25 August 2014

Sebastian Roberts
General Manager
Jemena Gas Access Arrangement Review
GPO Box 3131
Canberra ACT 2601

Dear Mr Roberts

RE: SUBMISSION TO JEMENA'S ACCESS ARRANGEMENT PROPOSAL

Origin Energy LPG (ABN 77 000 508 369, "Origin") appreciates the opportunity to provide input to the Australian Energy Regulator's (AER) deliberation over the Access Arrangement to apply to New South Wales gas Distribution Network Service Provider (DNSP) Jemena Gas Networks (JGN) in the period 2015-20. The AER has thus far worked in a highly cooperative manner with Origin with respect to this review and we welcome this approach.

Origin acknowledges that Jemena, too, has been more proactive in engaging with retailers in the lead up to this Access Arrangement re-set process than in the past, and appreciates these efforts. However, Origin continues to have fundamental concerns with areas of JGN's submission, in terms of both revenue components and terms and conditions.

Origin highlights that JGN's proposal must be consistent with the National Gas Objective (NGO) which is "to promote efficient investment in, and efficient operation and use of, natural gas services for the long-term interests of consumers of natural gas with respect to price, quality, safety, reliability and security of supply of natural gas."

JGN has proposed a significant increase in capital expenditure: an increase of $191 million, or 20 percent on the current period. In our view JGN has not sufficiently established either the basis on which it expects to maintain growth in new connections, or the actual extent of growth in localised peak demand. In terms of operational expenditure JGN have made assumptions about growth in the cost of labour inputs that also require further substantiation.

In relation to terms and conditions, JGN continues to propose a set of liability terms that is heavily and unjustifiably balanced in its favour, in contrast to other gas networks of comparable size and complexity. It also proposes to remove Temporary Disconnection services for small customers, even though these help customers in payment difficulty to get reconnected more easily.

JGN has proposed new tariff classes designed to facilitate an evolving market for embedded networks and distributed generation. While this initiative is welcome, JGN's fundamental approach still pays too much attention to the end use of the energy; when JGN should be considering embedded networks with one boundary meter and aggregate consumption over 10 terajoules (TJ) per annum to represent costs similar to those of a single large customer.

Our concerns are detailed in the attached submission. If you have any questions regarding this submission, please contact Steven Macmillan in the first instance on (02) 9503 5005.

Yours sincerely

Keith Robertson
Manager, Wholesale and Retail Regulatory Policy

Origin Energy

Response to Jemena Gas Networks Access Arrangement - Initial Proposal 2015-20

August 2014

Table of contents

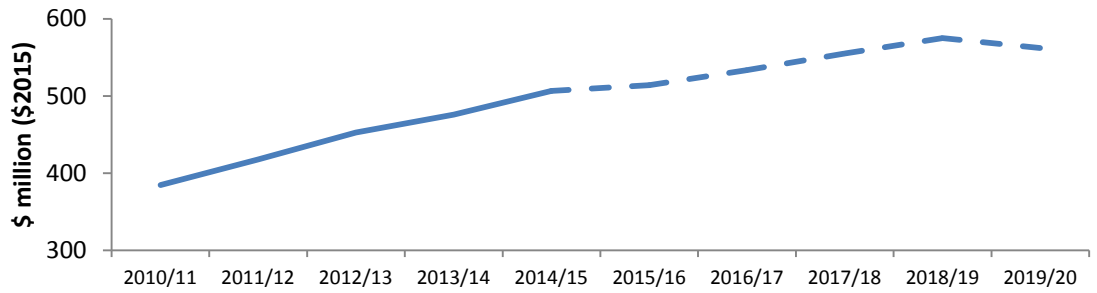
1. Revenue components

JGN outlined to retailers that its intentions for the next Access Arrangement period were to:

- Keep downward pressure on costs and gas prices;
- Continue to be proactive in attracting new customers;
- Respond to changes in the gas market; and
- Make it easier for customers to participate in the energy market.[1]

However, JGN also propose an increase in operational and capital expenditure over the next period, in part because their customers expect JGN to provide the "same high safety and service levels over the next five years, and to invest in improving our service quality to ensure all customers benefit from consistently high service levels in all areas of the network." [2] JGN's proposed total revenue in the current and next period are presented in Figure 1.1.

Figure 1.1 Jemena Gas Networks total revenue 2010-15 (approved), 2015-20 (proposed)



Source: JGN Access Arrangement Information 2010-15, 2015-20(Initial)

Origin seeks to understand on what basis JGN ascertained that customers wanted JGN to invest additional funds over above existing levels in improving service quality. JGN provide no evidence of customers wanting an improved level of network reliability, noting on the contrary that customers wanted JGN to take in to account the impact of their plans on end prices and to focus on improving efficiency. We note that in electricity customers, when surveyed, consistently say they want the same reliability standards maintained.[3] In light of this, Origin questions whether JGN's spending plans accurately reflect the outcomes of their engagement.

Presentation of trends in localised demand

JGN notes that "there is no direct relationship between the aggregate annual demand forecast described in chapter 5 and the localised conditions and observations that drive capacity development expenditure."[4] To the extent this fact precludes the AER from assessing the reasonableness of the proposed expenditure, this is of considerable concern.

One option would be for JGN to provide a histogram illustrating the distribution of peak demand growth rates across the network, at a disaggregated network level. Without some sort of representation of the variety of outcomes, Origin cannot assess the proposed expenditure, even at a high level. As such, Origin encourages the AER to apply careful scrutiny to this.

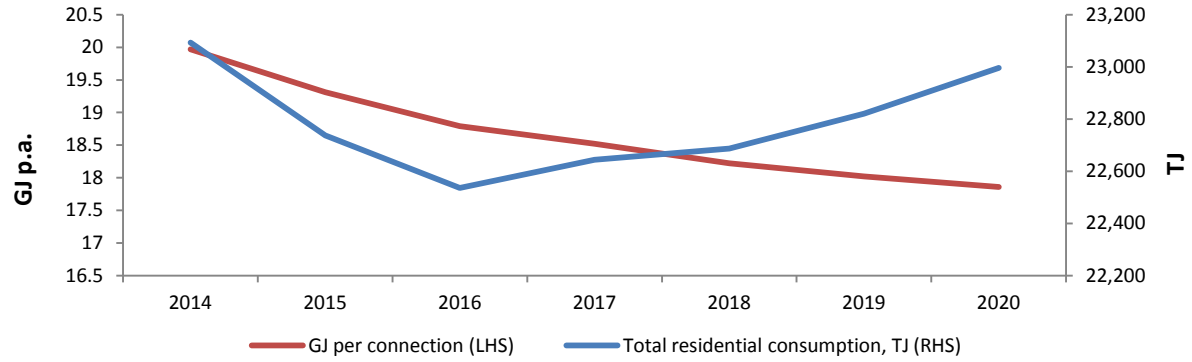
Capital expenditure on new connections

[1] Jemena presentation, "Key changes in the gas market", 29 May 2014
[2] Jemena Access Arrangement, Overview, p.xiii
[3] Ausgrid Regulatory Proposal, 2014, p.4; Endeavour Regulatory Proposal, 2014, p.2; Essential Regulatory Proposal, 2014, p.5
[4] Jemena proposed Access Arrangement, p.67

