

SGN Natural Gas GD17 Draft Determination Consultation Response

31st May 2016



SGN
Natural Gas

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1. Overall Approach

1.1 Introduction

1.1.1 As part of the GD17 Draft Determination (DD) document, the Regulator (UR) outlines the considerations and approach taken, with respect to the whole process and setting of draft allowances. This chapter was broadly split as follows:

- Price control Process:
 - Timelines and stages;
 - Price control principles;
 - Consumer and stakeholder engagement;
 - General Stakeholder engagement.
- Duration of the Price Control; and,
- Form of Price control.

This response document will set out our thoughts on the overall approach followed to date by UR, we have split this into the 3 sections outlined above for ease of reference.

1.2 Price Control Process

- 1.2.1 Paragraph 3.11 outlines the expectation that we will resubmit our Business Plan Template (BPT), including 2015 actuals. Whilst the resubmission of the BPT is wholly appropriate, given the low value of costs incurred within 2015, we feel that the signed Regulatory Accounts due with UR by 30th June 2016 should suffice.
- 1.2.2 We welcome the fact that, given all the work occurring at present, that the 2015 Annual Cost Reporting (ACR) template submissions have been delayed to June 2017 (for the 2015 and 2016 calendar years).
- 1.2.3 We also fully welcome paragraph 3.14, which outlines the continual post DD response engagement that will occur over the coming months up to the publication of the Final Determination (FD) document.
- 1.2.4 We understand the need for licence modifications to be implemented post FD publication. We have an initial discussion with UR scheduled for 6th June 2016 to present our thoughts regarding the modifications drafted for SGN Natural Gas. These are discussed in more detail chapter 10 of this response paper.
- 1.2.5 Paragraph 3.18 sets out the fact that SGN Natural Gas had to delay the start of our Price Control (PC) period to 1st January 2018, in this regard, we have entered into PC discussions a year earlier than we would have anticipated, meaning we are still currently finalising final network build plans and the associated targets that are connected to this. Hence, the need for further full engagement outlined by paragraph 3.14.
- 1.2.6 We would like to point out that this early engagement means that gaps remain within key areas of the draft determination, namely around volumes and penetration rates, capex unit rates, mobilisation operating expenses, connection incentives and the pre/post tax WACC.

- 1.2.7 Given our submitted pre-tax WACC for Gas to the West was based on a minimum expected final return from the project (i.e. post-tax) to our shareholders, and it is not proposed to change the PNGL or FE WACC to a post-tax basis, we strongly believe the SGN Natural Gas WACC should remain pre-tax. Notwithstanding this - if there is a move to a post-tax WACC this has to be done on a NPV neutral basis.
- 1.2.8 We look forward to the “lessons learned” process engagement scheduled for Q1 2017 and are keen to be involved in this process to provide any constructive information that would hopefully benefit all parties involved in PC engagement for future periods.
- 1.2.9 We have concerns around benchmarking of SGN Natural Gas Capex at our current stage of development compared to that of the current NI incumbent GDNs. The current UR analysis does not include adjustments to cater for the regional nature, the relative maturity or the workload mix of each the GDNs. It also does not make any allowance to cater for changing market conditions.
- 1.2.10 Whilst we understand the need for benchmarking, being compared to the “Frontier” of efficiency instead of an “Upper Quartile” appears inappropriate in our view. As the newly developing GDN in NI, to be on the “Frontier” of efficiency from the first year of the first PC is extremely ambitious, whilst we drive efficiency, there is only so much that is realistically achievable.

1.3 Duration of the Price Control

- 1.3.1 The 6 year duration of the GD17 PC is welcomed, due to the certainty of allowances that this brings, assuming that the package of allowances is sufficient to ensure the long term viability of the Gas to the West project.
- 1.3.2 We have been supportive of this longer duration in our response to the overall approach document as published by UR, however, given the significant gaps in allowances that are evident at present, our position would support some sort of mid PC review.
- 1.3.3 Paragraph 3.51 outlines the fact we will have gas available in our towns from Q4 2017, hence, the reason for the delay in the start of our PC to 1st January 2018. In reality, the current uncertainty surrounding the HP/IP build at present could significantly affect these timescales.
- 1.3.4 UR need to ensure this is given consideration when setting allowances to allow SGN Natural Gas to recover the agreed rate of return for the full 5 year duration we bid on.
- 1.3.5 UR also need to ensure that our reasonably incurred mobilisation and business as usual operating and capital costs are fully accounted for in an appropriate TRV, prior to commencement of the start of the first year of our PC.

1.4 Form of the Price Control

- 1.4.1 Paragraph 3.54 explains the incentives and rationale for the use of a “price capped” form of PC.
- 1.4.2 The significant gaps that are evident with the volumes set in the DD compared to those submitted by SGN Natural Gas as part of the Business Plan (using the information available at a point in time), will significantly hinder any opportunity to outperform and ,in turn, the benefit of a “price capped” PC.
- 1.4.3 However, given the engagement on volumes that will occur over the coming months, we are hopeful, as part of our final PC package, that the targets will be appropriately set, in order that the “price cap” works correctly and achieves what it intends to.

