

15 April 2019

Economic Regulation Authority
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Perth BC WA 6849

By email to publicsubmissions@erawa.com.au

Submission to the Economic Regulation Authority on the Australian Energy Market Operator's fifth allowable revenue and forecast capital expenditure proposal

Overview

Perth Energy submits this paper in response to the Economic Regulation Authority's (ERA) issues paper on the Australian Energy Market Operator's (AEMO) 2019-22 allowable revenue and forecast capital expenditure proposal (AR5 proposal).

AEMO is proposing to undertake significantly higher levels of capital expenditure than in previous allowable revenue periods. This has a material impact on current and future market fees, with AEMO proposing an 8.7% increase in AR5 fees and providing analysis suggesting a 14% increase in AR6 fees. This results in WEM fees reaching well above historical levels by the end of the AR6 period, at which point, depreciation is still to be earned.

AEMO proposes two key capital programs of work over the three-year, AR5 period:

1. \$51.25 million for the implementation of the State Government's Wholesale Electricity Market (WEM) reform initiatives
2. \$12.69 million for the implementation of AEMO's digital roadmap in Western Australia

We do not believe that, with the limited information provided in AEMO's submission, Perth Energy or the ERA could reasonably be expected to consider that the capital expenditure forecasts meet the requirements of clause 2.22A.11(b) of the WEM Rules, which states:

"the Allowable Revenue and Forecast Capital Expenditure must include only costs which would be incurred by a prudent service provider delivering those services... acting efficiently, seeking to achieve the lowest practicably sustainable cost of delivering those services...."



WEM reform initiatives

Perth Energy continues to support the progression of the WEM reform initiatives, specifically the update of legacy systems and processes that are now well past their intended lives such as AEMO's dispatch engine. However, we are also cognisant of the context in which AEMO's AR5 proposal has been developed.

As the entity responsible for the State Government's WEM reforms, Perth Energy considers that it is the Public Utilities Office (PUO) that is responsible for demonstrating the appropriateness of AEMO's WEM reform capital expenditure. In particular, the PUO has committed to undertake cost benefit analyses on each of the elements of the reform initiatives. This undertaking would seemingly produce the justification AEMO needs to satisfy the requirements of clause 2.22A.11(b) of the WEM Rules.

The reform process began in 2014, and while the problems being addressed and solutions being proposed have not changed materially, the reform continues to be delayed. We are yet to see any real evolution of the WEM since the former Electricity Market Review commenced in 2014. Perth Energy considers that, at the very least, many of AEMO's current systems need to be replaced with fit-for-purpose alternatives but questions the timing of AEMO's proposed expenditure given these continual deferrals of policy and regulatory change.

Perth Energy, during consultation with AEMO has advised that we support the immediate implementation of a new dispatch engine. However, the submission provided by AEMO to the ERA does not define the WEM reform program of works sufficiently for Perth Energy to identify the elements that relate to the implementation of NEMDE in the WEM.

Perth Energy recommends the ERA seek formal advice from the PUO and the Minister for Energy of this Government's commitment to the current reform program as well as the timing of the implementation of that program, prior to approving the forecast capital expenditure and allowable revenue proposed by AEMO.

Perth Energy considers that, once the judiciousness of the program of work has been demonstrated the ERA benchmark the forecast capital expenditure of the various elements of the WEM reform initiatives against projects that have been undertaken around the world. This will enable the market participants to be confident that the cost of the program is efficient, in the best interests of end-use customers, and therefore satisfies the requirements of clause 2.22A.11(b) of the WEM Rules.

Until the prudence and efficiency of the capital expenditure related to the implementation of the WEM reforms can be demonstrated by the PUO and/or AEMO, the proposed capital expenditure and allowable revenue requirement for the AR5 cannot be approved as it is inconsistent with the requirement of the WEM Rules.

Perth Energy supports an approach whereby as the PUO are able to develop cost-benefit cases, AEMO are able to demonstrate that the replacement of legacy systems reflect ongoing cost efficiencies for projects within this category of expenditure, then the ERA will be able to approve the "stage". Perth Energy do not support the other option for "staging" which is the approval of capital funding by year and can lead to perpetual projects that underdeliver on expected efficiencies; in our opinion this process must be approved by thematic project with clearly articulated cost and benefit targets.



Digital roadmap

Perth Energy understands that AEMO nationally has an IT development strategy that it seeks to implement, and recover the cost of in the most efficient manner. As previously mentioned, we are supportive of AEMO's introduction of fit-for-purpose IT systems in WA. This includes IT systems, platforms, security measures and data management.

While we agree that there are market and system operations systems and processes that need replacing, the systems being proposed to be upgraded as part of the digital roadmap appear to be largely national electricity market (NEM) and corporate systems, with the outcomes of the program for WA yet to be described in detail. Perth Energy therefore questions the driver for these upgrades, and therefore the benefits that will be able to be attributed to WA.

