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QIC Limited ACN 130 539 123

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Mr Andrew Splatt
Advisor
Australian Energy Market Commission
Level 6, 201 Elizabeth Street
Sydney NSW 2000

Via email: submissions@aemc.gov.au

Dear Mr Splatt

Submission on Transmission Loss Factors Rule Change (Ref: ERC0251)

QIC Global Infrastructure (“**QIC GI**”) welcomes the opportunity to make a submission to the Australian Energy Market Commission’s (“**AEMC**”) consultation in relation to the Transmission Loss Factors rule change requests currently being considered by the AEMC (“the **Consultation**”).

QIC GI is a business division of QIC Limited (“**QIC**”), a leading investment manager with over A\$87bn in funds under management as at 31 March 2019. Established in 2006, QIC GI is one of Australia’s largest infrastructure investors. QIC GI is focused on both Australian and global infrastructure investments and since commencement of the infrastructure program, QIC GI has successfully invested over \$11.3bn of our clients’ infrastructure allocation into a global portfolio of 14 infrastructure investments across 12 geographies.¹ QIC GI has a strong track record of providing long-term capital and supporting growth in Australia’s energy infrastructure, having made the following investments:

- Powering Australian Renewables Fund (“**PARF**”) (2016) – 80% equity interest;
- Lochard Energy (2015) – 100% equity interest;
- Epic Energy South Australia (2013) – 100% equity interest.

QIC GI’s major clients are Australian-based public sector superannuation funds that represent the superannuation savings of a significant portion of Australian households. These Australian clients are, and will continue to be, a significant source of investment capital in Australian energy infrastructure.

QIC GI, on behalf of its clients, has committed A\$800m of equity capital to PARF and as a result manages 80% of the equity interest in PARF.

¹ As at 31 March 2019.



PARF was established in 2016 through a partnership between AGL, QIC and the Future Fund. PARF aims to develop and own approximately 1,000MW of large-scale renewable generation in Australia to offer investors the opportunity to obtain the portfolio diversification benefits of greenfield renewable generation whilst supporting Australia's transition to a low-carbon economy. PARF owns the following assets:

- Nyngan Solar Farm, a 102MW solar plant in NSW, acquired by PARF in November 2016, having commenced operations in June 2015;
- Broken Hill Solar Farm, a 53MW solar plant in NSW, acquired by PARF in November 2016, having commenced operation in October 2015;
- Silverton Wind Farm, a 200MW wind farm project in NSW, committed to by PARF in January 2017, construction completed but awaiting commissioning by AEMO and TransGrid;
- Coopers Gap Wind Farm, a 453MW wind farm project in Queensland, committed to by PARF in August 2017 and currently under construction.

Since the inception of PARF in 2016 and the financial commitments to the Silverton and Coopers Gap greenfield projects in 2017, the investment environment for Australian renewables has declined dramatically. Putting aside the political uncertainty which has also had an adverse impact on the availability and price of capital for investment in the energy sector, there have been some significant developments in the regulatory environment which have, in our view, increased uncertainty and therefore reduced both access to capital and increased the cost of capital for the Australian energy sector, especially for renewable energy.

In particular, the recent unprecedented variability in marginal loss factors (“MLFs”) and challenges with respect to grid connections have created an investment environment where risk is unacceptably high. Without constructive improvements to the current MLF forecasting and connection process we are of the view that there is limited capital for new renewable generation in Australia and any available capital is likely to be much more expensive than it has been previously. The higher cost of capital for greenfield developments will feed directly into higher electricity prices for end consumers which is contrary to the current government's energy policy objectives.

QIC GI supports the views made by PARF in its submission to the Consultation, but as an equity investor in the Australian energy sector, QIC GI would like to specifically make the following comments:

- **Certainty, stability and transparency within regulatory frameworks, market design and structure are critical to ensure access to cost competitive capital.** Promoting investor confidence and attracting new capital that can efficiently fund the substantial investment required to transition Australia to a low-carbon future will require regulatory certainty and stability. Further access to efficient capital will also ensure security of supply (as there will be adequate capital to fund the required infrastructure) and will deliver low cost, reliable energy to consumers (as with regulatory certainty and stability comes lower cost capital). The capital that is needed to fund new infrastructure in the Australian energy market invests in a highly competitive international market and Australian energy investments are assessed not only against other Australian infrastructure investments (e.g. transport and social infrastructure) but also against other investment opportunities internationally. To attract the funds needed it is critical that Australia maximises its appeal as an investment destination for domestic and international capital flows and certainty, stability and transparency are particularly important to attracting high quality, long-term institutional capital.