1.5 Conclusions

- 1.5.1 Given that we have entered into price control engagement a year earlier than we would have anticipated, there remains significant gaps in key allowances between our business plan requests and those detailed in the draft determination.
- 1.5.2 We look forward to the recently agreed continued engagement with UR throughout the coming months to try and agree an overall package that ensures the feasibility of the Gas to the West extension for GD17 and beyond.
- 1.5.3 Whilst we have had engagement to date, there are areas that we would have liked to have been improved. It is important to note that we still feel that there is sufficient time in order that we can address this as part of our ongoing dialogue with UR (as reiterated by UR in paragraph 3.14 of the draft determination document).

2. Volumes and Connections

2.1 Introduction

- 2.1.1 Maximising natural gas volumes is key to the overall economic success of the Gas to the West project and ensuring that the total forecast GD17 volumes are in line with customer requirements is key to supporting natural gas as an economic choice for the Northern Ireland energy consumer.
- 2.1.2 SGN Natural Gas, as the gas distribution operator for the Gas to the West area, is acutely aware that the circumstances around a new 'Greenfield' business present a specific set of uncertainties around customer forecast volumes, which if not addressed at the price control stage, may manifest into future revenue and price uncertainties for both SGN Natural Gas and Gas to the West consumers respectively.
- 2.1.3 SGN Natural Gas recognise the importance of accurately calculating these volumes to ensure overall designs are efficient and transportation tariffs remain as stable and affordable as possible for end users which in turn will provide a stable foundation for the growth of the customer base in the Gas to the West area.
- 2.1.4 Under or over forecast of these I&C volumes will increase the likelihood of under and over recovery and a volume based re-opener by the Regulator (UR) of SGN Natural Gas' price control settlement, which in turn could lead to the resetting of distribution tariffs.
- 2.1.5 We have witnessed in the GB gas regime the importance of reducing gas tariff volatility which has been communicated by gas shippers in relation to the risk premium they build into their customer tariffs.
- 2.1.6 SGN Natural Gas understands that stable and predictable distribution tariffs are important to the end users and the Northern Ireland gas industry as a whole and as such have attempted to reflect discussions with end users regarding volume forecasts and connection timings to ensure these forecast volumes are as accurate as possible. Please note that in some instances reasonable assumptions based on industry knowledge have had to be made in relation to customers who have been reluctant to supply information to us, engagement with these customers to ascertain the required information is still ongoing.
- 2.1.7 Currently the Draft Determination (DD) document highlights a significant gap between our submitted volumes and current draft targets. We will work with UR over the coming months through continued engagement to ensure we reach an agreement on volumes that are reasonable and achievable by providing evidence where available on larger user's current fuel consumption.
- 2.1.8 It should be noted that our final build plan roll out is currently a work in progress and we still have future engagement processes to go through in order to finalise the plans, this could potentially impact the volumes target greatly. Notwithstanding this, there remains the current uncertainty surrounding the current HP & IP build that will also have a significant impact on take on rates for large users.

2.2 Identified Uncertainties

- 2.2.1 The SGN Natural Gas GD17 Business Plan submission identified a number of uncertainties which will impact on the rate and number of forecast connections in the Gas to the West area which will in turn impact on the realisation of forecast volumes across the price control period.

- 2.2.2 At present our final build plan roll out is a work in progress and we still have future engagement processes to go through in order to finalise the plans, this could potentially impact the volumes target greatly.
- 2.2.3 Notwithstanding this, there remains the current uncertainty surrounding the current HP & IP build that will also have a significant impact on take on rates for large users.

2.3 Key Considerations in Volume Estimation Process

- 2.3.1 SGN Natural Gas would outline there are 4 main points which must be taken into consideration when determining forecast volumes for the GD17 price control determination, namely:
- Risk and uncertainty associated with general economic climate;
 - The timing of forecast gas connections;
 - The appetite and cost to customers of switching to natural gas over alternative fuels; and
 - Determining the accuracy of actual forecast volumes.
- 2.3.2 The customer profile in the Gas to the West area is significantly different to the customer profiles in both the Phoenix Natural Gas and Firmus Distribution areas, with a much more predominant industrial / commercial presence over the domestic category in relation to the forecast volume throughput.
- 2.3.3 The Gas to the West area has four very large contract customers who account for over 70% of the forecast I&C volume throughput across the GD17 period and therefore ensuring that these volumes are accurately forecast is paramount to ensuring that the tariffs set for all customers remain affordable and price volatility is avoided.

The risk and uncertainty associated with such a large percentage of the overall volume linked to a comparatively small number of customers presents an acute risk for SGN Natural Gas in terms of setting forecast volumes if, for whatever reason, one or more of these customer volumes were to be withdrawn.

