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

Dear Mr Pierce

Re: submission to AEMC consultation stage – National Gas Amendment (NT Emergency Gas Supply Arrangements) – Rule 2019

We appreciate the opportunity to provide a submission as part of the consultation stage of the Australian Energy Market Commission's (AEMC) Northern Territory Emergency Gas Supply Arrangements rule change process. This submission contains Australian Energy Regulator (AER) staff views on the NT Government's rule change request.

Through 2018, AER staff engaged with various parties on this matter, including NT Government officials and the respective NT LNG operators—INPEX and ConocoPhillips. In July 2018, we wrote to the NT LNG operators to express our view that, due to their connections with the domestic gas network, the facilities of Darwin LNG and Ichthys LNG will be subject to Gas Bulletin Board reporting requirements from the NT application date under Part 18 of the National Gas Rules (NGR). However, recognising NT Government concerns that Ichthys LNG and Darwin LNG may be connected to the NT gas market for emergency supply provision only, we advised that this be approached as a policy, rather than a regulatory, matter. We further recommended that the appropriate course of action may be to seek a rule change.

This submission does not directly support or oppose the rule change request. However, it does question elements of the base case for rule change and seeks to contribute to the discussion at this early consultation stage. Interlinkages between Australia's east coast gas market and international gas markets have enhanced the importance of transparency in informing investment decisions and bringing clarity to the long term consequences of these decisions on the domestic gas market. It has become increasingly difficult to see Australia's domestic gas sector and gas export sector as mutually exclusive and gas fields located within Australian territory (whether on-shore or off-shore) should be regarded as part of the one national resource. This will be an important consideration toward future development of the

Gas Bulletin Board, including through the proposed ‘tranche 2’ reforms endorsed by the Council of Australian Governments (CoAG) at its December 2018 meeting.

Further to the NT Government’s rule change request, we firstly identify some preliminary matters, for AEMC consideration, that are not directly addressed by questions in the submissions template. We outline these preliminary matters at the end of this cover letter. The AEMC’s submissions template is also included (Attachment A), with our responses to the questions raised.

Yours sincerely

Peter Adams
General Manager
Markets Performance

Preliminary Matters

The AER has reviewed the proposed rule change and based on our understanding of the arrangements in the Northern Territory and the operations of the gas markets across the eastern seaboard provide the following comments to assist the AEMC in its deliberations.

In assessing the proposed Rule change, the AEMC may wish to further consider matters in three specific areas of the Northern Territory Government's November 2018 rule change request. These include:

1. the risk of withdrawal from emergency supply arrangements if NT LNG facilities are captured by Part 18 of the NGR;

2. the scale of Darwin LNG and Ichthys LNG trade in the domestic market relative to their core business; and

3. the ability or inability of Darwin LNG and Ichthys LNG to import domestic gas for feedstock for LNG production.

The AEMC may also like to consider:

4. Potential cross-over issues associated with Part 18 and other components of the NGR.

Background to these areas are set out below.

1. The risk of withdrawal from emergency supply arrangements if NT LNG facilities are captured by Part 18 of the NGR

<u>What is the extent of the willingness to withdraw?</u>

Section 4.2.2 of the rule change request highlights that emergency back-up supply, provided by NT LNG producers, is essential to maintaining security of gas and electricity supply in the NT. AER staff understand the importance of these back-up supplies but recognise that the risk to their ongoing provision lies in the willingness of NT LNG businesses to withdraw from the emergency arrangements.

There may be value in the AEMC seeking further clarification to understand:

- the circumstances under which the NT LNG businesses may withdraw from their emergency supply arrangements
- the timing around when this could happen and the likelihood for each of the NT LNG businesses respectively.

This analysis should be broader than just considering the NT LNG businesses 'commercial incentives', and include other factors such as contractual / legal obligations and technical aspects (such as the work required to physically disconnect infrastructure from the NT domestic market).

At the time the NT Government was writing its rule change proposal (November 2018), the NT was relying on the emergency back-up connection and supply arrangements with Darwin LNG to maintain 'N-1' redundancy.

