CanadianSolar

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

Lodged via AEMC website

RE: **Coordination of Generation and Transmission Infrastructure Proposed Access Model**

Dear Mr Pierce,

Thank you for the opportunity to make a submission to the above rule change process.

Canadian Solar is the 3rd largest manufacturer of PV modules in the world and an active developer of large scale solar farms having successfully completed 4600MW of solar farms worldwide. In Australia, Canadian Solar has a pipeline of over 1,000MW of projects and have successfully developed the Normanton, Longreach and Oakey Stage 1 solar farms, which are currently operational, and the Oakey Stage 2 Solar Farm which is nearing completion.

General Comments

Canadian Solar (CS) has been an active participant in forums on this rule change including forums conducted by the AEMC, CEC and Australia Industry Group. CS was critical of the original proposal seeking to use hedges to mitigate thermal curtailment and fund new transmission. CS is more strongly opposed to the radical new version of COGATI where 5 minute dynamic MLFs have been added to the proposal at the eleventh hour. Of even greater concern is that the AEMC has not provided any cost-benefit analysis of COGATI whatsoever.

The AEMC Discussion Paper states the COGATI proposal "should improve investor certainty … and may reduce their cost of capital" as well as potentially doing a number of other things. One is left wondering how much confidence the AEMC has that any of the benefits attributed to this radical overhaul of generator access and NEM operation will actually be realised? CS is very confident of the impacts of this proposal --- the largest disruption of the NEM since its creation leading to a massive drop in new generator investment. Our confidence is based on our witnessing this decline today caused by just the ***possibility*** that COGATI may be implemented.

This is not just Canadian Solar's view. At a recent COGATI forum at the CEC, a snap poll was conducted asking the investors and generators attending in person, and on the phone, whether COGATI was going to lead to an increase in investor certainly. By a vote of nearly 90%, to just 10%, the respondents said, "No"---COGATI was going to lead to a **decrease** in investor certainty. In response to a 2nd question, a very similar majority (~90%) voted that **they did not want COGATI to be implemented**.

The AEMC states in many places in the Discussion Paper that their proposal is designed to reduce investor uncertainty and will therefore benefit investors and generators.

Surely, it is self-evident that if anything close to 90% of the stakeholders *who are to be the supposed beneficiaries of a reform* oppose it; it's time to Stop.

The AEMC is going the wrong way; it's time to turn around. The time period before COGATI is implemented, and after it is implemented, will both be periods of significantly decreased investment in new electricity generation. COGATI is already having a chilling effect on offtake party, financier and investor confidence in the market. Parties are very cautious of taking the risk of what might happen should this 'Rule Change on the Run' be implemented. After the current proposal is implemented, new generation investment will continue to be depressed as will be described later. Every economic study of the electricity market has shown more renewables entering the NEM will result in lower prices (other things being equal). As COGATI decreases new renewables investment, the effect on consumers will be detrimental----higher prices and the increased probably of power outages due to less generation entering the market.

Specific Comments

It is difficult to make too many specific criticisms of the rule change as so many vital, critical and difficult issues remain unexplained in any detail. This is concerning as it leads one to theorise that either the AEMC has not considered them, or they have considered them and put them in the too hard basket for the time being. Either of these possibilities would be troubling for obvious reasons.

However, CS will provide some specific comments on the Financial Trading Rights (FTR) as just one example of why this 'reform' is ill considered and will be detrimental to the interests of consumers and the electricity market, in general.

First, it is important to understand that financiers are very likely to cease providing debt to any new generation projects without long term FTRs or at the very least, provide much less favourable debt terms including requiring additional equity contributions to deal with the increased risk and uncertainty. Banks require long term certainty of revenue to provide the tens of millions of dollars required to finance new projects. This is why banks typically require 8-10 year Power Purchase Agreements (PPA) for project finance; such agreements fix the price for the project's generation providing a high degree of revenue certainty. As not having an FTR will result in significant revenue uncertainty and risk, securing a long term FTR will almost certainly become a requirement for project finance on reasonable terms.

The AEMC has proposed FTRs with a tenure of 3-4 years in the Discussion Paper. As the AEMC has recently heard at various forums, such tenures would be minimal value as far as enabling new generation projects. Proposing FTRs of such a short tenure shows a disturbing lack of understanding of the electricity market and how new generation is financed. The 'solution' some have proposed is ten-year FTRs. While this would be an improvement, ten-year FTRs will 'lock out' new intending generators for 10 years---until the intending generators have an opportunity to purchase expired FTRs. The inevitable result is less new generation, less competition and higher energy prices for consumers. The conflict between long term FTRs to facilitate new investment and shorter term FTRs to enable competition is inevitable and probably impossible to solve to most stakeholder's satisfaction.