2.4 Domestic & Very Small I&C (up to 2,500 tpa – P1 category equivalent)

- 2.4.1 The current modelling for domestic and very small I&C connections contains assumptions that we are currently discussing with UR and we have agreed to present an updated view linked to our final build plan and assessed take on rates during the engagement over the coming month.
- 2.4.2 In relation to Northern Ireland Housing Executive (NIHE) connections, a penetration rate of 100% has been used in the DD. Applying the existing GDNs in Northern Ireland as evidence, this penetration rate is not achievable primarily due to the fact the tenant has veto power on whether gas is installed in the property, - a recent meeting with the Housing Executive has confirmed this.
- 2.4.3 Failure to pass these properties when they are due heating upgrades can lead to connections being missed for up to 15 years (NIHE lifespan of new heating system). It is our understanding that in some of the existing GDNs towns the penetration rate is believed to be as low as approximately 65% due to tenants choosing alternative fuel options.

- 2.4.4 This is even though gas is readily available and the GDN, along with NIHE and their appointed contractor are trying to convince the tenant to connect.
- 2.4.5 In relation to existing OO properties, a peak of 70% has been assumed by UR in the draft determination (DD), whilst this could be achieved over the 40 years, it is important to consider the annual PP when applying an annual penetration to this.
- 2.4.6 Achievement of OO connections is linked to the connection incentive received (see chapter 4 for detailed discussion), tables 24 and 52 of the DD show how much progress PNGL and FE have made in 20 and 10 years respectively, given the significant sums of money they had to utilise in relation to connection incentives.
- 2.4.7 We will continue to engage with UR in this area to agree an achievable target for this customer group as we consider the domestic penetration rates used in the Draft Determination are too aggressive and do not align with SGN Natural Gas' connection rates assumptions.
- 2.4.8 We have detailed below the domestic draft determination in comparison with the SGN Natural Gas business plan volumes over the same period which details a 5.7m therms difference between the SGN Natural Gas Business Plan and the Draft Determination across the GD17 period.

Table 1 - SGN Natural Gas and DD Domestic volume differences

Price Control Year	2017	2018	2019	2020	2021	2022	GD17 Total
DD Existing	-	491,800	983,600	1,290,975	1,598,350	1,905,725	6,270,449
DD NIHE	-	403,712	504,640	605,568	706,496	807,424	3,027,840
DD New Build	-	-	133,808	259,368	408,227	547,994	1,349,396
DD Total Domestic	-	895,512	1,622,047	2,155,910	2,713,073	3,261,143	10,347,685
	2017	2018	2019	2020	2021	2022	GD17 Total
SGN BP Existing	23,773	130,387	329,848	622,156	1,007,312	1,450,165	3,563,641
SGN BP NIHE	5943	32,597	82,462	155,539	251,828	362,541	890,910
SGN BP New Build	-	-	6204	24,796	52,044	85,843	168,887
SGN BP Total Domestic	29,716	162,983	418,514	802,492	1,311,184	1,898,550	4,623,439
Total Difference – SGN BP v DD	+29,716	-732,529	-1,203,533	-1,353,418	-1,401,889	-1,362,593	-5,724,246

2.5 Small I&C (2,500 to 25,000 tpa – P2 category equivalent)

- 2.5.1 The current modelling for small I&C connections contains assumptions that we are currently discussing with UR and we have agreed to present an updated view linked to our final build plan and assessed take on rates during the engagement over the coming month.
- 2.5.2 We will continue to engage with UR in this area to agree an achievable target for this customer group.

2.6 Medium, Large & Contract I&C (>25,000 tpa – P3 to P7 category equivalents)

2.6.1 SGN Natural Gas consider that there are 3 areas which, when combined, lead to the significant differences between the DD volumes and SGN Natural Gas's GD17 Business Plan submission volumes:-

- The timing and phasing of I&C connections;
- The inclusion of additional loads; and
- The SGN Natural Gas 80% volume forecast versus the UR 100% volume forecast.

2.6.2 We have detailed below in Table 4 the differences between the SGN Natural Gas GD17 Business Plan submission volumes and the GD17 Draft Determination (DD) volumes by I&C sectors.