JGN notes that 40 percent of the proposed capital expenditure relates to market expansion over the next period.[5] In Origin's view, JGN's forecast for consumption is optimistic in light of expected increases in gas prices over the regulatory period. According to Core Energy Group ("Core"), which prepared demand forecasts for JGN, wholesale gas prices will double over the regulatory period from $4 to $8 per GJ and retail prices will rise to over $30 per GJ.[6] In response to this price signal average, annual demand per connection is expected to fall, from 19.31 GJ in 2015 to 17.86 GJ in 2020, with residential demand growing by 0.61% on a compound annual growth rate (CAGR) basis (Figure 1.2).[7]

JGN acknowledges these declines are "exacerbated by the forecast increases to retail gas prices, including the projected increases in the wholesale price of gas, and the increasing competitiveness of forecast retail electricity prices over the period."[8] These forecasts support the view that consumers will choose less gas in response to rising prices and that the incentive to connect to the gas network will be diminished. In contrast, JGN forecasts that total residential consumption will bottom out in 2016 then begin to grow again, reaching almost the 2014 levels by 2020, as outlined in Figure 1.2.

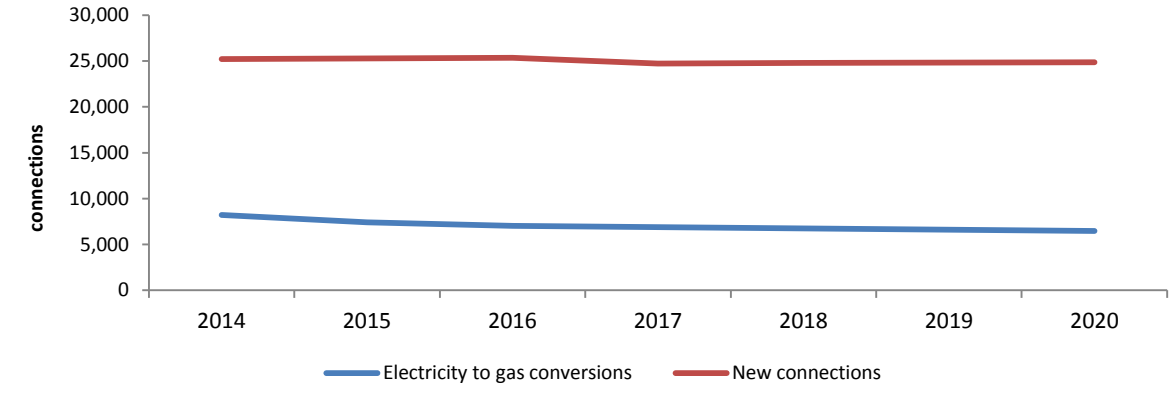
Figure 1.2 Jemena forecasts: Total residential demand and residential demand per connection, 2014-20



Source: Jemena Access Arrangement Information, Appendix 5.1, Table 3.8

The factor driving this discrepancy between demand per connection and overall residential demand is Core's forecasts for new connections and conversions in existing dwellings. Core forecasts new connections will increase from 165k in the current regulatory period to 188k in the next,[9] while conversions to gas in electricity-only homes will fall marginally following an initial fall of 10 percent in 2014-15.[10] These trends are outlined in Figure 1.3, below.

Figure 1.3 Core forecast: New connections and conversions in existing electricity only dwellings, Tariff V, 2014-20



Source: Jemena Access Arrangement Information, Appendix 5.1, Table 3.8

[5] Jemena Access Arrangement, p.44
[6] Core Energy Group, *Gas Demand and Customer Forecasts: Jemena Gas Networks, NSW Gas Access Arrangement 2015-2020*, p. 81.
[7] Ibid, p. 30-31.
[8] Jemena Access Agreement, p.33.
[9] Ibid, p.52-54.
[10] Ibid, p. 55.

JGN attributes the higher number of new connections to population growth in its network area and an increase in the construction of new estates and medium/high density premises.[11] A key assumption around new connections and conversions in existing dwellings is the success of JGN's marketing campaign, which Core anticipate will maintain growth despite a gas price signal to the contrary.

According to Core, the BASIX Program in NSW has typically contributed to a 90 percent penetration rate for gas in new homes. This number will decline however to 80 percent during the regulatory period due to higher gas prices and the availability of alternative technologies.[12] In other words, despite the availability of competitive alternative technologies like solar or reverse cycle heating, and the incentive of higher gas prices to consider other options, the BASIX marketing program will only be 10 percent less effective than it was in the current regulatory period. This is based on a "step change" in marketing expenditure.[13] In Origin's view, this is an optimistic assumption. As JGN state, in the Access Agreement:

> *"[G]as is a discretionary fuel of choice in NSW with increasing fuel options available to households and small businesses for cooking, heating and hot water. As a result, demand is more sensitive to movements in gas prices and other factors, relative to demand in cooler climates."*[14]

We agree with this analysis. The underlying basis for Core choosing an 80 percent penetration rate is opaque. Core states that it arrived at this figure by looking at historical data (presumably a 90 percent penetration rate) and following discussions with JGN's marketing executives.[15] It must be acknowledged that, medium density and high rise buildings are converted to gas as part of the building process before sale. Notwithstanding this fact, we do not believe Core has substantiated the 80 percent marketing penetration rate supporting JGN's forecast of new connections.

In relation to conversions, we think fewer customers will invest in converting existing appliances than in the current period, when they anticipate gas will become more expensive over the medium term relative to cheaper alternatives. Core notes:

> *[Electricity to gas] marketing will become increasingly difficult as the relative price outlook of gas vs. electricity moves in favour of electricity; The propensity for the influence of media (newspapers, electricity distributors etc) to impact consumer behaviour in anticipation of major price changes taking place will cause these declines in marketing impact to occur prior to actual price increases.*[16]

Origin concurs with the above statement, but the forecast for electricity to gas conversions is not commensurate with this, in our view. We would expect the number of conversions to diminish considerably, rather than only marginally. We seek further evidence of the interplay between an increased gas price, strong expectations of increases in gas prices, increased marketing spend and outcomes.

We encourage the AER to scrutinise these forecasts in light of JGN's proposed expenditure on market expansion of $451 million over the regulatory period, as well their proposed marketing budget.

