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Ms Sara O'Connor
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Submission by email: publicsubmissions@erawa.com.au

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Dear Ms O'Connor

RESPONSE TO ISSUES PAPER – 'AUSTRALIAN ENERGY MARKET OPERATOR – ALLOWABLE REVENUE AND FORECAST CAPITAL EXPENDITURE FOR 2016/17 TO 2018/19 – FORECAST CAPITAL EXPENDITURE ADJUSTMENT

NewGen Kwinana welcomes the opportunity to provide comments on the above issues paper (Paper). Additionally, NewGen Kwinana makes some high-level observations on the nature of the allocation of costs associated with 'market reform' and the increasing cost and complexity of the WEM.

Issues Paper

A general comment on the AEMO submission for additional funding is that the level of detail provided by AEMO is insufficient to be able to provide an opinion on the legitimacy of the request. Additionally, AEMO has not adequately described its Business as Usual (BAU) operations. It is difficult to determine how much of the requested additional funding would normally, in a similar commercial business, be undertaken as part of BAU.

Issue 1 – Resources for Market Reform

There is not enough information to make comment on the reasonableness of this request.

$4.28M appears to be a very significant amount. The AEMO submission suggests this is to be spread 50:50 across Market Operations and System Management. It does not further identify the resources required, the mix between internal and external resources[1], or the costs allocated to overheads (governance etc.). There is very little information to make comment on. It is also unclear whether this sum is likely to be increased, decreased or retained the following year (i.e. how long are these additional resources and/or costs to be retained and/or incurred)

$0.5M for additional floor space (assumed per year) is also a significant amount. AEMO has not indicated whether it has sought less costly alternatives or whether it has sought available temporary floor space from the PUO or other government agency (given this is a government driven reform agenda).

The reform agenda which AEMO is preparing for is ill-defined and by no means a *fait accompli*[2]. History suggests that expenditure on complex WEM reforms often end up wasted, as reforms do not progress. Given the uncertainty of the current reform process, NewGen Kwinana suggests the Authority applies a very conservative approach to approving additional funds to AEMO at this stage.

For that expenditure the Authority deems necessary, NewGen Kwinana requests that the Authority seek further information from AEMO demonstrating prudence with regard to: resourcing requirements; mix of staff

[1] AEMO suggests that it will increase its headcount by 38 employees for the whole additional expenditure request, but this is not categorised into individual expenditure functions.
[2] Constrained Access is still undergoing a consultation process to determine its value and support in the market. Other WEM reforms are closely related to constrained access and will be significantly impacted if it is determined that constrained access is not an appropriate reform at this time.

versus contractors or consultants; staff wages, benefits and performance indicators; negotiations with providers of external services. Generally, NewGen Kwinana expects AEMO to adopt the same principles it does to deliver an appropriate outcome at least cost.

Issue 2 – Capex for Rule Change Implementation

AEMO is seeking a total of $5.13M to implement RC_2017_06 over two stages ($3.5M in this request). This compares with AEMO's initial estimate of $400,000 to $500,000 made in the Rule Change Panel's (RCP) draft rule change report; and with a revised cost of $2.7M is the RCP's final rule change report. Notwithstanding the cost-benefit value of the rule change, this escalation in costs is significant and concerning.

Again, AEMO has not provided adequate detail around where and why these additional costs are to be incurred, other than:

AEMO must make software and code modifications to the WEMS and various sub-systems. For example, the WEMS will need to be able to calculate each market participant's daily prudential exposure.

NewGen Kwinana is unable to determine the reasonableness of this cost.

Additionally, AEMO has not indicated how much of this cost is to be incurred by external vendors as opposed to internal resources. It would be concerning if all the additional cost for a rule change is being tendered externally. It would be even more concerning if some of the costs are being met internally, but AEMO is charging market participants for these costs. AEMO employs a large staff to manage its IT systems and processes. What is unclear from the AEMO submission is the extent that this team is deployed on items such as managing system changes emanating from rule changes as part of BAU. NewGen Kwinana expects AEMO's BAU activities to cover a substantial component of the works required to manage the impacts of rule changes, given rule changes are a normal part of the market's function.

NewGen Kwinana requests that the Authority investigates how much of the costs of this rule change is being met under AEMO's BAU activities and makes some judgement on the appropriateness of those findings.

While the cost attributed to RC_2018_01 is immaterial compared to other costs in the AEMO submission, NewGen Kwinana's comments above apply.

Issue 3 – Energy Management System

NewGen Kwinana accepts the findings of the Authority's technical advisor from the 2017 AR4 allowable revenue process that implementing the e-terra platform is likely the most cost effective option going forward. The following comments are made on the current proposal.