Table 2 - Draft Determination I&C volumes

Price Control Year	2017	2018	2019	2020	2021	2022	GD17 Total
DD I&C Small & Medium	-	2,058	39,325	125,798	204,436	272,559	644,176
DD Large	-	953,200	1,906,400	1,906,400	1,906,400	1,906,400	8,578,800
DD Contract	7,674,113	23,022,387	30,695,500	30,695,500	30,695,500	30,695,500	153,478,500
DD Total I&C	7,674,113	23,977,645	32,641,225	32,727,698	32,806,336	32,874,459	162,701,476

Table 3 - SGN Natural Gas Business Plan

Price Control Year	2017	2018	2019	2020	2021	2022	GD17 Total
SGN BP I&C Small & Medium	2058	18,125	51,398	171,656	290,806	429,220	963,263
SGN BP Large	32,000	325,200	1,082,400	1,742,400	1,906,400	1,906,400	6,994,800
SGN BP Contract	5,700,800	17,147,200	20,283,837	21,928,237	21,928,237	22,093,837	109,082,147
SGN BP Total I&C	5,734,858	17,490,525	22,077,635	23,842,293	24,125,443	24,429,457	117,700,210

Table 4 - SGN Natural Gas and DD I&C volume differences

Price Control Year	2017	2018	2019	2020	2021	2022	GD17 Total	%
Difference between DD and SGN Volumes	-1,939,255	-6,487,120	-11,223,590	-8,885,405	-8,680,893	-8,445,002	-45,661,266	-
Timing / phasing Volume difference	-	-	2,453,071	-	-	-	2,453,071	5
Additional Volumes - difference	875,000	2,625,000	3,500,000	3,500,000	3,500,000	3,500,000	17,500,000	39
SGN 80% and DD 100% Volume difference	1,064,255	3,862,120	4,610,520	5,535,405	5,180,893	4,945,002	25,048,195	56

2.6.3 The total I&C volume difference over the GD17 period is 46m therms with the difference between the SGN Natural GD17 Gas Business Plan and the DD volumes being 2.5m therms associated with timing / phasing differences, 17.5m therms linked to additional volumes and 25m therms derived from the SGN Natural Gas GD17 Business Plan that uses volumes at 80% of the total I&C volume compared to the DD assumption of 100%.

Timing / Phasing Volume Difference

- 2.6.4 Aside from the issue associated with the potential delivery delay connected to planning and carriage way access which may in itself push back expected volume timings, SGN Natural Gas have undertaken detailed I&C customer discussions which have included expected connection timings.
- 2.6.5 A number of large I&C customers have indicated that they expect to connect to the gas network when gas is available outside of their premise although timings associated with plant conversion and the use of remaining fuel stocks may further delay actual connection. We expect to further refine this volume category over the coming month as we continue to meet a number of large and contract (P4 –P7) customers.
- 2.6.6 We will provide customer's indications of their connection timing forecasts as far as we possibly can during these discussions with UR to further substantiate that the Applicant Information Pack (AIP) profile connection percentages are not appropriate for the current circumstances on the Gas to the West network, especially the profile associated with the Contract customers as detailed in section 5.42 of the DD set at year 1 – 25%, year 2 – 75% and from year 3 – 100%.
- 2.6.7 The removal of the volume difference associated with connection timings (2.5m therms over GD17) would reduce the margin between the SGN Natural Gas Business Plan volumes and the DD volumes to approximately 43.5m therms and would in our opinion align to actual customer connection expectations.

Additional Volumes

- 2.6.8 The DD includes a 50% of 7m therms per annum volume profiled across the GD17 period at 25% for year 1, 75% for year 2 and 100% from year 3 onwards. SGN Natural Gas did not include any additional volumes within the GD17 Business Plan submission as we considered that the likelihood of these volumes being realised was not substantiated following customer meetings.
- 2.6.9 Also, we note in the GD14 Final Determination paragraph 9.10, the fact that UR disallowed 'general' reductions for FE, given the fact that excluding this matched the assumption of no additional loads, hence, the openings and closures would equalise over the PC period.
- 2.6.10 Recent examples of closures in the Ten Towns area of FE are the loss of approximately 6 million therms per annum within Ballymena with the imminent closure of JTI and Michelin Tyres, which shows the fragile nature of Industry in Northern Ireland as well as the risks attached to being so reliant on large industry.
- 2.6.11 As we have not requested any 'general' closure allowance to be made, we would request that the 'general' additional load assumption be removed. We will discuss this fully with UR over the coming months during engagement.

80% Volume Assumption

- 2.6.12 This was used in our base case as it was seen to reduce the risk of an under-recovery due to forecast volumes not being realised if 100% were used in initial years and resulted in a subsequent tariff increase for customers to mitigate the volume shortfall.