Operational expenditure: wages and construction

In its forecasts for internal and external labour costs BIS Shrapnel reports that it expects a shortage of engineering and construction labour to place pressure on wages in the utilities sector, particularly towards the end of the regulatory period. In terms of internal labour cost

[11] Ibid, p.38
[12] Ibid, p.57
[13] Ibid, p.33
[14] Ibid, p.33
[15] Core, *Gas Demand and Customer Forecasts*, p. 57
[16] Core, *Gas Demand and Customer Forecasts*, p. 55

escalation, BIS Shrapnel forecasts average weekly ordinary time earnings growth of 4.4 per cent per annum in the Electricity, Gas, Water and Waste Services industry ('utilities') over the regulatory period.[17] This growth is attributed to increased demand for engineering construction workers in the NSW utilities sector.[18] With respect to external labour cost escalation, BIS Shrapnel notes that the construction sector supplies most of the out sourced labour for utilities, and that wages will average growth of 3.9 per cent over the regulatory period due to an upswing in construction activity.[19]

In Origin's view, investment activity will peak in the utilities sector in the current regulatory period and competition for labour will not be as intense as BIS Shrapnel forecast in its Input Cost Escalation Report. BIS Shrapnel acknowledges that overall labour supply will not be an issue in NSW, but suggests that the nature of the skills required in engineering and construction will create sufficient pressures to push up internal and external wages costs.[20] At the same time, BIS Shrapnel forecasts that national construction wages (including engineering) will "enter a phase of weaker growth, averaging 3.4 per cent per annum" before recovering to 4 per cent at the end of the regulatory period.[21]

Origin believes that BIS Shrapnel has not fully taken account of the potential for slowing construction activity nationally to absorb some of the upswing in activity in NSW. With the construction phase of the resources boom coming towards an end, workers in Western Australia and Queensland will become available to meet the demand for labour that BIS Shrapnel forecast in the latter parts of the regulatory period. With mining construction activity having peaked, and the resources sector transitioning into a less labour intensive production phase, labour mobility ought to absorb some of this increase in demand for construction workers in NSW.[22] Although these workers may live in other states, it is likely that a number of workers will be willing to relocate to take advantage of employment opportunities in NSW. This is particularly the case in the mining sector where workers often relocate as part of undertaking employment. As a recent Productivity Commission report suggests, the mining industry has the highest labour mobility of all the sectors in the Australian economy whilst the construction industry is about average in terms of its labour mobility.[23]

Curiously, BIS Shrapnel forecasts that construction activity in NSW "is expected to lift considerably in the second half of the decade as the surplus of generation activity is slowly eroded through continued population growth and industrial activity, placing greater demands on electricity supply."[24] This is despite AEMO's Electricity Statement of Opportunities stating that NSW will not require new capacity beyond 2023-24.[25] Rather, in NSW there will be surplus capacity of between 1,450 MW and 3,100 MW in the market in 2023-24 and there will be "sufficient surplus generation capacity to meet growing local consumption and exports to Queensland."[26] In Origin's view, BIS Shrapnel's assessment of labour pressures in utilities and construction is highly unlikely following the network overbuild from the current electricity regulatory period and continued decline in demand for energy.

Overall, Origin believes that BIS Shrapnel has overestimated internal and external labour pressures in the utilities sector, meaning wages growth will be more muted following the fall in national construction activity. A combination of interstate and local labour supply will help to ease wage pressures in the utilities sector at a time when investment in energy networks in NSW has peaked. JGN can therefore expect that cost escalations with respect to wages will be much more muted than BIS Shrapnel has forecast.

[17] BIS Shrapnel, *Input Cost Escalation Report*, April 2014, p. 34. This is in Wage Price Index terms.
[18] Ibid, p. 33.
[19] Ibid, pp. 37-38.
[20] Ibid, pp. 34-35.
[21] Ibid, pp. 37-8, 47.
[22] Reserve Bank of Australia, *Statement of Monetary Policy*, August 2014, pp. 43, 46-47.
[23] Productivity Commission, *Geographic Labour Mobility*, April 2014, p. 14.
[24] Ibid, p. i.
[25] AEMO, *Electricity Statement of Opportunities for the National Electricity Market*, August 2014, p. 6.
[26] Ibid, pp. 2, 16.

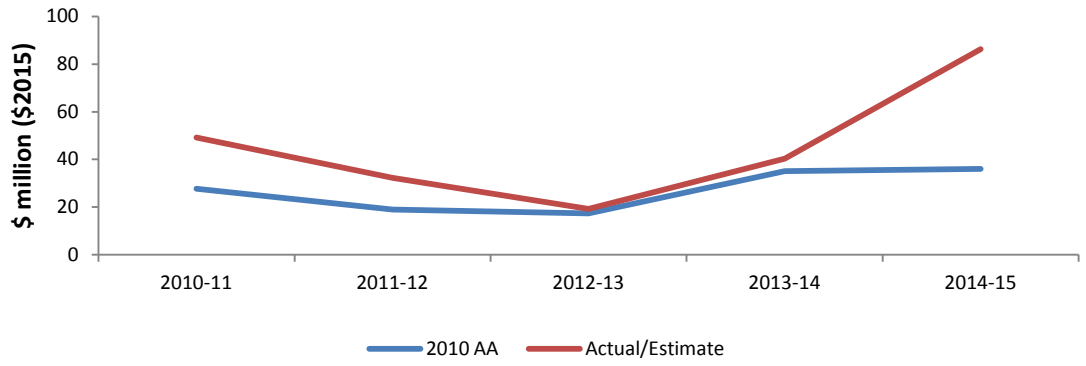
Information technology upgrade

Origin notes that JGN was allocated $97.5 million ($2009–10) for an upgrade of their information technology (IT) systems in the current period. In the current proposal JGN notes:

JGN expects to have invested $957.9M in capital expenditure, which is 8.7 per cent higher than the amount the AER allowed, primarily due to unexpected expenditure on property and IT systems in 2014-15.[27]

JGN's capital expenditure on IT and other non-system assets is outlined in Figure 1.4, below, which shows considerable increase in the early and latter years of the period.

Figure 1.4 JGN expenditure: IT and other non-system



Source: JGN AAI 2015-20, p.29

JGN is yet to complete its upgrade to a SAP operating system and is still providing its small customer bills as one aggregate line item in a document presented in 'pdf' format. In light of this, Origin questions what assets the $97 million in expenditure delivered, as well as the additional 8 percent overspend. To the extent these were network management systems we would expect to see a concomitant reduction in costs for network maintenance.