- The additional $0.7M revenue request is another example of a concerning under-estimate of the cost of implementation, being 23% above the initial estimate. The Authority should monitor the implementation costs of this and other projects. Any systemic bias of cost increases in IT project implementations should be factored into future revenue determinations.
- There is no information on the cost of the AEMO service agreement with Western Power for the utilisation of the existing XA/21 platform. It is unclear how much of the cost of maintaining that platform, including the 2016 upgrade to it, has been borne by market participants and how much has been borne by Western Power. Market participants should understand if any cross-subsidisation to Western Power has occurred.
- Similarly, given the history of System Management utilising legacy Western Power owned systems, The Authority should clearly identify the ownership structure of the new systems being developed. AEMO's 2017 AR4 allowable revenue submission describes significant reliance on and leverage of

AEMO's east coast operations. Whilst that is beneficial to reduce costs, it must be ensured that WEMS operational systems are transferrable. That is, if the WEM were to replace AEMO with another market operator in the future, what access to these systems would exist?

Issue 4 – Transfer of Systems Management's IT Function from Western Power

NewGen Kwinana queries the legitimacy of this cost. System Management performs the important task of operating the market. When the market was introduced in 2006, System Management should have been adequately resourced to perform this function independently of other stakeholders. Maintaining System Management as a ring-fenced entity within Western Power saved costs at the time. But this does not mean that now the costs of extracting System Management from Western Power should be met by market participants. Market participants have been properly resourcing System Management for some time.

To date, the role of System Management has been performed by Western Power, as a ring-fenced entity. It is assumed that the market fees paid by market participants for the services provided by System Management have also been ring-fenced. That is, market participants have not been cross-subsidising Western Power. It is expected that after paying for System Management since market start that the IT systems, staff and other specialist IP is retained within System Management.

NewGen Kwinana suggests that the transfer cost of System Management to AEMO should be met by government. And NewGen Kwinana requests that the Authority investigate whether market participants could reasonably expect System Management to own its own systems after being funded by participants for 10 years.

Issue 5 – IMO Malaga data Centre Migration

The key distinction between Issue 4 and Issue 5 is that AEMO is able to acquire the existing IMO IT systems. That is, after market participants funding the IMO for 10 years, market participants enjoy the benefit of access to those systems. However, there is not enough information provided in the AEMO submission to comment on the reasonableness of the costs and timing of the proposed migration. AEMO advises that the Malaga infrastructure is at 'end of life'. But there is no further information about the state of the infrastructure or definition of end of life.

NewGen Kwinana requests the Authority and its technical consultants to gather further detail from AEMO and make a determination on the lowest cost outcome that continues to provide the market with an appropriate level of operational risk management.

Additionally, If the current systems are migrated to the AEMO cloud, NewGen Kwinana requests the Authority to provide some advice about the future accessibility of the AEMO IT systems to the market should AEMO no longer be charged with operating the WEM.

Issue 6 – Increases to Capex and AR5 Fees

NewGen Kwinana does not believe there is enough certainty that the proposed market reforms will progress in their current format; or that if they progress, on the proposed timelines, for AEMO to incur the level of additional funding requested. It is reasonable, however, to progress the rule changes in the timeframes proposed.

Referencing the comments in this submission, NewGen Kwinana believes the quantum of additional funding requested by AEMO for the remainder of AR4 is excessive.

Further comment on the anticipated increase in market fees is provided below in the section Market Cost and Complexity.

Allocation of Costs

A significant portion of the request for additional funding is to cover costs that, in the opinion of NewGen Kwinana, are inappropriately allocated to market participants. Comments made on Issue 4 above discuss the costs associated with the transfer of System Management from Western Power to AEMO. Of equal concern is the unilateral allocation of costs associated with the government's reform policy agenda to market participants.

Typically, bodies that undertake analysis to further policy objectives or implement reforms are funded by the governments of the jurisdiction they service. This is true of the AEMC, ESB (as part of COAG), AER, ACCC and PC, all of which provide input into the workings of the national electricity sector. AEMO, as the market operator, is funded by market participants. Individual states fund their own energy policy development. The market reform championed by the PUO on behalf of the WA government has deviated from this model in several areas, some of which appear arbitrary. The instruments that have made possible are:

- The *Electricity Industry (Wholesale Electricity Market) Regulations 2004*: introduction of cl.12(4) which enables the Market Rules to set out AEMO's performance obligations and provides the ability to finance such obligations. This was amended in July 2018.
- Market Rule 1.20, which specifies the obligations of AEMO to prepare for aspects of the market reforms being proposed by the PUO. This rule was also made in July 2018; was not subject to any consultation or submission process; and was not required to give regard to improving the Market Objectives, as rule changes by market participants must do.

What this means is that the WA government has unilaterally introduced new rules and regulations, without any consultation with the electricity sector, which enables it to allocate some of the costs for designing, planning and implementing its policy suite of proposed market reforms[3] to market participants. In some instances, the cost allocation appears arbitrary. For example, AEMO is responsible for providing the secretariat services for the Power Systems Operations Working Group (PSOWG), while PUO will provide such services for the Market Design and Operations Working Group (MDOWG). While it is recognised that AEMO (and System Management in particular) is well placed to manage the technical deliberations of the PSOWG, there is no reason for these costs to be charged to market participants. The costs of the PUO providing the secretariat functions of the MDOWG are being borne by the PUO. It would be appropriate for the PUO to reimburse AEMO/System management for costs relating to the PUO's proposed reform program.