Our question is whether, in isolation from the evolution of the national market, AEMO would choose to undertake the proposed digital roadmap in the context of the significant expenditure and resources allocated to the WEM reform initiatives also proposed over the same time period. These two initiatives, while seemingly complementary, will together place significant cost pressure on WA Market Participants and ultimately end-use customers, with the benefits of the digital roadmap being unclear for WA.

Moreover, Perth Energy is concerned that AEMO is proposing to implement a number of projects, within the digital roadmap which do not yet have a policy framework underpinning them. For example, the NEM systems may have increased capability to allow for Distributed Energy Resources, whereas WA may not see these solutions become available under the regulatory framework for a number of years. Perth Energy considers expenditure of this scale, albeit just a share of the national expenditure program, for drivers outside of WA to be imprudent in a DER policy vacuum. In the absence of any DER framework, specifically any clear resolution on the structure and regulation surrounding a Distribution System Operator (DSO), it is likely that end-users will be asked to pay for the same "IT Roadmap" twice – once by AEMO and then again by Western Power.

Perth Energy does not consider that AEMO's proposal provides sufficient detail about the weaknesses of the WA market and broader system operations arrangements that the proposed project seeks to address, in order for the proposed expenditure to be considered prudent in accordance with clause 2.22A.11(b) of the WEM Rules.

Perth Energy is also of the opinion that the PUO are best placed to justify this spending once a policy position has been reached with regard to market structure.

Until the prudence and efficiency of the capital expenditure related to the implementation of AEMO's digital roadmap can be demonstrated and that the roadmap is complementary to the broader WEM reform initiatives, the proposed capital expenditure and allowable revenue requirement for the AR5 should not be approved.

Summary

Perth Energy consider that the more narrowly defined "business as usual" expenditure can be considered prudent and efficient. That is, the expenditure required for the ongoing maintenance of system and market operations, the evolution of the market through the implementation of system and



process changes as a result of approved Rules Change Proposals, and replacement of antiquated, no longer fit-for-purpose systems and processes with appropriate alternatives.

We do not consider AEMO has provided sufficient evidence to allow the ERA to approve the capital expenditure or associated allowable revenue for the WEM reform initiatives or digital roadmap at this point in time. However, we look forward to the PUO and/or AEMO providing additional information in support of these two key projects ahead of the next round of consultation on AEMO's AR5 proposal.

Our response to the ERA's specific questions is provided at Attachment A.

Should you have any questions in relation to this submission prior to our attendance, please contact me on [REDACTED] or at [REDACTED].

Regards,

[REDACTED]
Elizabeth Aitken

General Manager Operations



Attachment A: Response to the ERA's specific questions

Perth Energy welcomes the opportunity to provide comment in relation to AEMO's AR5 proposal more broadly, and in response to the ERA's two specific questions:

1. Given that much of the market design and detail of the systems needed to operate a new market design are yet to be determined, would interested parties prefer the ERA to approve funding:
 - a. for the full three years of the AR5 period
 - b. through a staged approach, such as happened in AR4, where AEMO proposes additional funding as clarity and certainty develops through the market reform program?

Please give the reasons for your preference.

2. Which, if any, aspects of AEMO's submission are of most concern to stakeholders and why?

Our comments on each are provided in the following sections.

1. Perth Energy's preferred approach to funding approval

Whilst we have a reasonable degree of faith in AEMO's delivery of projects in an efficient manner, we are concerned that the prudence of the two key projects is questionable.

The WEM reform initiatives are being driven by the PUO, and the digital roadmap is being driven by technical requirements in the NEM. AEMO is yet to demonstrate that the programs in their entirety can be considered prudent (in particular the timing) or that the costs included in the forecasts is reasonable and could be considered to reflect that of a service provider efficiently minimising costs for consumers.

Moreover, the WEM Rules do not provide a framework under which AEMO's past capital expenditure can be assessed against the WEM Rules requirements (e.g. under an ex-post review). Instead they are recovered from Market Participants whether or not the ERA would consider them after-the-fact to be prudent and efficient per the requirements of clause 2.22A.11(b).

We and our customers cannot withstand any level of over-recovery given that all of the elements of the electricity cost-stack are increasing.

It is on this basis that Perth Energy considers the ERA would be better to consider and approve as required the capital expenditure and allowable revenue under a staged approach. This must include alignment with the availability of cost benefit assessments of each block / phase /project of the WEM reform program.

2. Perth Energy's concerns with aspects of AEMO's proposal

WEM reform initiative

Perth Energy continues to support the progression of the WEM reform initiatives, specifically the update of legacy systems and processes that are now well past their intended lives such as AEMO's dispatch



engine. However, we are also cognisant of the context in which AEMO's AR5 proposal has been developed.

Perth Energy, during consultation with AEMO has advised that we will provide support for the immediate implementation of a new dispatch engine. As we outlined in our 2016 Rule Change proposal, the reduction of gate closure to a maximum of 30 minutes will result in significant balancing price reductions for consumers. AEMO have advised that this rule change cannot be implemented without changing the dispatch engine, which is at the end of its useful life.