JGN note that a principal feature of the proposed capex program in the next period is "completing the GASS+ replacement project which will replace JGN's legacy asset and works management system with a SAP-based system."[28] It is unclear how this can be a principle component of the next period's capital expenditure program, given the $97 million allocation in the last period, the significant overspend in the last period associated with IT related assets, and the failure to move to SAP in the last period. We question whether the AER should view all of this capital as conforming expenditure under the NGR.

Regulated return on assets built without permission

JGN is seeking compensation to relocate its network assets that were originally constructed on land without the relevant permissions. JGN should not be compensated for any poor decisions in not acquiring necessary permissions while constructing the network.[29]

Tariff rebalancing

In Origin's experience some of JGN's tariff rebalancing on Demand tariffs in the current period has weighted large increases on the lower blocks of inclining block structures. Origin requests that the AER pay close attention to the alignment of tariff increases with projected volumes to ensure revenue is collected in line with approved revenues.

[27] JGN Access Arrangement Information, 2015-20, p.20
[28] Jemena proposed Access Arrangement, p.47
[29] AAI Clause 6.3.6, paragraphs 251 & 252

2. Terms and conditions

Removal of temporary disconnection for small customers

JGN proposes to remove the Temporary Disconnection service for small customers. Origin currently uses this service when a customer has failed to pay their bill. JGN retain the customer on the relevant retailer's customer list and in the event the customer does settle their payment, they are reconnected on the same terms.

Origin opposes JGN discontinuing the Temporary Disconnection service, since:

- The sole driver for the change, as identified by JGN, has not been established and so the change is unnecessary;
- the change will reduce flexibility around reconnecting customers and specifically make it harder for a portion of customers who are more likely to be in hardship to get re-connected;
- the additional contractual churn will add to costs and delays with no concomitant benefit.

JGN proposes to remove temporary disconnection, on the basis that the model contract terms in the NERR preclude them retaining a customer on the customer list after ten days. If a customer settles their outstanding debt after 10 days, JGN proposes to require the Network User to apply for the customer as a new connection. JGN have confirmed that the NERR model terms are the only reason they are contemplating removing the temporary disconnection service.

In Origin's view there is nothing in the National Energy Retail Rules that preclude JGN from maintaining the temporary disconnection service, leaving the customer on the Network User's customer list, and signing them up on the same terms as soon as they settle their outstanding debt. We believe removing the temporary disconnection service is unnecessary and counter to the NGO in terms of the efficiency of gas services, as it will lead to administrative delays and impediments to customers with payment difficulties being reconnected.

The relevant section of the model terms in the NERR are below:

13.1 Where we must reconnect

(a) If you are a small customer, we must arrange for reconnection of the premises if, within 10 business days of your premises being disconnected:

(i) where your retailer asked for the disconnection—if we are asked by your retailer to reconnect the premises; or

(ii) in other circumstances—if

(A) You ask use to arrange for reconnection of your premises; and

(B) You rectify the matter that led to the disconnection; and

(C) You pay any reconnection charge.

(b) We may terminate this contract 10 business days following the disconnection if the requirements in paragraph (a) are not met.[30]

Under the NERR Part 6 Division 4 there is no distinction between temporary disconnection, permanent disconnection and de-commission – all of which would constitute de-energisation. The NERR reference above does not oblige JGN to do anything regarding their customer list, nor does it relate to the contractual arrangement between the customer and the Network User. To the extent a Network chooses to terminate its contract with the customer, the NERR do not oblige JGN to remove the customer from JGN's customer list and the customer remains associated with the retailer in the market (as JGN have acknowledged) and so JGN have no exposure regarding any subsequent network charges.

[30] NERR, Schedule 2 Model terms and conditions for deemed standard connection contracts

To Origin's knowledge no DNSP in any jurisdiction where the NERR are already in force has found they are obliged to remove the customer from the agreement between the DNSP and the Retailer if the customer does not settle their payment within ten business days. Origin is unclear how JGN has come to a contrary understanding.

The impact of JGN's withdrawal of the temporary disconnection service is that it will be more administratively complex to reconnect a customer, since this will be a new request for service and this cannot be requested via a service order. This is counter to the interests of all parties, since:

- The customers in this situation are more likely to be having difficulty paying their bills and hence creating more complications around reconnection after they have settled their outstanding payment could exacerbate the delay;
- It is in JGN's interest to reconnect customers as soon as possible so that they can continue to purchase JGN's haulage services;
- It is in the retailer's interest to reconnect the customer as soon as possible, since the alternative is a poorer customer experience and a greater risk the customer will churn.

In Origin's experience, unnecessary delays in re-connecting customers who have settled outstanding debts can lead to Ombudsman complaints.

Origin believes removing the temporary disconnection service is counter to the NGO in terms of the efficiency of gas services. Origin believes JGN should maintain the temporary disconnection service in the interests of the NGO. The AER should provide a view on whether the NERR Model Terms preclude JGN (and other DNSPs) providing a temporary disconnection service.

Indemnities and other imbalanced terms

Origin has long had concern with the imbalanced nature of JGN's indemnity provisions. While Origin notes JGN has attempted to address these, we remain concerned that the proposed terms are still less balanced than on any other major gas distribution network where Origin has customers. The clauses of concern to Origin are outlined below. We then examine how these distinguish JGN from other regulated gas DNSPs of similar size and complexity. Origin highlights that unreasonable and unnecessarily imbalanced liability provisions run counter the National Gas Objective in that they inefficiently allocate risk between parties and impede the efficient delivery of the service.

Clause 1.1 - the definition of Damage

- This includes legal costs on a full indemnity basis. This is not standard and to Origin's knowledge, is not found on any other gas distribution haulage terms. This should be deleted.

Clause 6.2 – Unauthorised overrun

- The User is liable for consequential loss under this clause (cl. 26.5(a)(i)), whereas JGN is not (cl.26.4);
- The User's liability is unlimited (cl.26.5(a)(i)) under this clause, whereas JGN's is capped (26.3(a)).

Clause 10.1(d) – Delivery of gas at a receipt point that does not meet the specification

- This indemnity applies to all gas delivered, but should apply only to gas delivered *on behalf of the user*, as per AER's decision in Victoria;[31]
- The User is liable for consequential loss under this clause (cl. 26.5(a)(ii)), whereas JGN is not (cl.26.4);
- The User's liability is unlimited (cl.26.5(a)(ii)) under this clause, whereas JGN's is capped (26.3(a)).

Clause 10.3 (c) – Curtailing off-spec gas

- The User is liable for consequential loss under this clause (cl. 26.5(a)(iv)), whereas JGN are not (cl.26.4)

[31] Multinet VIC (2013), Part C, clause 4.7(c), AER Draft Decision Multinet VIC (2013), Part 2, p.253

- The User's liability is unlimited (cl.26.5(a)(iv)) under this clause, whereas JGN's is capped (26.3(a)).

