28 March 2019

Utilities Reform
Department of Treasury and Finance

By email: DTF.UtilitiesReform@nt.gov.au

Dear Utilities Reform,

Re: Tetris Energy Submission on the Northern Territory Electricity Market (NTEM) Functional Specification

Tetris Energy ('Tetris') appreciates the opportunity to consider and comment on Northern Territory Electricity Market Draft Functional Specification, released by The Department of Treasury and Finance ('DTF') on 7 February 2019. With our ambitions to start construction on the Manton and Batchelor solar farms at the start of the dry season, we have focussed our response on the items that will provide the certainty for those to proceed.

Pending investment
We note that energy market design and transition is complex and involves numerous stakeholders. To ensure that the Northern Territory receives the investment and jobs during 2019 – there should be a focus on trying to facilitate the projects that have already executed a Power Purchase Agreement with the NT retailer, Jacana Energy. Getting these projects up and running will demonstrate private sector investment in the territory and pave the way for future renewables under the Government's renewable policy.

Given the complexities, DTF could also consider a variety of temporary mechanisms to encourage new entrants while maintaining a secure and reliable system, rather than relying entirely on the full design of secondary markets for ancillary services and capacity. The timeline for implementation of the secondary markets is not yet outlined, and further, secondary markets have historically tended to perform poorly with respect to their intended purposes. Simple changes now can facilitate planned new entrants while giving time to develop and refine the market model. This includes confirming how new generators will connect and deal with curtailment.

Connection Policy and NTEM
Clear connection policy: A conducive investment environment in the Darwin Katherine Interconnected System ('DKIS') requires strong coordination between Power Water Corporation ('PWC') and the NTEM, particularly regarding the connection process for new generators. This requires consideration of both the physical infrastructure (network capacity), as well as how the system is operated (dispatch, curtailment). Currently, PWC Power Services appear to be basing their connection assessment policy on thermal capacity, while PWC System Control evaluate their assessment based on system reliability. Tetris supports a clear connection policy that considers all these factors.

Shared curtailment risk: A connection policy that places all curtailment risk on the generator will deter new investment in the DKIS and reduce the efficiency of the market. As the DKIS doesn't have the same economic and technical signals for new generators trying to connect as seen in the NEM, PWC should work with the Reliability Manager to ensure new connections are sustainable.

Ancillary Services

Interim strategy: Tetris appreciates the clarity provided by PWC in the *Supplementary Paper on C-FCAS* and is broadly supportive of the interim market strategy where all generators provide C-FCAS (lower) and Territory Generation provides all C-FCAS (raise), as lower events are not expected to happen very often. Tetris requests that additional clarity and a timeline towards the full market be provided as soon as possible.

Clarity on causer-pays: Post-event causer pays recovery of FCAS compensation has been a source of significant contention on the NEM. Consideration should be given to avoid these issues in the NTEM design, including to capacity to aggregate generators to lower user pays.

Synthetic inertia: We also encourage a deeper assessment into the adequacy or synthetic inertia in lieu of physical inertia, as the current percentage requirement on physical inertia may be an unnecessary and not cost-effective reference to the status quo.

Capacity Market

General Design: Whilst a capacity market seems like it may be appropriate here, lessons should be headed from the existing examples in Western Australia and the United Kingdom, in order to avoid gold-plating unnecessary generation assets.

Maintaining Competition: A crucial part of the reliability manager's role will be to set the price ceiling (i.e. the price at which unmet capacity requirement will be purchased). At the commencement of the market, most of the capacity will be supplied by existing synchronous generators, and if the capacity price is allowed to rise too high, these generators will be able to cross-subsidise their energy price and undercut the entry of renewable generators and storage. The process of setting the price should be as transparent as possible, to alleviate this risk.

Capacity of solar: Tetris suggests that the 5% nameplate capacity accreditation for solar PV is potentially very low, and strongly agrees with the DTF's statement that further study is needed into this, ideally involving consultation and transparency.

Dispatch support services

Greater clarity: No transitional arrangements are specified for dispatch support services. Given that this effects the maximum capacity of the 132 kV Katherine line (a major source of uncertainty for projects in the pipeline), Tetris requests that further information be provided regarding the precise compensation that will be granted to renewable generators on the Katherine line who provide ancillary services in Darwin, thereby increasing the maximum line capacity.

Overarching considerations

Holistic consideration with Generator Performance Standards: Tetris acknowledges DTF's and PWC's efforts to consider both consultation processes holistic and encourages this to be ongoing as the industry reform progresses.

Greater certainty: The open-ended nature of the transitional phase (I-NTEM) presents significant risk to investors, Tetris would encourage greater certainty on the intended implementation time of the NTEM, even if only indicative or approximate at this stage.

Accommodating announced projects: Tetris notes that it secured an offtake agreement with the NT Government retailer under a competitive process, based on the network and market information available at the time. Tetris requests that DTF is mindful that this is taken into consideration, so that new changes do not make the projects uneconomic and deter the pending investment and jobs from these projects.

If you have any questions, please contact Frank Boland, Director, frank.boland@tetrisenergy.com

Regards,

Frank Boland

Director, Tetris Energy