



23 February 2017

Mr John Pierce
Chairman
Australian Energy Market Commission
PO Box A2449
Sydney South NSW 1235

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Dear Mr Pierce

EMERGENCY FREQUENCY CONTROL SCHEMES – DRAFT RULE DETERMINATION - DEC 2016

Origin Energy Limited (Origin) welcomes the opportunity to comment on the AEMC's draft rule determination on Emergency Frequency Control Schemes (EFCS) which forms part of the System Security Market Frameworks Review.

Origin is supportive of the enhanced national governance framework for an EFCS that is presented by the AEMC in this draft rule. We also continue to support the development of a new 'Protected Event' category that allows AEMO to implement preventative measures for identified events.

Under frequency load shedding (UFLS) should be seen as a last resort to prevent a system black event and used as an effective system security tool in conjunction with appropriate levels of inertia and fast frequency response. AEMO and TNSPs are best placed to determine the appropriate UFLS settings so that an appropriate balance can be found between a genuine load shedding event, where frequency excursions need to be controlled, and everyday frequency fluctuations due to load and generation changes. Improvements in technology should continue to play a role in refining these settings.

The introduction of a national over frequency generation scheme (OFGS) is a sound development in response to potential over generation scenarios. Origin supports the notion that the main purpose of shedding generation is to maintain system security, and as such, AEMO should look to first shed generation that are not contributing towards maintaining system security and stability at the time of an event.

As is the case with ULFS, we would reiterate that OFGS should continue to be considered a last resort as there are extensive costs associated with unit trips, which can bring forward maintenance and delay the return of a unit if it is damaged. The draft report is correct in highlighting the slow start up times of larger thermal plants if the tripped unit has been offline for some time. In designing an effective OFGS, Origin has a preference for a block shedding system, where large amounts of MWs are shed across a number of units rather than a singular full station trip. This would enable the units to maintain minimum output levels and steady operating temperatures, allowing the station to recommence operation sooner.

The draft report discusses a number of consultation requirements between generators and TNSPs when designing the OFGS. Origin welcomes an open and transparent process where TNSPs negotiate in good faith to meet the requirements of the OFGS. This is especially true around meeting generator performance standards and the costs associated with potential upgrades to generation assets. Generation owners must be comfortable that any changes to performance standards or upgrades will not compromise the integrity of their units or risk damaging the unit which could result in costly repairs.

Origin continues to support the development of a new 'Protected Event' category and agrees with the draft report that it is essential there is a robust governance framework in place to economically assess the likelihood of a protected event versus its potential impact on the NEM. With this in mind Origin supports the appointment of the AEMC Reliability Panel to economically assess each of the protected events that are developed in advance by AEMO and determine the post-contingency operating state that AEMO must meet.

Under the draft rule AEMO, in consultation with TNSPs, will prepare a list of protected events which would include the likelihood of an event occurring and the costs if no ex-ante actions were taken. Origin is strongly in favour of industry consultation when developing the list of protected events before it is submitted to the AEMC Reliability Panel for economic assessment. Input into the list of protected events will allow a wider range of possibilities to be considered, and industry expertise can be garnered in areas that AEMO may not prioritise.

Should you have any questions or wish to discuss this information further, please contact James Googan on james.googan@originenergy.com.au or (02) 9503 5061.

Yours sincerely,



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