Clause 14.9(b) – Gas doesn't meet pressure specifications
- The User is liable for consequential loss under this clause (cl. 26.5(a)(iii)), whereas JGN is not (cl.26.4);
- The User's liability is unlimited (cl.26.5(a)(iii)) under this clause, whereas JGN's is capped (26.3(a)).

Clause 22.3 – Suspension of gas at request of Service Provider
- The User is liable for consequential loss under this clause (cl. 26.5(a)(iv)), whereas JGN is not (cl.26.4);
- The User's liability is unlimited (cl.26.5(a)(iv)) under this clause, whereas JGN's is capped (26.3(a)).

Clause 23.7 – Load shedding, interruption, curtailment, cessation
- The User is liable for consequential loss under this clause (cl. 26.5(a)(iv)), whereas JGN is not (cl.26.4);
- The User's liability is unlimited (cl.26.5(a)(iv)) under this clause, whereas JGN's is capped (26.3(a)).

Clause 26.1(e) - Mitigation
- There is an obligation in indemnity 26.1 so that when an indemnity has been invoked both both parties must try to mitigate the damage that is the subject of an indemnity. This should apply to all indemnities (not only to 26.1) and this should be made clear in the drafting.

Clause 26.3(b) – JGN's capped liability
- JGN's liability is limited to the amount **recoverable** under their policies of insurance.
- If JGN's liability is going to be limited, then there should be obligations on JGN to maintain certain insurance and not do anything which would mean that it cannot recover under the insurance or make the insurance void.

JGN has the following comments in relation to the unlimited liability that apply to Network Users but not to JGN itself, provided in support of its Regulatory Proposal:

a small number of specific User responsibilities which are of particular importance to ensure the safe and reliable supply of gas through the Network are excluded from the scope of the User's liability limitation referred to in 3(b) above. These relate to the gas which the User contracts (upstream) to have delivered into JGN's Network meeting the specification and pressure requirements for the Network and complying with JGN's requirement to cease delivery (when required by JGN under the Agreement).[32]

Origin questions the basis for these limitations on reciprocity, being that they are of "particular importance". Envestra has a comprehensive limitation on liability in its South Australian Access Arrangement Terms and Conditions, and this limitation is **reciprocal** in all cases. Envestra faces comparable risks to Jemena as the operator of a large gas distribution network. The relevant clause in Envestra's Terms and Conditions states:

*To the extent permitted by law, the maximum amount that **either party** will be legally liable to pay to the other party (and to any other person or persons) as damages for compensation in respect of the death or any person or any injury to any person or any damage to any property will be limited to $100 million in aggregate in relation to any one event or occurrence (aggregating all damages and compensation due to the other party and each person in respect of that event or occurrence). Neither party will have any right to recover damages or compensation from the other party in relation to any claim to the extent that the other party's liability will then exceed the limit set out in this clause."* [Emphasis added][33]

[32] JGN, *Explanation of JGN's Reference Service Agreement*, p.32
[33] Envestra, *South Australian Access Arrangement Terms and Conditions*, cl.27.7, p.25

Origin highlights that the AER has approved similar clauses on Envestra's network in Queensland[34], as well as in Victoria gas networks, including Multinet, which shares owners with JGN.[35]

With respect to the imbalanced treatment of consequential loss, JGN provides no explanation as to the justification for this. Origin notes that Envestra also exclude consequential loss on a reciprocal basis:

*To the extent permitted by law, **neither party** will have any liability to the other party, for or in respect of any claim (whether in tort, in contract or otherwise) for any loss of business or business interruption, loss of profit, loss of revenue or loss of opportunity, or for any other purely economic or monetary loss, or for any indirect, special or consequential loss, cost, expense or damage, which the other party may suffer or incur.* [Emphasis added][36]

As with the overall limit, Origin does not understand why Envestra is able to manage risk better in such a way that it can make its limitation on consequential loss reciprocal in all cases, whereas JGN does this in only some cases.

The AER should require JGN to bring its liability provisions in line with what other large gas DNSPs have demonstrated is possible, by making its proposed limitations on liability and on consequential loss apply equally to all parties.

Embedded networks and cogeneration

Models for the provision gas, electricity and hot water are evolving, with a growing focus on generation for buildings and precincts. JGN's approach to pricing for embedded networks in the past was that a single large user providing energy related services to numerous sub-users would be charged as if each of the sub-users was an individual customer. This approach is peculiar to JGN and is not cost reflective. It sets charges on the end use of the gas, even where JGN's costs were similar as for a commercial or industrial site. This approach has made projects uneconomic that would otherwise have gone ahead. Origin has raised these concerns with JGN and in response JGN have proposed the following new tariffs:

- Volume Boundary Meter (VB), and
- Volume Residential Distributed Generation (VRT).

Origin has some concerns with these tariffs as they are proposed in JGN's proposal.

The VB tariff's annual fixed charge of $1550 is high when compared to other networks, for example, the equivalent aggregate charge on Envestra's network is $142.[37]

The VRT tariff is only provided in four of the 11 urban zones. JGN needs to clarify why only these zones are included. For example, a cogeneration project on Sydney's North Shore (Zone 5) would need to adopt a Demand Capacity large customer tariff if it was above 10 TJ per annum. The first 50 GJ of demand capacity for Zone 5 are $3,636, compared with $743 for Zone 4 and $155 for Zone 6. This rate appears very high and would presumably rule out any cogeneration in that part of Sydney. Origin requests that JGN prepares VRT rates for all urban zones.

The minimum consumption for eligibility to the VRT tariff is also too high. This threshold means projects between 10 TJ and 50 TJ cannot benefit from JGN's new approach to embedded networks. A significant proportion of cogeneration projects involve less than 50 TJ per year. All projects above 10 TJ are equivalent to medium sized commercial sites in terms of JGN's costs and so should be able to benefit from the VRT rates.

[34] Envestra, Queensland Access Arrangement Terms and Conditions, cl.27.7, p.23;
[35] SP Ausnet Victoria Gas Access Arrangement Terms and Conditions, cl.13.6(b), p.41
[36] Envestra, South Australian Access Arrangement Terms and Conditions, cl.27.6, p.25
[37] Envestra Charges Queensland as of September 2014 , a daily charge expressed here in annual terms

The mix of residential and non-residential use should not be a factor in JGN's considerations. JGN states it is the same pipelines and other assets required to transport gas to supply energy to small customers so they should pay similar rates. This does not logically follow. The same pipelines are used to deliver gas to large commercial and industrial customers also, but they are charged less because they are less costly to administer, due to the lack of small customer metering. The same is true of a single site where a Retailer or third party manages a sub-network of customers. 10 TJ a year should be the threshold above which VRT applies (and below that threshold the VB tariff can apply).

