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Ben Hiron
Australian Energy Market Commission

Submitted online
3 June 2021

Dear Ben

RE: FFR market ancillary services – Draft determination

Thank you for the opportunity to provide feedback on the draft determination for the FFR market ancillary services rule change.

Enel X operates Australia's largest virtual power plant.¹ We work with commercial and industrial energy users to develop demand-side flexibility and offer it into the NEM's energy and ancillary services markets, the RERT mechanism, and to network businesses.

This submission sets out our comments on the draft determination and draft rule. The key points are:

- We support the creation of new markets for a very fast raise service and a very fast lower service.
- We also support extending the existing arrangements for registration, scheduling, dispatch, pricing, and settlement to the new market ancillary services to the extent practical.
- Care should be taken to make sure that any additional processes, studies, or constraints for FFR are proportionate to the risks that FFR may present, and do not in themselves create a significant barrier to entry.
- We do not support the proposed three-year implementation timeframe. The justification for such a lengthy timeframe is neither clear nor strong.
- We recommend a commencement date of 12 months from the date that the final rule is made, which on current timeframes would be July 2022.

If you have any questions or would like to discuss this submission further, please do not hesitate to contact me.

Regards

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Manager, Industry Engagement and Regulatory Affairs
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¹ Bloomberg NEF, December 2019.

Creation of new markets for fast frequency response

Enel X supports the AEMC's decision to create new markets for a very fast raise service and a very fast lower service. We agree with the AEMC's arguments in support of this approach. That is, we agree that:

- FFR services are suited to 5-minute markets.
- The creation of two new markets, as opposed to combining existing markets, will more explicitly recognise and value the speed capability of FFR providers.
- The specification of FFR services separately to the other market ancillary services will allow for FFR volumes to vary with respect to inertia, and for this variable requirement to be independent of the requirement for the other market ancillary services.
- The creation of two new markets will minimise the impact on the specification of the existing services and registration outcomes for existing providers.
- The creation of two new markets creates a clear signal for industry about what services are required, which provides certainty for investment and incentivises new providers to enter.
- Administering the markets in the same way as the existing markets is easy for FCAS providers to understand and should be reasonably straightforward to implement.

We also support the AEMC's proposed names for the new services.

Registration process

Care should be taken to make sure that any additional processes or technical studies required for FFR market participation are proportionate to the risks that FFR may present, and do not in themselves present a significant barrier to entry.

In its advice, AEMO recommends that integration issues related to FFR-capable plant be managed in a similar manner to the process for the registration of generator performance standards. The generator performance standards approval process is complex and time-consuming for AEMO, NSPs and proponents. Such an approach would add unnecessary costs and hinder the development of a competitive FFR market. Further, it is a framework for generators, and thus may introduce a bias against other technology providers. We agree with the AEMC's view that AEMO's proposed changes to the registration process would lengthen the time taken to assess an application for registration of FFR plant and may come at the cost of reduced flexibility. We therefore support the AEMC's decision to reject AEMO's proposed changes and instead extend the existing ancillary services registration process to the new services.

AEMO's advice also states that the registration process for FFR plant may need to include additional technical studies. Any technical studies should have a clear objective and be proportionate to the potential risks. Upfront transparency about the potential costs and timelines for any such studies will be very important so that FFR providers can make informed decisions about whether to enter the market. Further, given there is already a lot of FFR-capable plant registered in the NEM and participating in the 6s markets, it's not clear what benefit there would be in conducting technical studies to effectively re-register existing plant in the new FFR markets.

AEMO notes in its advice that proponents may not have much transparency of FFR integration issues. It will be very important for AEMO to provide as much transparency of these issues as possible, and its

solutions to them. The more visibility potential FFR providers have of these matters, the easier it will be for them to decide whether to make the necessary investments to enter the market.

Implementation

Enel X does not support the AEMC's proposed timing for implementation, for the reasons set out below.

1. Inertia decline is quickening and subject to increasing uncertainty

As noted in the draft determination, the exit of synchronous generation is reducing levels of inertia. AEMO's *2020 System strength and inertia report* noted existing inertia shortfalls in Tasmania and likely shortfalls in South Australia in 2023. South Australia's existing inertia shortfalls have only been addressed via the direct procurement of FFR by ElectraNet.