- 2.6.13 The SGN Natural Gas position on this is that this would not be a desirable outcome. It would create significant uncertainty and future disincentive for customers to use and / or switch to a natural gas at a critical time in the project. SGN Natural Gas also consider there still exists a high level of risk associated with economic factors impacting on the viability of many businesses in the Gas to the West area.
- 2.6.14 A number of generic factors can be applied to each customer's volume which are applicable in part due to the 'Greenfield' nature of SGN Natural Gas' operation, i.e. a set of circumstances which will prevail due to the one-off nature of the switch from their existing fuel source to natural gas. These can be summarised as follows:
- Due to the requirement to install new or modified equipment to use natural gas, the first year's burn for I&C customers will be uncertain. A period of commissioning / testing and the use of two fuel sources will impact on realised annual volumes. This may span more than one regulatory year; and
 - We believe environmental / carbon emissions policies are also having an impact on design volumes of I&C loads – as costs increase for I&C customers relating to the emission of carbon and the use of fossil fuels and more efficient processes and procedures evolve this is leading to overall reduced energy requirements. This will impact on the current energy used in the GD17 forecast usage and has been taken into account in the 80% base load assumption.
- 2.6.15 Uncertainty around timescales for connection to the natural gas network is leading to end users extending their commitment to existing fuel sources to ensure they reduce their risk exposure to higher spot prices for oil in the future. Until both the high pressure and low pressure route and design work is fully established and confirmed, SGN Natural Gas are only able to provide indicative timescales for possible connection. This uncertainty in connection timelines is leading to increased potential for reduced volumes in initial years of the GD17 period.
- 2.6.16 SGN Natural Gas included large and contract I&C forecast volume figures within the GD17 Business Plan submission to closely reflect actual forecast volumes following several stakeholder engagement discussion meetings with our I&C customers, particularly over the period Summer 2015 to the current time who represent just over 70% of the total I&C volume.
- 2.6.17 We have also previously engaged the services of an I&C gas industry professional with considerable Northern Ireland experience over a number of years to review in detail I&C customer requirements and expectations to assist us in establishing as accurate as possible I&C volumes over the GD17 period. These discussions have taken place with onsite customer engineering experts to discuss in detail the actual energy requirements of industrial process equipment and also the manner in which equipment is physically utilised.
- 2.6.18 For example, a number of customers have twin boiler installations on site but only operate both appliances in circumstances where occasional operational processes require a higher level of heat input, where normal operational requirements only require single boiler use.
- 2.6.19 SGN Natural Gas have now employed a dedicated Head of Business Development who has considerable industry experience who will continue to meet I&C end users over the coming 2 months to further discuss energy requirements and provide factual evidence as far as possible to UR of actual forecast energy requirements.

- 2.6.20 We will provide this evidence to UR following the submission of this GD17 Draft determination response and will continue to engage with UR on finalising I&C volumes in light of this information.
- 2.6.21 SGN Natural Gas included within the GD17 Business Plan submission our view of the considerable impact that falling oil prices have had on the Northern Ireland energy market, especially the marked reduction in heavy fuel oil and kerosene prices which fell substantially from the 2014 high price of \$100 a barrel to the low, recorded in January 2016 of \$28 a barrel. Further details were also included in a supplementary paper "2016-01-28 SGN Natural Gas GD17 Oil Price Paper BG.docx" forwarded to the UR on the 23rd February 2016.
- 2.6.22 Although oil prices have recovered slightly since January 2016 to the current market price of \$49 a barrel, World Bank Commodity Forecast price data (April 2016) indicates a very slow increase in forecast prices up to \$58 a barrel in 2022 which still represents significant savings to end users over pre 2014 oil prices.
- 2.6.23 SGN Natural Gas considers that the economic uncertainty that exists in the market place in relation to alternate fuel prices still has the potential to impact on I&C volumes and timings of connections.
- 2.6.24 A number of customers in the contract load category have indicated to SGN Natural Gas that they will retain their HFO or Gas Oil capability to provide the option to switch fuels should market price signals determine more economic energy sources are available.
- 2.6.25 Of the four very large customers, three have indicated that they intend to retain their alternative fuel options and one customer has specifically communicated to SGN Natural Gas that they will proactively switch between fuels where it is economic to do so.
- 2.6.26 SGN Natural Gas considers this factor has the potential to severely impact on the realisation of full volumes from large and contract I&C customers throughout the GD17 period.
- 2.6.27 The SGN Natural Gas base I&C volume included in the GD17 Business Plan is 80% of the potential load only on the basis that some customers would not burn the full forecast annual quantity for the full price control period, due to:
- inherent engineering design assumptions made in the original forecast (which are based on a peak demand requirement) overstated load; or
 - their appetite for switching from HFO to natural gas being delayed due to economic factors; or,
 - the potential for customers with a dual fuel capability to 'mix and match' their energy sources where fuel pricing signals incentivise alternate arrangements.
- 2.6.28 Overall we still consider that it would not be prudent to include a 100% volume assumption in the GD17 period. We consider there is a significant risk of under recovery which would lead to an increase in tariffs at a critical time resulting in a significant detrimental impact.
- 2.6.29 We will continue to engage with UR in this area to agree an achievable target for this customer group.

Current Market Intelligence and Connection Assumptions

- 2.6.30 Since our submission, we are continuing to engage with potential customers to ascertain exact annual volumes for each contract site. The data has been collated from information received directly from the customer and it details their current annual fuel consumption for the 15/16 period. An example of the evidence collected to date is provided in the accompanying Appendix 2.