The submission provided by AEMO to the ERA does not define the WEM reform program of works sufficiently for Perth Energy to identify the elements that relate to the implementation of a new dispatch engine in the WEM.

If there were more clarity in the AEMO submission regarding the timeline for specific systems that are to be implemented, then it would be easier for Perth Energy to support this expenditure, at least in part.

Digital roadmap

There is no clear evidence in the AEMO proposal to justify the imposition of this cost on consumers. Based on the information provided in the AEMO submission, the driver of this expenditure appears to be issues with the NEM rules and regulatory framework, not the WEM.

The information that is provided makes a direct reference to a DSO function. The creation and operating requirements of a DSO in the WEM is a policy decision, not a decision for AEMO. Moreover this decision has structural and regulatory framework implications that are tied directly to network operations in the WEM and the interface between AEMO and Western Power (or not, based on the policy decision yet to be made).

Perth Energy cannot support this expenditure until

- a) There is a clear policy directive from the PUO and the Minister for Energy;
- b) There is no likelihood of a further commitment of funds to Western Power to undertake the same investigative work; and
- c) The PUO has completed both the DER roadmap and a cost benefit analysis for the work required to implement the roadmap.

Employee Benefits Expense

Table 7 on page 32 shows employee benefits expense increasing from \$38,229k in AR4 actual to \$48,738k in AEMO's AR5 submission. This is a 21.6% increase in employee benefits expenses.

The submission outlines an annual salary increase of 2.9% as per the AEMO Enterprise Agreement 2018, which equates to approx. \$4.2m, but provides no information on the additional \$6.2m of expenditure. If this cost represents the backfilling of positions due to the WEM reform requirements, then it should not be included as operating expenditure.

Settlements work program – POMAX and RoPE



Section 4.2.1 of the AEMO Allowable Revenue submission mentions a POMAX Settlement replacement which costs approx. \$1.6m as per Table 19. No information has been provided as to whether the opportunity to leverage off current AEMO east coast systems has been investigated, nor whether a cost benefit analysis has been undertaken for the proposed solution.

POMAX EDM application and database upgrade

This is supported by Brady, and is directly affected by the governments' decisions regarding full or more retail contestability. It is Perth Energy's position that until the policy vacuum regarding contestability is resolved that this expenditure not be approved.

Demand and renewable energy forecasting

Section 4.2.6 of the AEMO Allowable Revenue submission request \$90k funding for solar forecasting. Specifically in the submission they mention *"This will improve the accuracy of day-ahead and on-the-day forecasting, which will enable real time operations controllers to make better informed dispatch decisions, including identifying and dispatching appropriate ancillary services."*

Considering that Market Participants are funding the upgrade, a requirement for this funding must be that the information be made available to Market Participants similar to that of the load forecast or non-schedule generation data.

General rule change proposals

Perth Energy is concerned that AEMO may not be able to progress other rule change proposal if it doesn't have sufficient funding. There are some rule changes that will be required during the AR5 period that fall outside the WEM reform program. The submission does not appear to have adequate budget to enable AEMO to implement non WEM reform rule changes proposals.

Project contingencies

Every project has a different, large, positive contingency built into it. Given that there are never customer refunds from spends because there is no ex-post framework in the rules to assess the prudence and efficiency of the spend, this seems excessive AEMO's lack of historical cost forecast vs actual information provided in the submission means that these large contingency amounts cannot be assessed for reasonableness by anyone other than the ERA. It would be appropriate at this juncture for the ERA to undertake an assessment of AEMO's historical forecasting error and assess the contingency amounts in light of this.

Overall expenditure amount

As would be required by good regulatory practice, Perth Energy expect the ERA to undertake a top-down challenge in relation to forecast capex and opex. It appears from the submission that AEMO has developed each of its forecasts in isolation by optimising the delivery of each project or program individually. The ERA must consider issues such as optimal resourcing and any capex/opex trade-off that has been "baked in" to the submission as a result of this process.



Perth Energy expects the ERA would apply the same level of scrutiny to AEMO as it would any other network business, and ensure that any efficiency dividend should be applied as it would to Western Power..

Perth Energy highlights that a bottom-up build will always lead to higher than required forecasts and an over-recovery from consumers. We (as with end-use customers) cannot withstand any level of over-recovery given each of the elements of our cost-stack are increasing.

Depreciation

We note that the full extent of the impact of the two programs of work do not appear to have been articulated, as any years beyond 2025 have not been accounted for. While AEMO has not documented its depreciation assumptions, Perth Energy assumes that the “standard” application of three to five years has been adopted by AEMO. This has a significant impact on cost recovery, and therefore on the amount that consumers must pay.

Impact on market fees

The ERA must benchmark this significant impact on market fees with other jurisdictions, and outline whether the SWIS consumer is receiving value for money from these increases.

Where the work “needs” to be undertaken but the projects are unable to demonstrate value for money, the cost should be paid for through an alternative method, such as a Government subsidy.