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Australian Energy Market Commission
PO Box A2249
Sydney South NSW 1235

RE: NT Emergency Gas - Project Reference Code GRC0052

Power and Water Corporation (**PWC**) is pleased to provide a submission in response to the *National Gas Amendment (NT Emergency Gas Supply Arrangements) Rule 2019 Consultation Paper* dated 7 February 2019 (**Consultation Paper**).

The Consultation Paper has been prepared to discuss a National Gas Rule (**NGR**) change request submitted by the Northern Territory Government in November 2018 to the Australian Energy Market Commission (**Rule Change Request**). The Rule Change Request seeks to introduce changes to the National Gas Rules that would exempt LNG related facilities in the Northern Territory from provisions within part 18 of the NGR requiring them to be registered as Bulletin Board participants, thereby exempting them from reporting information about their operations on the Bulletin Board.

PWC's Role in the NT Energy Market

PWC is established under the *Power and Water Corporation Act 1987* and is a Northern Territory Government Owned Corporation under the *Government Owned Corporations Act 2001*. PWC is a major buyer and supplier of gas in the Northern Territory (**NT**). The vast majority of that gas is used by PWC's customers (such as the NT's electricity generator, Territory Generation) to generate electricity for consumption by industrial, commercial and residential consumers in the NT. PWC is effectively the supplier of last resort in the NT. It therefore plays a critical role in ensuring that "the lights stay on" in the NT and has a very keen interest in the outcome of the Rule Change Request.

PWC's Support for the Rule Change Request

PWC is broadly supportive of the Rule Change Request.

Ichthys LNG and Darwin LNG have and will play a critical role in supplying emergency gas to PWC. PWC is concerned that unnecessary regulatory burdens will provide a disincentive to Ichthys LNG and Darwin LNG continuing to fulfil that important service in the future.



In PWC's view, creating a regulatory environment that does not discourage the NT LNG producers providing emergency gas supplies to PWC into the future leads to greater certainty that essential gas supplies in the NT are maintained at all times. This enhances business and consumer confidence by providing a stable and reliable energy system.

Special Circumstances Affecting NT LNG Producers and NT Energy Markets

PWC considers that some unique and distinguishing features of the NT gas market and the NT LNG producers justify the exemption sought in the Rule Change Request. These features can be summarised as follows:

- The NT LNG projects are underpinned by their own dedicated offshore gas fields and facilities, and are not reliant on the availability of domestic gas supplies. This contrasts with the East coast LNG projects. The NT LNG producers can be seen as independent, dedicated LNG export projects.
- The NT electricity system is dependent on natural gas for essentially all power generation requirements. This contrasts with the eastern states electricity market, where baseload generation on alternative fuels such as coal is available. Further, whereas coal, gas, hydro power and pumped storage are available for mid-merit and peaking purposes in the Eastern states, gas is the only available fuel in the NT. Moreover, the NT is not electrically connected to other grids meaning no back-up electricity is available from other Australian states.
- PWC is effectively the gas supplier of last resort for the whole NT system, covering both interconnected systems and remote areas. In emergencies and planned and unplanned outages involving PWC's ENI-Blacktip gas supply, PWC is totally dependent on the emergency/back-up gas supply arrangements in place with Ichthys LNG and Darwin LNG. These emergency/back-up arrangements are not long-term firm commitments to supply gas to PWC meaning this critical supporting role could be withdrawn if the NT LNG producers disconnected from the NT gas market; potentially leaving PWC heavily exposed to having little or no emergency/back-up gas supplies to meet the gas requirements of electricity generators.

Reliance on Gas and Limited Alternatives

Section 2.5 of the Consultation Paper outlines some of the particular issues affecting security of energy supply in the NT. In fact, gas is used for up to 500 MW of baseload, mid-merit and peaking electricity generation stretching from Darwin to Alice Springs.



In the event of a total reduction in gas supply from the Blacktip field, load shedding and potentially catastrophic system failure could occur within a day of the interruption occurring. The alternatives to emergency gas from the NT LNG producers are unlikely to be able to meet such a shortfall because:

- the capability of diesel generation units is limited. Diesel units would be unable to meet total load without substantial investment in additional units, fuel storage and conversion. Existing dual fuelled units can take around 24 hours to convert fuel operation from natural gas to diesel;
- linepack in relevant pipelines is finite;
- the Amadeus Gas Pipeline has no compression to deliver gas North to main loads in and around Darwin - the pipeline effectively relies on the compression of gas delivered from the Blacktip field to flow gas in the pipeline to Darwin loads;
- the Northern Gas Pipeline is not presently able to deliver gas from the East coast; and
- gas may not be available from alternative suppliers on short notice and in priority to competing demands on the East coast at that time.

In addition, PWC considers that the NT LNG producers provide the lowest cost option to PWC and the NT community as a whole for the provision of emergency gas supplies in comparison to alternatives such as investment in increased diesel storage or upgrading the Amadeus and Northern Gas Pipelines (and possibly the Carpentaria Gas Pipeline) to ensure gas can be transported from the East coast wholesale gas markets to relevant electricity generators. This is particularly the case when considering the infrequent nature of demand for emergency gas.