NewGen Kwinana maintains that this cost allocation is inappropriate. While it may not be in the Authority's remit to determine the appropriateness of the manner in which the WA government has sought to allocate costs to market participants, NewGen Kwinana requests that the Authority seeks further detail from both AEMO and the PUO regarding how costs relating to market reform are proposed to be allocated. NewGen Kwinana is concerned that the AEMO AR5 revenue request could include significant additional market reform related costs – particularly if the WA government directs AEMO to undertake further works via Market Rules changes.

Market Cost and Complexity

Market fees have risen substantially since market start. Market fees are poorly defined. Budgeted market fees (that are levied on participants) are the expected allowable revenue each year (for AEMO's market operations and system management; the ERA and the RCP) divided by the expected demand. Unders and overs are rectified each year once the actual expenditure and demand is identified. And market fees are

[3] At the time of writing, the proposed market reforms were still undergoing a consultation process and none had been recommended to progress or otherwise.

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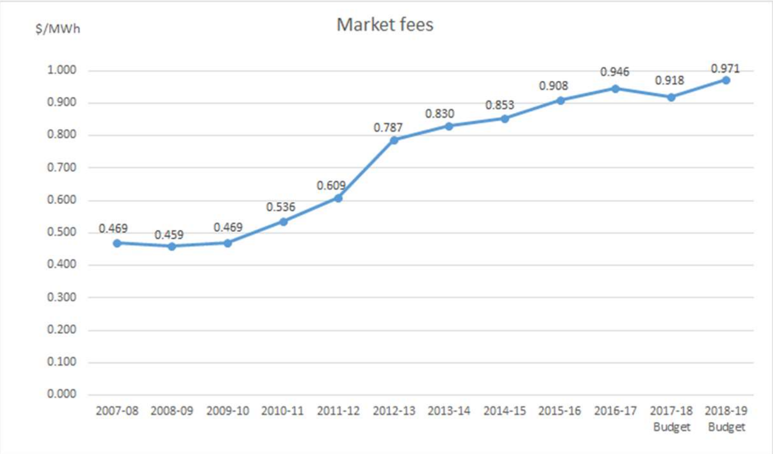
applied to both energy generated and energy sold. So the cost of operating the market is 2 x the market fee x the quantity of MWh's consumed.

The chart below tracks actual market fees from market start (and budgeted fees for those years' where actuals are not yet known). The increase is profound. The cost of operating the market is approaching $2 for every MWh consumed. The cost associated with this additional AR4 revenue request will not be seen until AR5, whereby market fees will rise around 12%. This is before any further additional revenue required by AEMO is added to their AR5 request.



Source: Courtesy of the ERA

A question to be asked is: What additional benefit is the market receiving for such a large additional cost? The structure of the market has not changed much since market start. The WEM is a small market compared with most other electricity markets around the world. It has an average minimum demand of around 1,500MW and an average maximum demand around 2,500MW. Demand is likely to remain flat for the next five years[4]. And it is not a complex market. It has two main fuel sources and over 90% of energy is traded bilaterally. Over the last 12 month period, some rough statistics are:

- 80% of energy was produced by 14 facilities, of which 5 facilities (16% of energy produced) were must run co-gen units;
- Of the remaining energy, 10% was produced by must-run non-scheduled generation;
- 72% of energy was produced by only 10 facilities;
- 90% of energy produced is controlled by 3 operators[5].

The point is that the market is not sufficiently complicated to adopt the types of complex designs and systems used in other much larger markets, such as the NEM, PJM, ERCOT or CAISO. Those markets have tens of thousands of MW's of demand, interconnection between multiple regions (and often other markets) and many more competitors and facilities. Yet the proposed market reform seems to be aimed at adding ever increasing complexity to the market. And with that, comes increasing costs.

As WEM demand stagnates over the coming decade (aided by the increased adoption of behind-the-meter solar and storage), but the cost to operate the market continue to rise, market fees (those costs divided by

[4] AEMO forecasts a slight demand increase while Western Power forecasts a slight demand decrease.
[5] Synergy, Alinta and Bluewaters/Newgen Kwinana.

the demand) will rise at an ever greater pace. It is not unreasonable to assume that the WEM will cost around $3 for every MWh consumed by the end of the AR5 period.

NewGen Kwinana understands the Authority will focus on the issue of market fees and the value provided by those fees in the upcoming Annual WEM Report. This will provide a welcome opportunity to reflect on the appropriateness of such a costly market and the value it provides to consumers.

Should you have any questions regarding this submission please contact Daniel Kurz on 08 9261 2881 or daniel.kurz@sscpower.com.au.

Yours sincerely

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