This is the most up to date and relevant data that can be used to accurately determine potential volumes in GD17 and any discrepancies from the original FMA figures used in the AIP. Our findings highlight some discrepancies such as those outlined in Table 4 below:

Table 5 – Large Load customer differences

Customer	Difference
Cust 1	86,000
Cust 2	-560,000
Cust 3	-714,000
Cust 4	325,000
	-863,000

Note: Full Table with supporting evidence shown in the Appendices

- 2.6.31 Paragraph 5.40 of the DD highlights the closure of one company with the loss of 3.4m therms and this volume was subsequently removed from the overall DD17 volumes. SGN Natural Gas market intelligence has identified further loads that have since closed from the FMA study was completed.
- 2.6.32 **Table 6** details the individual and total volumes that have closed, been removed or are not connectable since the FMA study was completed and therefore SGN Natural Gas would request that these volume also be removed from GD17.

Table 6 - Large Load customers

Customer	EAC (Therms)
Cust 1	3,400,000
Cust 2	340,000
Cust 3	320,000
Cust 4	200,000
Cust 5	90,000
	4,350,000

Note: Full table with supporting evidence in shown in the Appendices

- 2.6.33 For purposes of **Table 7** below, gas live is the point in time when the gas is made live to a customer's meter. Connection date is the point in time when the customer commences use of natural gas on site following the conversion (or part conversion) of their plant.
- 2.6.34 Customer connection dates in **Table 7** below allows for a three month window after gas live date. (Note - these dates are based on a December 2016 main project planning approval.) This window allows for potentially unforeseen operational delays in the build plan as well as testing and commissioning of pipelines and therefore our gas live date. Whilst every effort is being made to ensure delays in the build plan do not occur, previous industry experience from other GDNs shows these delays frequently happen.

Table 7 - Large Load programme dates

Customer	Gas Live Date	Customer Connection Date
Cust 1	Nov-16	Nov-16
Cust 2	Jul-17	Oct-17
Cust 3	Dec-17	Mar-18
Cust 4	Dec-17	Mar-18
Cust 5	Dec-17	Mar-18
Cust 6	Dec-17	Mar-18
Cust 7	Dec-17	Mar-18
Cust 8	Dec-17	Apr-18
Cust 9	Dec-17	Apr-18
Cust 10	Dec-17	Jul-18
Cust 11	Jul-18	Jul-18
Cust 12	Jul-18	Oct-18
Cust 13	Jul-18	Nov-18
Cust 14	Sep-18	Dec-18
Cust 15	Sep-18	Dec-18
Cust 16	Oct-18	Jan-19
Cust 17	Nov-18	Feb-19
Cust 18	Nov-18	Feb-19
Cust 19	Dec-18	Mar-19
Cust 20	Dec-17	Apr-19
Cust 21	Jul-18	Jul-19
Cust 22	Jan-18	Jan-20
Cust 23	Oct-19	Oct-21
Cust 24	Oct-19	Oct-21

- 2.6.35 Unforeseen engineering issues could be construction difficulties on the preferred gas route, unknown culverts, traffic management issues, contractor resource problems etc.
- 2.6.36 The three month window also allows for problems the customer may encounter during their conversion process such as new plant delivery delays, commissioning delays with their contractor, general conversion problems such as plant failure etc.
- 2.6.37 For customers that to date have been reluctant to provide any form of commitment either verbally or in writing with regard to their willingness to convert when gas is available, we have applied a 6 month window (additional 3months from standard) to allow for additional customer engagement.
- 2.6.38 In the instance of government bodies where a conversion to gas will be solely lead by the overall payback of their conversion project and their application in advance for the capital investment, a 12 month window has been applied to allow for funding applications once gas live date confirmed and the possibility the funding may not be approved. If the funding is not approved, it will be the following year before it can be applied for again.
- 2.6.39 In the instance where Bio Mass has been installed a two year window has been applied as the customer will require new boilers and burners meaning the initial capital investment needed will make the payback less attractive.