There are a number of practical limitations and risks associated with alternative emergency gas supplies that make them unfavorable in comparison to supply from the NT LNG producers. To date, the performance of the NT LNG producers has shown them to be a reliable supplier to the NT.

Conclusion

PWC places a high importance on ensuring security of gas supply in the NT. It considers that any additional information and transparency benefits arising out of the NT LNG producers reporting on the Bulletin Board (which PWC considers to be negligible) are far outweighed by the potential detriment to PWC, its customers (including baseload electricity generators) and consumers in general if the NT LNG producers decided to cease providing emergency gas supplies to the domestic gas market. The scale of the potential detriments to PWC and other stakeholders and the scarcity of practical alternatives in emergency gas supplies provide strong grounds for approving the Rule Change Request, in PWC's view.



PWC's responses to some of the specific questions in the Consultation Paper are set out in Annexure 1 to this letter.

Please do not hesitate to contact me if you require any further information in relation to this response.

Yours sincerely

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General Manager – Gas Services
Power and Water Corporation



Annexure 1- Responses to Specific Questions

BOX 1 Question 2: What drawbacks are there to the domestic market of not being provided with information on these upstream activities?

From PWC's perspective, its main concern is whether the absence of Bulletin Board information will negatively impact on its ability to plan for, and manage any situation requiring emergency gas supplies from the NT LNG producers. It does not believe it will suffer any such negative impact. This is because PWC has both contractual entitlements to information and operational communication channels with the NT LNG producers that ensure adequate information is provided.

PWC believes that other market participants will not be disadvantaged by the absence of information in upstream activities. As noted in the Consultation Paper, participants will still receive adequate information by reason of current and proposed Bulletin Board reporting in relation to pipeline throughput and capacity downstream of the LNG production facilities.

BOX 2 Question 2: Is the replacement cost of emergency or back-up supply likely to be that much greater than existing agreements?

The price for emergency gas under existing arrangements is based on a formula which is linked to international energy prices. However, as noted in PWC's covering letter, there are a number of practical limitations and risks associated with alternative emergency gas supplies that make them unfavorable in comparison to supply from the NT LNG producers. In PWC's view, the issue of replacement cost is only one of the considerations that should be taken into account when assessing the importance of maintaining emergency gas supply arrangements from the NT LNG producers. Please refer to PWC's covering letter for further details.

BOX 2 Question 4: If the NGP is upgraded for bi-directional flow, is this supply less reliable than supply from the LNG projects, if so why?

There are a number of factors that suggest supply to the NT through the NGP is likely to be less reliable than supply from the NT LNG projects. These include:

- i. pipeline capacity from the gas source to the NT pipeline system may not be available at the time the emergency occurs;
- ii. the Amadeus Gas Pipeline has no compression to deliver gas North to main loads in and around Darwin. It may not be possible to deliver gas from the NGP up to the demand centres in Darwin via the NT pipeline system;



- iii. the NGP may not have sufficient capacity to deliver gas in sufficient quantities to meet the total demand in the Darwin system. PWC understands that the NGP can deliver approximately 90TJ/day whereas total PWC deliveries through the Amadeus Gas Pipeline can exceed 110TJ/day;
- iv. sufficient gas may not be available for supply from the East coast to supply gas to the NT market at short notice (i.e. hours); and
- v. if there is also an emergency on the East coast affecting gas supplies, the NT may not have priority to available gas.

These factors and risks are less prevalent in the case of emergency gas supplies from NT LNG producers.

BOX 4 Question 1: How might the operation of the emergency supply arrangements be expected to change in the near future?

PWC have been advised that Darwin LNG will cease to supply emergency gas in the next 2-3 years once the current gas field supplying the plant is depleted. The plant will then require upgrades for new gas supply which could be a number of years. PWC would need to renegotiate emergency gas supply arrangements with the owners of the new gas field/s and/or the owners of DLNG processing facilities. In the interim, PWC will be totally dependent on Ichthys LNG for emergency gas.

BOX 4 Question 2: In the event of plans to change the operation of the lateral pipelines connecting the projects with the domestic market, to what degree should the domestic market be informed of these changes in advance?

PWC considers that current and proposed Bulletin Board reporting on pipeline throughput, capacity and expansions should be sufficient.

Any future proposals to extend the information to be reported to planned changes in operation would need to be carefully considered. For example, it will be paramount to weigh the public interest in disclosure against issues of confidentiality, commercial sensitivity and administrative burden. The forced public disclosure of changes in emergency agreements may provide a significant disincentive to potential suppliers from negotiating and entering into such arrangements. The potential for such negative effects is likely to significantly outweigh any perceived benefits of forced disclosure.



BOX 4 Question 3: In the event that a new exemption is granted in any rule made, is there any information that would be valuable to the domestic market, beyond what would be reported by PWC and APA on the connecting pipelines, for example planned shutdowns of the upstream facilities?

PWC cannot foresee what additional information may be required by the domestic market beyond that which will already be reported by reason of the interconnecting pipelines being subject to Bulletin Board information reporting, and other bilateral reporting arrangements. For example, to the extent a change or interruption in the operations of NT LNG facilities impacted on downstream gas supplies, PWC would inform its customers in accordance with normal contractual mechanisms and through operational channels or communication.