In addition, JGN's conditions for embedded networks are unnecessary and onerous. Clause (b) requires the User to communicate certain things to the customers of the network, when in fact JGN has no relationship with these customers and expressly excludes itself from any liability with respect to these customers. Clause (c) requires the User to have all approvals and authorisations to on sell energy, when this is the User's concern, not JGNs; this clause should be removed. Clause (e) requires the User to:

acknowledge that where any Gas delivered to the Delivery Point is used in connection with the supply of hot water to residential units through a centralised gas fired hot water system, the End Customers at those units will not have the benefit of the standard design controls applied by the Service Provider to new residential centralised hot water systems where the Service Provider provides Measuring Equipment for each residential unit. Without limiting or restricting condition (c) above, the User is responsible for satisfying all laws and customer expectations concerning the supply of hot water to End Customers at the premises;[38]

JGN has no knowledge of what goes on beyond the boundary and hence cannot know whether the end customer is getting a level of service that is better or worse than they would with meters provided by JGN. From Origin's experience a startlingly high proportion of JGN's water meters are in need of replacement. In other cases, JGN does not have a relationship with the building owner and so cannot access meters that are internal to the property and so relies on estimation rather than actual reads. It is quite plausible that a customer's experience could be greatly improved from moving to an embedded network arrangement, in the way that already occurs on all large gas networks except JGN's. As such, clause (e) should be removed.

Lastly, Origin notes that JGN is not a regulator and that taking on a quasi-regulatory role adds to administrative costs and delay unnecessarily.

Quotes for Network augmentation

Origin has found that when JGN provides a quote for network augmentation required to connect a new customer (or to expand their connection), their quotes provide little detail of their cost components and can vary widely. This lack of transparency makes it difficult for proponents of these projects to prepare plans of likely network costs associated with a project, which impedes the efficient provision of energy services. JGN could helpfully provide a set of standard minimum conditions.

Gas that does not meet specifications - Liability

An individual network user should not be liable for losses it suffers due to a separate network user introducing gas that does not meet the specifications. Currently, JGN cannot be held responsible for non-compliant gas unless "all gas received by the Service Provider at all Receipt Points meets the Specification".[39]

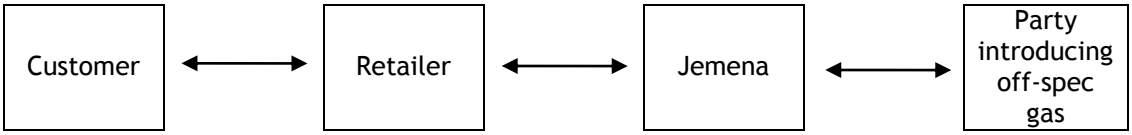
JGN will have an RSA with each Network User that covers JGN for any non-compliant gas introduced. This means JGN can pursue the Network User that introduces the off spec gas and compensate other Network Users who suffer loss as a result of the non-compliant gas introduced

[38] Jemena proposed Reference Service Agreement, Annexure 7
[39] Proposed RSA, clause 10.6

by another party. Network Users do not necessarily have contracts with all other Network Users, whereas JGN will always have these through the RSA.

In the scenario in Figure 1.5 if a customer was to pursue Origin because of off-spec gas introduced by a third party, Origin would have no recourse to JGN or the party that introduced the off-spec gas, but JGN would have recourse to the party that introduced the off-spec gas. Since JGN has this recourse it should pursue the claim.

Figure 1.5 Relationships in gas provision



As an alternative, JGN should be liable for the quality of gas on the network, recognising that each Network User is independently liable to JGN for the gas introduced on its behalf.

Clauses in the proposed Reference Service Agreement that are inconsistent with NECF

A number of clauses do not align with the amendments to the NGR flowing from the National Energy Customer Framework (NECF), as outlined below.

Billing frequency[40]

This should be made consistent with 506 (1) of NGR – that is, no later than the 10th business day of the retail billing period.

Due date for payment[41]

While JGN proposes 14 days, this is not consistent with NGR 502 ('due date for payment' definition), which says 10 business days, because 14 days is less time over holiday periods than 10 business days and will not allow enough time to reconcile charges and arrange authorisation and payment.

Interest on overdue payments[42]

JGN proposes that interest be based on a corporate overdraft rate – this is inconsistent with the NGR (476(1)), which states this rate will be the bank bill swap rate plus two percent, which is less than the corporate overdraft rate.

Security[43]

This should reflect the provisions in the NGR, being clause 298, Part 3, Chapter 9 of the National Gas Law.

Network billing

Presentation of bills – aggregation of small customer haulage charges

Origin notes that JGN currently provides a bill for the small customer segment that aggregates all consumption into a single line item, labelled "Miscellaneous". Origin notes that this single line item is the largest service JGN provides Origin. This approach is not consistent with the

[40] Proposed RSA, clause 20.3
[41] Proposed RSA, clause 20.4
[42] Proposed RSA, clause 20.6(b)
[43] Proposed RSA, clause 28

efficiency objective in the NGO. Origin currently tries to work backwards to verify these charges, using its own consumption data. Unfortunately, this is an imprecise calculation because of uncertainty around the number of master meters and sub-networks. Origin believes that once JGN move under the coverage of Part 21 of the National Gas Rules this approach will not be compliant with rule 506 (2)(a) which states:

(2) The Statement of charges must include:

(a) the distribution service charges, separately identified, in respect of each shared customer's premise for which metering data was received, or a service request was completed, during that retail billing period.

Origin understands JGN is targeting the second quarter of 2016 as start date for the NSW business-to-business (B2B) system and that this will facilitate more detailed network bills. These plans notwithstanding, Origin seeks assurance that JGN's bills will be compliant with rule 506(2)(a) as of 1 July 2015.

Presentation of bills – 'pdf' format

JGN issue their bills in a 'pdf' file format, drawn from a spreadsheet. This means that Origin must manually transcribe records of service orders for small customers and the details of large customer accounts into a spreadsheet manually, which is highly inefficient. Origin requests that, in the lead up to the commencement of B2B systems (scheduled for in 2016), JGN provides the data in its original spreadsheet format to facilitate data entry and to reduce the margin for error.

JGN also lacks standard processes for expressing the calculation of charges on its bills. When Origin queries these charges, JGN charges for the investigation, which would not be required if more detail was required in the initial bill. This compounds inefficiencies.

Bundling of disconnection and reconnection fee

Origin notes that JGN includes the cost of reconnection in the disconnection fee of $150. Origin has a number of concerns with this approach.