Since then, we understand separate emergency arrangements have commenced with Ichthys LNG, which further improves the reliability and security of supply of gas for the NT.[1] While both emergency arrangements are in place, the NT domestic gas market has 'N-2 redundancy'.

We understand the emergency arrangements will remain in place as follows:

- For Darwin LNG, until the end of 2022
- For Ichthys LNG, until the end of 2033 (assuming the arrangements commenced at the start of 2019)

This timing suggests the security of gas supply in the NT will remain at 'N-2' redundancy for almost four years – until the end of 2022 – when it will return to 'N-1' redundancy for a further 11 years – until the end of 2033. This assumes Darwin LNG doesn't continue to have emergency supply arrangements with the NT post 2022, which we understand is not known.[2]

There would be value in the AEMC looking at each project and their respective emergency supply arrangements separately when considering this proposal.

<u>The urgency of the rule change process</u>

On the basis of the above, there appears to be no real urgency associated with this rule change request and the NT's gas supply security situation.

Any stated or inferred urgency around risk to emergency supply in the NT should be measured against the current N-2 security situation, including the emergency arrangement with Darwin LNG, which remains in place for the next four years. Accordingly, this rule change assessment should be examined carefully and in our view does not require a hastened timeframe.

Further, this request is progressing concurrently with tranche 2 Bulletin Board reforms endorsed by the Council of Australian Governments (CoAG) in December 2018. Proposed tranche 2 reforms include amendments to the National Gas Law to extend Bulletin Board reporting to LNG production. Exempting NT LNG gas facilities from Bulletin Board reporting now and or indefinitely could undermine the policy intent of the tranche 2 reform process. The outcomes of this rule change process should be sensitive to the potential outcomes of the tranche 2 reforms.

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[1] Section 4.2.1 of the NT Government's proposal states back-up gas will be available from Ichthys LNG from late 2018.

[2] *Power System Review 2016-17*, The Utilities Commission of the Northern Territory, p.143

Similarly, this rule change process is not subject to time pressures associated with the NT application date, which imposes Bulletin Board reporting obligations on NT gas facilities from 3 April 2019. To assuage any compliance concerns, AER staff have advised NT LNG operators that the AER will not take action on potential non-compliance with Part 18 reporting while the NT Government's rule change proposal is pending.

What potential supply alternatives exist?

In considering this application, there would be value in assessing the risks associated with any proposed withdrawal from emergency supply arrangements. The consequences of there not being access to Ichthys LNG emergency gas should be measured against other potential supply sources that may help with NT system security in the medium to long term. The importance of a single back-up supply source should be considered in the context of the NT's other resource options. The impact of the potential gas sources listed below are worthy of further consideration.

- What is the potential for security supply arrangements with Darwin LNG to be extended (renegotiated) beyond 2022? This date is associated with the projected end of field life for the Bayu-Undan resource that supplies Darwin LNG. The operator of DLNG, ConocoPhillips, states on its website that it is 'in discussion with a number of projects in Northern Australia that could extend the life of Darwin LNG'.

- The commissioning of the Northern Gas Pipeline (NGP) has enabled gas swaps between parties on either side of the NGP, meaning NT gas slated for east coast markets could potentially serve NT demand under a swap arrangement with an east coast supplier. Presumably, as a supplier to east coast markets, the NT has gas production capability in excess of local demand requirements and this could help to underpin NT supply security through a swap arrangement.

- Impediments to developing on-shore gas fields have been removed following the partial lifting of the moratorium on hydraulic fracturing in the NT. This should be considered in the context of the 2022 expiry date of the emergency supply arrangement with DLNG. To what extent do new supply developments help to mitigate against future supply risks?

- The NT Utilities Commission identifies several 'major' sources of back-up supply in its *Power System Review 2016-17*. In addition to LNG, section 7.3.3 identifies that the NGP opens up new gas supply opportunities in relation to uncontracted Amadeus Basin gas. It also identifies the existence of back-up diesel generation if limited gas supply is available for electricity generation.

