2020

🔗 **System:** Production Deployment: 2 July 2020

🔗 **System:** Participant Parallel Test: 3 July 2020 – 1 August 2020

📄 **Procedure:** APCWG consultation closes: 15 July 2020

📄 **Procedure:** Procedure Effective Date: 1 August 2020 (TBC)

🔗 **System:** Application Go-Live Date: 1 August 2020 (TBC)

## System

- New Prudential Services will be integrated into WEMS MPI as new menu item in Settlements.
- 2 week Market Trial period will be provided.
- 4 week participant parallel run will be provided. During the parallel run,
  - Both the existing and new prudential reporting screens will be available in production.
  - This will allow Market Participants to see the new Outstanding Amount calculation working with actual market data prior to Procedure becoming effective.
  - Existing Prudential calculations will be used for prudential management under the rules until Procedure effective date.

## Procedure

- Consultation will occur in parallel with participant parallel run
- Market Procedure will become effective on Go-Live Date after consultation.
- Current prudential reporting application will be removed.

## RoPE Working Group

- Showcase the UI, API and provide briefing on Go-Live plan

# Project Engagement

- RoPE has been engaging with Market Participants as part of the WEM Rule Change Working Group.
- Previous RoPE engagements presented concepts, showcase development, and requested feedback on direction for the final software.
- RoPE encourages all participants to review presentations, attend Working Groups and provide feedback to the project.

Next WEM Rule Change Working Group to be scheduled:  
12 June 2020\*

## WEM Rule Change Working Group

PUBLISHED: 12/05/2020

MARKET  
WA Meetings

The purpose of the WEM Rule Change Working Group is for the operational or technology users to understand and learn about how changes to the WEM Rules will be implemented by AEMO in its changes to the WEM applications (i.e. WEMS, RCM, Settlements, Prudentials).

The working group will provide participants with:

- an overview of the projects including IT system design, release schedule, and interaction with stakeholders;
- detailed showcases of functionality changes;
- a chance to discuss Market Participant testing; and
- the opportunity to provide AEMO feedback on the design and useability of the systems.

### For Further Information:

Please direct any queries regarding WEM Rule Change Working Group to [WAelectricityforum@aemo.com.au](mailto:WAelectricityforum@aemo.com.au).

## Records of WEM Rule Change Meetings

12/05/2020 WEM Metering Settlement and Prudential Calculation Formulation - May 2020

1.05 MB



<https://www.aemo.com.au/consultations/industry-forums-and-working-groups/list-of-industry-forums-and-working-groups/wem-rule-change-working-group>

# Calculation Formulation

AEMO has developed a calculation formulation document detailing all of the settlement rules and how these rules are amended for use in the Outstanding Amount calculation. This document will be certified by AEMO's independent auditor and is the basis for the new Prudential Services.

This document creates a mathematically accurate representation of the WEM Rules, including:

- Representation of Sets for use within the document
- Mathematical equation representation of estimation methodology for Prudentials as outlined in the Market Procedure: Prudential Requirements
- Mathematical equation representation of the WEM Rules
- Specification for Variables used by the Prudential system
- Trading Margin calculation for Participants on a given day
- Monthly (NSTEM) and Weekly (STEM) Settlement

Note: Draft document is available for download from the Stakeholder Consultation section of the AEMO website

# Market Procedure Amendments

## Market Procedure:

### Capacity Credit Allocations

- Amendments require AEMO to use the latest Capacity Credit Allocation information to update the Outstanding Amount calculation
- Minor updates are also proposed to reflect amendments to the WEM Rules made by the Minister for Energy in February 2020 in relation to Reserve Capacity Price arrangements

## Market Procedure:

### Prudential Requirements

- Amendments to the Outstanding Amount calculation, so that the estimated exposure for a Market Participant is calculated using known settlement data available at the time of the calculation
- Amendments to specify the methodology for undertaking estimates in circumstances where AEMO is required to estimate input data that was unavailable at the time of the calculation