In terms of cost, if the average cost of either the disconnection or reconnection service is taken to be $75, this is considerably higher than SP Ausnet's more geographically dispersed gas network in Victoria, where the fee is $54.[44] The charge is also not particularly efficient or cost reflective; if a customer changes to a new retailer or moves house after being disconnected the out-going retailer may not be able to recover the reconnection charge component, when that customer may already have a substantial standing debt. This will be exacerbated to the extent JGN insists on removing the temporary disconnection, as outlined above.

Bundling of service to property and metering charges

Origin notes that JGN proposes to combine all fixed costs in one annual charge, which would include:

- the fixed cost nature of natural gas distribution;
- the cost to connect customers to the network having regard to the size, location and type of network user; and
- the fixed nature of metering costs.

Origin understands from JGN that the motivation for this change is to facilitate the end customer calculating their final tariff component, as a basis for comparison of retail offers. Origin questions this decision.

[44] SP Ausnet 2014/15 Tariff Schedule, p.27

For the very small customer portion of the customer base that wants to calculate their net network component, this would equally be feasible by adding a metering component and a residual fixed component. The reason customers cannot do this now is because the metering component depends on the capacity of the meter – something the average small customer would not be able to assess. If the metering component was the same for all types of small customer meters (and the proposed aggregate must include an average metering cost), then these customers could still do the calculation.

Origin questions whether bundling together metering and JGN's other fixed costs is consistent with the efficiency objective in the NGO. The benefit of having the metering charge expressed separately is that models for service provision in energy and related services are evolving, with potential for more competition in these services. An example of this is JGN's approach to volume boundary tariffs that recognise the potential for embedded gas networks. The business cases for these projects are easier to assess when the avoided metering charges are transparent. Origin notes this is the same fundamental principle supporting the AER's decision to classify metering services as alternative control services under the National Electricity Rules.

Lastly, as per other networks, JGN's fixed charges should be expressed on a daily basis, as per other networks, in the interests of clarity and transparency and, since billing is on the monthly basis and months vary in length. Currently, this transparency is missing making it difficult for retailers to reconcile network bills and explaining network charges to customers.

Fixed charges expressed on a per annum basis

JGN proposes to calculate some charge volumetric components based on the gigajoules consumed each quarter or month, rather than the quantity of gigajoules delivered over the billing period.[45] To Origin's knowledge "Quarterly" is not defined, and evidently months vary in length. These charges should be on a total volumetric basis over the billing period (which is defined in each bill) so that retailers and customers can more easily replicate these calculations, in the interests of efficiency. To Origin's knowledge all other gas DNSPs are able to express volumetric charges over the billing period. Origin notes that JGN propose to express fixed charges (such as metering charges) as a $/p.a. amount.[46]

Disputed payments

Proposed clause 20.7(c) allows the Network User to withhold payment where it believes the invoice is incorrect. However, this is only permissible where the bill is "manifestly inaccurate". This requirement is unique to JGN and is an unreasonable standard given Origin's understanding of the higher incidence of inaccurate gas and hot water meters on JGN's network and its opaque approach to network billing. A more suitable requirement would be that the Network User be "acting reasonably" when disputing a charge.

Furthermore, while the User does not have to pay an amount which is manifestly wrong, JGN can require the User to pay interest on the disputed amount that is not manifestly wrong. This seems unreasonable and is not in line with standard practice on other networks.

Metering

Metering accuracy and timeliness

In Origin's experience, JGN has a significant number of gas meters and hot water meters that are not accurate. There is no explicit requirement in the Access Arrangement for JGN to test gas meters, merely a requirement on the Network User to test them where the Network User is responsible for them[47] and an implied obligation on JGN.[48] In relation to hot water meters, there

[45] See for example the calculation of the Volume Throughput Rate
[46] JGN Access Arrangement, p.53
[47] Proposed Reference Service Agreement, cl. 15.2(b)

is no requirement implied or otherwise. Where meters are inaccurate or faulty this impedes the achievement of the NGO. Other DNSPs have explicit requirements in their access arrangement to test meters they own as required by law,[49] and relevant legislation here would appear likely to include the *Gas Supply (Gas Meters) Regulation 1997 (NSW)* and the *National Measurements Act (1960)*; the latter states that measuring instruments relied on for trade must be verified.[50] An explicit requirement on JGN should be included in JGN's Access Arrangement.

Beyond including a requirement for JGN to test its meters regularly, the AER should consider including an incentive mechanism that will encourage JGN to improve the performance of their meter fleet. Retailers are constrained in their capacity to raise a dispute under the Access Arrangement in relation to the general problem of JGN's substandard performance in this area. This means that even where there is a requirement for JGN to meet a standard this does not of itself guarantee an effective result. The NGR provides that:

A full access arrangement may include (and the AER may require it to include) one or more incentive mechanisms to encourage efficiency in the provision of services by the service provider.[51]

Origin believes that meter data accuracy is a very suitable metric for which such an incentive mechanism could be included. The accuracy of the meter fleet has a direct bearing on the efficiency of the services provided and the quality of the customer experience. When a customer has to query estimates or inaccurate bills, this creates inconvenience and difficulty, and the risk they of being over-charged. Origin strongly supports an incentive mechanism being included in the Access Arrangement that ties a portion of JGN's revenue to is improvement in the area of meter data accuracy.

Metering communications equipment at large customer sites

Clause 17.1(a)(ii) of the proposed RSA obliges JGN to install communications equipment at large customer sites where "where economically and technically feasible". Origin notes that JGN frequently report that they do not have adequate cellular or other network coverage to install communications equipment. In Origin's experience, the majority of the sites are in the wider Sydney metropolitan area where the extent of coverage has greatly improved. The lack of communications equipment means outcomes can vary and retailers are required to make adjustments to large customer accounts with differences significant in some cases depending on variation in the wholesale price. Origin believes that a reasonable endeavours obligation should be placed on JGN to

- establish whether there is coverage available;
- provide communications equipment where coverage is available;
- provide evidence coverage is not available where this is the case.

Lack of B2B process

Standards of service order completion

In Origin's experience, the standards for the completion of service orders as provided for in JGN's *Retail Guide* are inadequately codified and not to a standard equivalent with other large gas DNSPs. Equally, JGN's rate for successful completion of service orders is inadequate. Origin understands these shortcomings will be addressed through the move to B2B systems in the NSW gas market, separately from the Access Arrangement. Nonetheless, we highlight these problems because they create genuine impediments to the efficient provision of gas services in NSW and hence to the NGO.

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[48] Origin notes that a requirement to test at the request of the retailer exists in the NSW Gas Distribution Code, however we understand the entire code is currently subject to review.
[49] See Envestra Terms and Conditions for South Australia and Queensland, cl.10.1
[50] *National Measurements Act (1960)*, cl.18GA
[51] National Gas Rules, version 21, Part 9, Division 9, cl.98(1)

A pertinent example relates to the process by which a customer moving in to a site where the previous customer was disconnected for non-payment. Outside NSW the new customer can contact any retailer and request a new account be set up. In NSW the customer must contact a retailer, the retailer contacts AEMO, AEMO contacts the customer to notify them of the retailer of the previous customer, the customer contacts that retailer, the out-going retailer re-connects the customer and settles the account, then finally the customer can ring a different retailer and select a market offer of their choosing.