2. The scale of Darwin LNG and Ichthys LNG trade in the domestic market relative to their core business

Section 4.2.2 of the Northern Territory Government's rule change request argues that:

> any interaction between the Northern Territory gas market and the LNG producers is likely to be inconsequential to the Territory LNG producers' core business of producing LNG due to the relatively small size of the Territory gas market compared to their own operations (p.8-9).

In stating this, the NT Government draws comparison with Queensland LNG export businesses, which have a higher degree of integration with the domestic market. The rule change request argues that Queensland's three LNG producers are:

> active and influential participants in the east coast gas market;

and that in comparison

> both Territory LNG producers (Darwin LNG and Ichthys LNG) source their gas from offshore gas fields and only engage in limited and periodic trade with the Northern Territory gas market (p.8).

Should relativity offer a path to exemption?

Whilst the domestic trade volumes of NT LNG producers are not, at this time, comparable to those of Queensland LNG producers, this does not offer grounds for exemption from Part 18 of the NGR. Likewise, the extent to which Queensland LNG producers are 'active and influential' in the domestic market, compared to NT LNG producers, does not mean the latter are somehow not to be regarded as gas market participants under the Bulletin Board framework. The triggers through which participants are captured under the framework are clearly set out in Part 18 (as follows).

Materiality and locality are factored into the Bulletin Board reporting framework

Part 18 of the NGR applies to gas facilities (production facilities, pipelines and storage facilities) that are part of the interconnected east coast gas pipeline system. Physical connection to that system is the primary cause of capture under Part 18—on the basis that the infrastructure supports the physical receipt or delivery of natural gas in the domestic market. Conversely, remote BB facilities are exempt from Part 18 (c.144), on the basis that gas cannot flow to/from east coast gas markets (gas trading exchanges) via those facilities. This is evidenced by the definition of remote BB facilities under Part 18. In the case of the lateral pipelines connecting Darwin LNG and Ichthys LNG to the domestic market, this is evidenced by the Part 18 definition of a remote pipeline[3]:

[3] It is possible that a gas facility is both a remote BB facility (under Part 18) and physically connected to the east coast gas network. In this instance, no gas would flow across the connection—the remote BB facility operating as part of a closed system. To maintain its definition as a remote BB facility, no quantity of gas could flow across the connection, regardless of its intermittency.

remote BB facility means a BB facility that is or is connected to a remote pipeline.

remote pipeline means a transmission pipeline that:

(a) is not an STTM facility or part of a declared transmission system;

(b) is not a pipeline on which natural gas sold through the gas trading exchange may be physically delivered or received or through which such natural gas may be transported;

(ba) is not a Part 24 facility; and

(c) is not connected directly or indirectly to a pipeline satisfying paragraph (a), (b) or (ba) of this definition.

Importantly, many east coast gas market facilities are comparatively small, next to the facilities of LNG producers, yet are captured by Part 18 of the NGR. The key precondition for capture applies to receipts and/or deliveries, in the east coast gas market, by gas facilities with a nameplate rating equal to or greater than 10 terajoules per day. If a facility meets the nameplate threshold, and is part of the interconnected east coast market, it is captured by Bulletin Board reporting requirements.

AER staff have therefore highlighted the following factors, presented in the NT Government's rule change request, as not relevant to Part 18 capture:

- the relativity of trade volumes between gas market participants;
- the relativity of components of a gas market participant's operations (in this case the relativity of NT LNG export trade to domestic trade); and
- the source of gas from off-shore fields.

Materiality of gas flows and remoteness were previously considered by the AEMC in developing the current Bulletin Board reporting framework. The AEMC will now need to consider if and why NT LNG facilities should be treated differently. It is useful to revisit the purpose of the Bulletin Board, under Division 2 of Part 18 of the NGR, when considering this rule change request:

145 Purpose of the Bulletin Board

The purpose of the Bulletin Board is to make information available to BB users to facilitate:

(a) trade in natural gas and natural gas services; and

(b) informed and efficient decisions in relation to the provision and use of natural gas and natural gas services.

In this respect, the trading relationship between NT LNG and the domestic market may seem inconsequential to the LNG operators (relative to their export volumes) but could have large consequences for the domestic market.