FFR's role in managing contingency events under low inertia conditions will only grow as synchronous generators exit the system. However, there is increasing uncertainty about the pace and scale of these exits. The energy transformation is happening even more quickly than AEMO's most aggressive ISP forecast. While the ESB is working on improvements to the transparency and predictability of generator closures, the combination of low wholesale prices, market reforms and government intervention is expected to accelerate coal exits. If generators exit sooner than expected, we could be caught without enough inertia to manage the power system. While not a complete substitute for inertia, the timely introduction of an FFR market can mitigate the risks of that scenario arising. Further, while AEMO indicates that it will be able to maintain a secure power system under low inertia conditions in the foreseeable future by procuring more 6s FCAS, doing so will come at a greater cost.

We agree with the view raised by Infigen in its rule change request that it is better to have the market set up and ready to go when needed, rather than being caught short. If there is little value in FFR at market start, then the price and quantity procured can reflect that. If the value of FFR increases, then the market will signal that increased need and prospective providers will respond to that signal.

2. The sooner the market starts the sooner we'll see investment in the types of technologies the system needs as it transforms

An FFR market will incentivise technology innovation and development in fast responding, dispatchable capacity. These are the kinds of technologies the system will need as it transitions to a high-renewables future. In this way, the introduction of FFR markets is likely to be a relatively low cost, high reward reform.

Long implementation timeframes prolong investment uncertainty for providers of dispatchable capacity. The earlier the market can provide the signals for these types of technologies, the sooner the system will see investment in them. Again, there is a risk in leaving it too late and investments not being made in time to meet the need.

It is also important to note that investors in fast responding, dispatchable capacity will not enter the NEM based on FFR price signals alone. Owners of such capacity, particularly batteries, will be looking to value stack across all potential revenue streams. The timely introduction of an FFR market will, for many, provide another revenue stream to help push the investment over the line. This capacity will then be available to help meet the various other needs of the system as it transitions, e.g. ramping capacity.

3. AEMO’s rationale for slow implementation is not strong

A three-year implementation timeframe suggests AEMO would be starting its consideration of FFR design from scratch. However, the introduction of an FFR market has been discussed for several years now and investigated by both the AEMC and AEMO. AEMO’s implementation options advice sets out all the previous work AEMO has completed and commissioned on the topic. Appendix D of the AEMC’s draft determination sets out all the work that it has done. FFR markets are also well established in other markets worldwide.

In its advice AEMO sets out four steps it would need to take to implement an FFR market:

- Engineering work on FFR service definition, including telemetry and data recording requirements.
- Engineering work on the scheduling arrangements for FFR services, including FCAS constraint development.
- Market system and IT system changes, including NEMDE changes.
- Consultation with industry, including consultation on MASS changes.

There is no detailed description of these steps, or a clear link between these steps and the proposed implementation timeframe. It would be helpful if AEMO provided more information on:

- what each of these steps entails
- how long each step would be expected to take
- which steps could be taken in parallel and which would need to be sequential.

It would also be helpful to understand whether AEMO expects the proposed requirements (e.g. telemetry and data recording) to be materially different to the existing requirements of the fast services and, if so, why. Given there is already FFR operating in the NEM within the existing 6s markets, it’s not clear that these requirements would need to be substantially different.

AEMO also notes that it would need to conduct registration of FFR providers and associated testing and compliance measures. However, it’s likely that many prospective FFR providers are already registered and providing FFR. The plant and system changes required for these participants to offer FFR are likely to be minimal. And, given there is already a functioning registration process in place, incremental work to register any new providers would not be significant.

Finally, given the draft rule is to introduce two new markets that otherwise replicate the arrangements of the existing FCAS markets, it’s not clear that AEMO would need to make significant changes to NEMDE or its IT systems. As above, more detail on what these changes are would be instructive.

4. A MASS review should not take 18 months

It is not clear why AEMC is proposing to give AEMO 18 months to revise the MASS.

The MASS is subject to the rules consultation procedure, which is roughly a six month process. While AEMO will need some time before the review commences to develop the consultation paper and implement the final MASS after, these processes should not take an additional 12 months.

Further, while AEMO has the power to extend the timeframes for consultation under a MASS review, we expect that a review to introduce FFR services would be reasonably straightforward given its limited scope and the strength of stakeholder support for the change. By contrast, the MASS review currently underway has a broad (and in some respects controversial) scope, so is not a good comparison.

As noted above, the idea of an FFR market has been discussed in the NEM for some time and by the members of the AEMC's technical working group for many months. AEMO and industry would not be coming at the subject matter for the first time.

In summary, a more detailed explanation of the reasons for the proposed implementation timeframe is needed. In the absence of this, we propose a rule commencement date of 12 months from when the final rule is made, which would be July 2022.

We do not support contracting as a transitional measure. A contracting approach:

- risks diverting AEMO resources away from implementation of the new markets
- may not necessarily be straightforward to put in place
- may lock in FFR providers at the expense of competition at market start.