Origin accepts that the best way to manage these sorts of inefficiencies is via the forthcoming reform of the retail market procedures rather than the Access Arrangement, since the latter can be varied over time in accordance with established principles, whereas the latter is formalised over a five year period. However, Origin highlights that these issues are of pressing concern and the move the B2B will be an important step in promoting the NGO in NSW.

Reform to Network Code

Origin understands from JGN's Proposal that the current NSW Gas Distribution Network Code sets minimum standards for the relationship between network operators and retailers, but that the document was originally written by JGN and was last reviewed in 2002. Origin believes that the document needs an independent review, as well as a review mechanism for enabling regular updates and changes, which include consultation.

Origin understands from JGN that as of June 2014, the NSW Department of Trade and Investment, Regional Infrastructure and Services was reviewing the ongoing operation of the Network Code in view of the significant overlap and some inconsistencies between the Network Code and provisions of the National Energy Retail Law and National Energy Retail Rules which commenced operation in NSW in transitional form on 1 July 2013. Origin looks forward to the outcome of this process and encourages the AER to ensure that the decisions its takes allow for any changes the NSW Government might be looking to make in this area. (The Victorian Gas Distribution Code provides an effective model for this review.)

Disconnections

Personnel requirement

JGN currently requires a representative of the retailer to be present when disconnecting a Commercial/Industrial customer. No other gas DNSP has this requirement and Origin does not believe this requirement is necessary.

Unaccounted for gas

The terms and conditions in the RSA leave too much discretion to the network in relation to the purchase of unaccounted for gas (UAFG). For example:

- Clause 9.4(b) as drafted appears to relieve the network operator from any responsibility with regards to its custody and control of the gas once it has been received. We believe that as an experienced and responsible network operator, the network should not be relieved of any responsibility once it receives the gas.
- Clause 9.5(a) to (d) gives the network too much discretion over how much Unaccounted For Gas (LG Quantity) it purchases, the period of time over which (the LG Period) it purchases gas and how often it purchases UAFG.
- Clause 9.5(f) does not put the responsibility of the UAFG volume risk on the network.

We understand that, in practice, the network purchases UAFG every day and is required to carry exposure to volume risk, but that the network passes on the price risk to network users via its annually adjusted tariffs. We understand that the network is required to justify to the AER that

it has acquired the UAFG on a competitive commercial basis. The terms and conditions of the RSA should reflect actual practice and remove any discretion from the network in these matters.

Also in relation to UAFG, Origin seeks assurance that to the the extent JGN has spent capital on replacing and improving its network a commensurate reduction in gas is demonstrated. JGN does not make its lost gas percentage public (where Envestra does) and hence Origin cannot verify the trends itself. Therefore we encourage the AER to apply scrutiny to this on the Users' behalf. This should also apply to replacement expenditure in the next period.

New connection terms for large customers

Origin notes that the Proposed RSA includes terms relating to new connections[52]:

(i) Except where clause 11.3(j) applies, where the delivery point requires connection to those Network facilities:

> *(i) in the Service Provider's reasonable opinion, it is technically and economically feasible to connect the delivery point to those Network facilities (in which case, such connection will be subject to such charges and conditions as determined by the Service Provider); and*
> *(ii) the Service Provider and the User agree on the requirements (if any) for the installation of a Delivery Station, the connection charges (or other capital contribution) and any other charges payable in respect of the delivery point, the MHQ and (where applicable) the MDQ.*

In Origin's view, this should not be solely at the discretion of JGN. Unless otherwise agreed between the parties, some standard principles should apply to non-standard new connection contracts, including:

- JGN should be responsible for activities that relate to network assets such as asset locations, obtaining permission from landowners, maintaining easements, etc;
- Balanced liability clauses should apply under which each party is responsible for the activities that they control and exclusions of liability should be reciprocal;
- Construction should be undertaken to relevant standards; and
- The applicant is to reimburse the network's reasonable costs.

Origin has recently been offered terms and conditions that JGN sought to impose for a new connection. Origin requested new sets of terms and conditions from the network but terms and conditions that were provided were no better than the onerous terms and conditions. Origin reluctantly had to inform the customer that it was unable to assist with the new connection as a result of the terms and conditions offered by the network. We do not believe that the onerous terms and conditions provided align with the National Gas Objective.

New Receipt Points

Clause 14.2(b) of the Proposed RSA states that a New Receipt Point should meet all relevant industry specifications and specifications as required by JGN. This should include a reasonableness limitation on JGN.

Clause 14.7 entitles JGN to operate a Receipt Point. This should be removed, in Origin's view. This requirement puts an obligation on the User to oblige the pipeline operator to provide JGN operating rights over equipment that belongs to the pipeline operator. This is not feasible for the Network User and hence is unreasonable. Furthermore, in the event JGN were to operate a pipeline receipt point, this would be likely to have an effect on pipeline operation. JGN offers no indemnities to any parties as a result of it operating part of the pipeline.

[52] Proposed RSA, 11.3(i)

Changes to receipt points or delivery points

The proposed RSA permits JGN to refuse to change a receipt point or delivery point if this means it would earn less revenue.[53] Origin believes this is an unreasonable barrier to efficiency.

Daily Forecasts Not Needed Under Normal Conditions

Clause 7 of the Proposed RSA requires all users to forecast their withdrawals from the network every day. This appears to be an unnecessary holdover from before the implementation of the Short Term Trading Market. The network only has input over forecast withdrawals under emergency conditions, hence this is an unnecessary requirement that should be removed except in the event of an emergency.

Pressure control pipeline operating as flow control pipeline

Clause 4(b) of Annexure 4 of the Proposed RSA appears to describe both pressure control & flow control pipelines being able to perform a flow control pipeline function. It is unreasonable to require a third party to the RSA (a pressure control pipeline operator) to duplicate the functionality of a flow control pipeline. Origin seeks further clarification of JGN's intention in relation to this.

Responsibility for Delivery Station Components

Annexure 6 outlines Responsibility for Delivery Station Components. However, the Annexure appears to apply a different approach for assets that were in place prior to and after 1 August 1997. This appears an arbitrary distinction and Origin would like the justification for this clarified.

Creation of supply points

JGN currently request retailers to initiate new supply points in the market whereas on other networks, this is a responsibility of the network. Origin believes this a process best managed by the network.

[53] Proposed RSA, 13(b)