- 2.6.40 As the customer has made a conscious decision not to utilise a fossil fuel on their site they are likely to have a reluctance to move back to one taking into account the current focus on carbon emission reduction. Therefore, the extended window allows for the additional engagement required to negotiate a possible conversion to natural gas.
- 2.6.41 Synopsis of timeline assumption from gas live to connection date.
- LPG and Oil – 3 month window;
 - Oil and no willingness to convert – 6 month window;
 - Government bodies who will need to apply for funding – 12 month window; and
 - Bio Mass sites – 2 year window.
- 2.6.42 How a load profile ramps up to full gas burn will vary depending in the complexity of the conversion, amongst other factors. Any assumption that 100% of the load will be available from the connection date forward is not feasible for the large majority of conversions contract customers.
- 2.6.43 Factors affecting the profile of how a customer's gas load will ramp up to full gas burn include
- Amount of plant required to be converted e.g. one steam boiler versus a production line;
 - Customer's intention to run down their existing oil stocks e.g. convert one boiler and leave one boiler on oil until it runs out;
 - Customers capital investment – phased investment versus full investment up front;
 - Customers susceptibility to lost production time e.g. 24/7 vs 5 days a week, may wish to convert certain plant at certain times to minimise disruption; and
 - Seasonal - heat dependant loads will have a preference to wait until summertime.
- 2.6.44 From the point a customer connects until the point they are at full burn we have applied the average of the shortest likely full burn scenario being zero days and estimating the longest to be 2 months, therefore an average of a 4 week lead in time has been reasonably assumed.
- 2.6.45 For the 4 week period of the lead in time from connection to full burn, the customer volume has been adjusted to an average of a reasonably assumed 50% of full burn potential.
- 2.6.46 The information contain in paragraphs 2.6.30 through to 2.6.45 and the further information we will provide over the coming weeks in our direct discussions with the Regulator will further evidence that the uncertainty with regard to the large and contract loads is a crucial element in correctly sizing the volumes for this customer group. The uncertainty of consumption directly linked to the dual fuel operation, delays in connection until GD23 and the potential for relocation of plant outside of the Gas to the West area all increase the risk of volumes not materialising to the extent detailed in the DD.

2.7 Conclusions

- 2.7.1 We expect to further engage with large and contract customers over the coming weeks to discuss both timings of connections and expected volume loads to further engage with the Regulator over the month June 2016 to reach agreement on GD17 volumes. We consider that the DD volumes can only represent a holding position until these discussions have concluded.
- 2.7.2 Although the variance between SGN Natural Gas Business Plan I&C volumes and DD volumes at this stage is currently 45m therms over the GD17 period we consider that 5% of this difference is attributable to timings / phasing of demand connecting across the GD17 period and SGN Natural Gas customer engagement will realise realistic connection timings which decrease this variance.
- 2.7.3 Our assessment of the DD volume figures calculate that the additional loads, which account for 38% of the variance to the SGN Natural Gas Business Plan volumes will also be addressed through discussions with our customers over the coming month. We have already discussed these additional loads with a number of end users and we consider that there is a sizeable risk associated with incorporating even 50% of the 7m therms included within the DD volumes.
- 2.7.4 The SGN Natural Gas position on the reduction of volumes to take into account the potential of risk associated with customers not burning their full volume due to economic factors which influence their order books is still high as well as the potential for customers to close completely due to external macro impacts. We consider volume expectations detailed in the DD to be too high and present a sizable risk to the stability of distribution tariffs across the GD17 should they be maintained at their current level as quoted in the DD.
- 2.7.5 We have already witnessed a number of large industrial customers closing throughout Northern Ireland which would, if they had been connected to the Gas to the West network, had a major impact on the GD17 period volumes.
- 2.7.6 We consider that the most pragmatic approach to volumes is to incorporate an element of volume reduction to take account of this risk to ensure that any tariff impact on all customers connected to the Gas to the West network is mitigated.
- 2.7.7 As with both the timing of connections and the additional loads we expect to further engage with end users over the coming month to gather further evidence to substantiate our reduced volume figure with a view to meeting with UR in June 2016 to further discuss the area of volumes. As we discussed earlier, the timings of loads coming onto the network is an emerging issue which will not be fully developed until the issues associated with planning and road access are resolved or become fully transparent.

3. Opex Requirements

3.1 Introduction

- 3.1.1 There are three main areas of Opex in which a significant difference exists between the Business Plan submitted by SGN Natural Gas and the Draft Determination (DD) document issued by the Regulator (UR).
- Mobilisation;
 - I.T. Systems; and
 - Additional Opex Allowed.
- 3.1.2 In the draft determination UR have provided for mobilisation costs up to Q4 2017 and then 5 years of Opex. We believe for the reasons set out in the response below that mobilisation ends Q4 2016 and we would therefore need 6 years of business as usual Opex commencing from January 2017.
- 3.1.3 This has resulted in a shortfall of funding of £0.9m notwithstanding other Opex items such as additional transitional staff time of £0.6m, and further GD17, costs including IP build process of £0.5m p.a.