- **Transmission loss factors directly impact the commercial viability of electricity generators in the National Electricity Market.** Accordingly, methodologies for estimating transmission losses that are or could be perceived to be unverifiable and/or yield volatile results could negatively impact the attractiveness of Australia’s energy sector as an investment destination for both debt and equity investors. Without a high degree of certainty around the stability of transmission loss factors for a given project, we expect investors will:

- take more conservative assumptions in evaluating investments in this sector;
- require higher returns on investment to compensate for higher risk, resulting in a higher cost of capital; and
- reallocate capital away to alternate, competing sectors and/or geographies.

These factors would drive a reduction in investment in the sector, and an increase in the returns required for an investment, resulting in higher electricity prices for consumers. More critically, there is risk that investors re-allocate capital away from the sector on a wholesale basis, resulting in an inability of local projects to find capital at an efficient and competitive cost.

- **Question 1: Identifying the Problem**

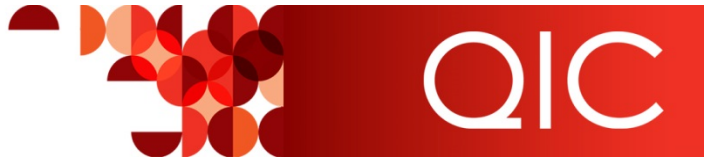
QIC GI supports PARF’s submission that the current methodology of utilising a marginal loss factor as a proxy for transmission losses produces unpredictable results, and that alternate transmission loss estimation methods, such as an average loss factor methodology, would yield more stable estimates and provide a higher degree of certainty for generators. This is particularly the case for generators located on the fringe portions of the transmission network which is where the majority of Australia’s wind and solar resources are. Given that between \$8-27bn in new investment is forecast to be required to replace retiring generation capacity and meet demand growth,² it is paramount that the transmission loss factor methodology ultimately adopted is able to, and is perceived to be able to, deliver stable and reliable results. Unless this is the case we are firmly of the view that it will be extremely difficult to raise the debt and equity capital necessary to fund this new investment. We are already observing a reduction in the access to equity and debt capital for renewable investments. If the required debt and equity capital is able to be raised, without more stable and reliable transmission loss factor forecasts, the capital raised:

- will require a higher return to reflect the higher degree of risk;
- will have lower leverage to reflect the more volatile cash flows, further increasing the total cost of capital; and
- this higher cost of capital will ultimately put upward pressure on electricity prices for consumers.

- **Question 2: Proposed Assessment Framework**

QIC GI agrees with the AEMC’s proposed assessment framework, which highlights the promotion of efficient investment in, and operation of, electricity services with respect to price and reliability. We believe the AEMC framework appropriately considers whether the suggested rule changes contribute to the achievement of the National Electricity Objective (“NEO”). Further, we support PARF’s submission that the AEMC framework should include an assessment of the impact on efficient investment, with appropriate consideration given to the stability and predictability of forward loss factors. Increasing the stability and predictability of loss factors will translate to lower risk for investors, which will allow equity and debt investors to target lower returns, ultimately delivering lower electricity prices for consumers.

² In net present value terms, page 5, *Integrated System Plan*, Australian Energy Market Operator, July 2018.



▪ **Question 3: Changing the Transmission Loss Factor Framework**

QIC GI supports PARF's submission that the current methodology for estimating transmission loss factors results in outcomes that are highly unpredictable and contrary to both the key elements of the proposed AEMC assessment framework, and to the achievement of the NEO. QIC GI supports PARF's submission that alternative estimation methodologies, particularly a forward-looking average loss factor ("ALF") methodology, would result in more predictable outcomes that contribute to the achievement of the NEO by producing loss factor estimates that are more stable and more robust without adding undue complexity. A higher degree of certainty will allow equity investors to target lower returns which will translate to lower electricity prices for consumers. Less volatility in cash flows will also allow lenders to provide more debt capital to new generation projects also lowering the weighted average cost of capital and further reducing electricity prices for consumers. Further, the proposed ALF approach is simple to calculate and retains the locational signalling aspects of the existing MLF approach. Whilst QIC GI is supportive of a decision now to replace the MLF methodology with the ALF methodology we note that there are a number of possible alternative methodologies which could also improve the level of certainty and therefore increase the efficient pricing and allocation of capital in the sector. Other viable methodologies which could be considered in the future, with the ongoing development of the Australian electricity regulatory framework, include the cap-and-collar methodology used in the Irish electricity market, and the application of grandfathering principles to provide a higher degree of certainty for market participants.

As a major investor in Australian infrastructure and the Australian energy sector in particular, we are highly supportive of the AEMC taking timely action to implement the ALF methodology and rectify the issues outlined in this submission. This will contribute to the restoration of investor confidence in the Australian renewable energy market, and therefore to the achievement of the NEO. We would welcome the opportunity to discuss this submission with you.

Yours sincerely

A handwritten signature in black ink that reads "Ross Israel".

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A handwritten signature in black ink that reads "Angela Karl".

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