The situation will be even worse in the short term as the AEMC has stated existing generators will receive free 'grandfathered' FTRs for 5 - 10 years. By 2022 or 2023 when this rule change comes into force, most parts of the network will be 'full', or nearly full, meaning that the great majority of FTRs in most areas will be provided to incumbent generators. If 90+% of FTRs are grandfathered for at least 5 years, then **very few, if any, new development projects will be built as project finance will be unavailable.** The inevitable result is a lot less new generation, less competition and higher energy prices for consumers. The conflict between long grandfathering periods for FTRs to reduce sovereign risk and shorter grandfathering periods to enable competition is inevitable and probably impossible to solve to most stakeholder's satisfaction.

At a recent forum, the AEMC was asked if a generator holding FTRs for all their generation would effectively have an MLF of 1. After a period of looks being exchanged between the AEMC panel members, one member of the AEMC panel finally said, "yes, that's right". Assuming the AEMC's response was correct, this means that current generators with an MLF of 0.9, for example, would receive a windfall gain of 10% as their MLF will be raised to 1.0 for at least five years. Incumbent generators are going to lobby extremely hard to maximise the length of grandfathering with so much increased revenue on the line. More importantly, which magic pudding is going to pay all the generators in the region for 100% of their generation when only 90% of the power makes it to customers? It would be useful if the AEMC could clarify this point.

This brings us to the next flaw in FTRs---that the Financial Transmission **Right** is actually more of a Financial Transmission **Request** as the AEMC has stated if the excess settlement residue pool is going to be exhausted, generators will not receive the complete benefit for which they likely paid tens of millions of dollars. It is unreasonable to expect market participants to pay a firm price for a non-firm benefit. The residue settlement pool looks to be quickly emptied in areas of the grid where 60-70+% of the generation has FTRs. Generation without FTRs paying the Local Price, and thereby adding funds to the settlement pool, will be in the distinct minority causing the residue settlement pool to be quickly 'emptied' resulting in owners of FTRs not receiving the full benefits.

The AEMC may reverse their decision and state grandfathered FTRs should not improve a generator's current situation (i.e. they would not receive a MLF=1). This would result in two FTRs--- 'new' ones (with MLF=1) and 'grandfathered' ones with an MLF representative of some assessment of the 'current' MLF of each project. However, this opens a new can of worms. Would the AEMC use the current MLF, a three-year historical average, next year's forecast, a 5 year forecast, or some other methodology to establish the grandfathered MLF? Every generator will advocate very strongly for their preferred option (i.e. the one resulting in the highest grandfathered MLF). A one size fits all approach establishing a 'fair' grandfathered MLF will be nearly impossible.

Once the grandfathering of FTRs is over, then the very real potential exists that the largest market participants and/or large financial institutions will buy up FTRs thereby limiting competition. The AEMC has stated they are aware of this potential issue and will have some sort of safeguard. However, any safeguard will have loopholes and large, well-resourced companies will inevitably find ways around them. For example, the AEMC has stated a company may have to have a development in the area to buy FTRs. A company could cheaply and easily get around this by spending $10,000 or so taking out an option to lease on a nearby farm. Voila----a 'qualifying' solar farm development enabling the purchase of FTRs. At a recent COGATI forum at the Australian Industry Group, a large Energy User stated, the FTR market will be gamed just like the water market is now---large hedge funds buying up rights to hoard and/or needlessly drive up prices. The Energy User's concern is absolutely valid, and any resulting reduction in competition caused by gaming the FTR market will drive up energy prices for consumers.

FTRs are a minefield and it appears that the AEMC has not worked out a method to avoid the various mines or even figure out where all the mines are located.

<u>Moving Forward</u>

As previously stated, we consider that that COGATI rule change process should not proceed. Instead, CS considers it should be replaced by the following two processes already in train.

The COGATI Rule Change proposal effectively gazumps the orderly and considered consideration of the AEMC's National Electricity Amendment (Transmission Loss Factor) Rule.

Canadian Solar suggests that the Transmission Loss Factor rule change process continue their assessment of MLF reform options instead of COGATI's recent apparent takeover of this role. Many in the industry are supportive of Average Loss Factors; there is very little support for dynamic 5-minute loss factors. While the current MLF regime today is problematic, there is currently only one MLF to forecast each year. Under the COGATI proposal, investors and their financiers will have to contend with forecasts of **over 1 million** dynamic MLFs over a ten-year period. This will most certainly increase risk and uncertainty, as no one could possibly forecast so many variables with any semblance of confidence or accuracy.

With regards to generator access, Canadian Solar considers that the Energy Security Board's *Post 2025 Market Design for the National Electricity Market* review is the most appropriate forum for consideration of potential reform of the NEM's Open Access system. In the meantime, we urge Governments, Network Providers and the AER to implement the roadmap for reducing transmission constraints outlined in AEMO's Integrated System Plan.

Canadian Solar is supportive of reforms that are demonstrated to provide benefits to the Electricity Market and its customers. Unfortunately, the COGATI rule change has failed to demonstrate that the benefits of the 'reform' are more than the costs of the intended consequences---let alone the potentially much worse unintended consequences.

We would be pleased to discuss our response with the AEMC in more detail, if desired.

Sincerely,

Jonathan Upson

Director, Origination

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