3. The inability of Darwin LNG and Ichthys LNG to import domestic gas for feedstock for LNG production

Electricity generation

Further consideration of the relationship between NT LNG production and the domestic market, most particularly Ichthys LNG's involvement in the domestic market, would be useful. This should include the relationship between domestic gas used for electricity generation and Ichthys LNG's processing facilities. The rule change request states that:

> There is also capacity for Ichthys LNG to import small quantities of gas from the Northern Territory gas market intermittently on a spot or as available basis, however, there is only capability for Northern Territory gas to be used for Ichthys LNG for electricity generation (p.8).

The relevance of this distinction is unclear. As section 4.2.2 of the rule change request notes, Queensland LNG producers:

> source their gas from onshore gas fields connected to the domestic market…'(p.8).

This includes gas used for electricity generation for the purposes of LNG processing. Assuming Ichthys LNG sources gas from onshore gas fields (the NT market) for electricity generation, this is receipt of gas as part of LNG processing. There is value in further considering this issue in the context of Bulletin Board reporting requirements and the degree to which Ichthys LNG operations can be regarded as separate to the domestic market.

Bilateral flows

A review of actual and potential flow activity on pipelines connecting Ichthys LNG to the domestic gas market would also provide useful insight. The rule change request argues that Ichthys LNG will not be importing gas from the domestic market under 'normal circumstances' (p.8). Given that Ichthys LNG is connected to the domestic network via a bilateral pipeline, further information should be sought on the circumstances under which domestic importing could arise. This would include circumstances through which gas may be imported for different phases of LNG plant commissioning.

We further highlight that section 4.2.5 of the NT Government's proposal acknowledges:

> that infrequently and for short periods of time, gas flows from Territory LNG producers to the Northern Territory gas market under the emergency back-up supply arrangements may be of relevance to Northern Territory gas market participants (p.11)

However, regarding gas flows in the other direction under a spot sales arrangement (i.e. from the domestic market to the NT LNG projects), the proposal states these flows:

are not relevant at the present time because major users are not reporting entities under Section 223 of the NGL (p.11)

We think that flows in either direction between the NT domestic market and the NT LNG businesses, for any reason, are relevant to the NT gas market participants and the east coast gas market more broadly. Both circumstances should be considered when examining the benefits arising from the provision of information to the domestic market. The fact that major users (including LNG producers) are not current reporting entities under Section 223 of the NGL is not a reason to ignore the benefits that will be achieved when these reforms commence in the near future.

Lastly, we wish to emphasise that the inability to import 'domestic' gas for feedstock for LNG production does not, in itself, provide a basis for exempting NT LNG facilities under Part 18. As previously outlined, this is due to the ability of these facilities to supply the NT market with emergency gas flows (gas that potentially flows to east coast markets).

4. Potential cross-over issues associated with Part 18 and other components of the NGR

Further to the new Bulletin Board reporting requirements that took effect from 30 September 2018, recent changes to the NGR include the amended Part 23 and the new Parts 24 and 25. These changes impact the compliance obligations of the lateral pipelines connecting NT LNG to the domestic market. In the case of the pipeline connecting Ichthys LNG, Parts 23 and 24-25 require the owner to consider whether the connection is a third party access pipeline (the pipeline can be regarded as having two shippers—INPEX gas for Ichthys LNG electricity generation and PWC gas for emergency supply).

Consideration of the implications of this rule change application in the context of Parts 24-25 in particular would be useful. For example, if a Part 18 exemption were to be extended to the lateral pipelines, there is still potential for the Ichthys LNG lateral to be captured under elements of Parts 24-25, which are designed to compliment Part 18 of the Rules.

In relation to the undersea pipelines, which connect to the lateral pipelines, NT LNG operators may need to consider exemption paths under Parts 23-25 of the NGR. The AEMC's analysis, as part of this rule change request, should inform these considerations. The AEMC analysis should determine whether the gas in the undersea pipelines (downstream of off-shore processing facilities) meets the definition of natural gas under the National Gas Law. If it does, Part 23-25 pipeline exemption applications will be required.