3.2 Mobilisation

- 3.2.1 SGN Natural Gas would like to reiterate our position concerning the mobilisation dates. As previously discussed in response to supplemental question DD-019 (Post Draft Determination) April 2016, throughout the bid process and the submission, SGN Natural Gas have taken the mobilisation date to end on First Operational Commencement Date (FOCD), as stated in the bid application pack (page 3, Annex 6) and further understood this date to be the date that gas was first available, which is scheduled for Strabane in October 2016. However from the draft determination it is stated that FOCD is currently envisaged to be Q4 2017. SGN Natural Gas is of the opinion that this would be Full Operational Commencement Date and the time between the two dates will in effect be the first year of business as usual.
- 3.2.2 As at mobilisation end the bid shows all necessary resources, systems, processes and procedures being in place. This is also consistent with subsequent discussions with UR following grant of Licence in relation to compliance. Chapter 3 of the bid document shows the period following mobilisation to Full Operational Commencement date (when gas is available at all Transmission AGIs i.e. Q4 2017) as "Business As Usual" or Year 1. Figure 1 on page 46 of the bid document and Figure 3 on page 50 show all necessary resource being in place by the end of mobilisation i.e. October 2016.
- 3.2.3 We note there is no mention of price control periods in the bid document Chapters. Details were simply presented for mobilisation leading directly into FOCD and Years 1 to 10 inclusive. We believe the confusion may have arisen as a result of the structure of Annex A in the bid document.

- 3.2.4 We note this has mobilisation sitting under Year 1 and introduces the concept of Price Control Periods. This structure of the table assumes Year 1 to 5 falls under Price Control Period 1 and Year 6 to 10 under Price Control Period 2 but there are no dates set against any year. If Year 1 were to be taken as the first year of the Gas to the West price control period i.e. 2018, the table would also suggest SGN Natural Gas has not yet entered mobilisation and will only do so in 2018. This is not a credible argument. The format is inconsistent with the narrative and tables in the main document but was completed by SGN Natural Gas in good faith.
- 3.2.5 In relation to the additional costs of £0.6m that we have highlighted in previous response to supplemental question 19, having been incurred in participating in a price control process prior to mobilisation and First Operational Commencement Date, we cannot find any evidence in the applicant pack of any requirement to carry out early design work or prepare a business plan ahead of First Operational Commencement Date.
- 3.2.6 Indeed Figure 2 in Chapter 3 of our bid clearly outlines that design of spine and feeder main was not envisaged to start until mobilisation and was not due to be complete until month 6 of mobilisation i.e. the end of April 2016. This confirms the work that we have undertaken to date is in addition to costs and guidance provided for in our bid and the applicant pack.
- 3.2.7 Also, there are additional GD17 costs linked to the build/IP. The price control process was expected to take place following FOCD, when all internal resource as set out in Figure 1 of Chapter 3 would be in place.
- 3.2.8 In summary, to remain consistent with our bid we believe the Final Determination should provide for 1 year of mobilisation costs for the period up to O4 2016 followed by 6 years of opex through to the end of 2022.

3.3 I.T. Systems

- 3.3.1 It is noted that during the draft determination UR have discussed the points put forward by SGN Natural Gas concerning IT costs, disclosed in the February 2016 IT paper sent by SGN Natural Gas.

3.4 Sales & Marketing

- 3.4.1 SGN Natural Gas still has the view that the current macro-economic climate in NI alongside the current oil versus gas price ratio, as discussed in the February 2016 Sales & Marketing paper, contributes to a significant and unforeseen change in conditions from the bid process. This area is being responded to in greater detail in chapter 4 of this response document.

3.5 Additional Opex Allowed

- 3.5.1 In the DD document chapters 6.427 – 6.434 it states that certain Opex costs have been increased using a proxy of total domestic connections as the driver determined by UR in GD17 versus the SGN Gas to the West application, due to a significant change in customer numbers and volumes. SGN Natural Gas agree with this approach. However we are in the process of finalising our designs and once UR have reconciled the small and medium I&C numbers that they be included in this calculation as the category has grown significantly from the application pack as more detailed information of our Licensed Area has become available.

3.6 Connection Incentive

- 3.6.1 SGN Natural Gas note that UR have removed the 25% non-additional assumption to the connection incentive used in the application pack. However the incentive allowance is set on a reducing glide path to maintain consistency with the other GDNs. Throughout GD14 these allowances were set the same per annum for the entire price control, we would feel that as a new business in NI and as chapter 6.441 of the DD states “[SGN is at the beginning of its network development and therefore some of its challenges are different to that faced by FE and PNGL in terms of convincing domestic owner occupied customers to connect](#)” there is surely a more ‘Greenfield’ company specific allowance that could and should be set. In relation to OO connections, this is discussed in greater detail as part of chapter 4 of this response.
- 3.6.2 In relation to SME customers, we urge UR to consider some sort of pot, linked to targeted connections, in order to recognise the ‘Greenfield’ nature of our business to aid targeted education and brand awareness for these business, this will help ensure natural gas becoming the ‘fuel of choice’ in the West of NI in a much faster timescale.

4. Connection Incentives

4.1 Introduction

- 4.1.1 As part of the GD17 Draft Determination, the Regulator (UR) outlined that all Gas Distribution Networks (GDNs) would receive the same domestic Owner Occupied (OO) per connection rate, including the same sliding scale across the price control period.
- 4.1.2 The non-additionality percentages set for the GDNs are used as the differentiating factor by UR to reflect the differing levels of maturity i.e. the level of customers who would lift the phone of their own accord, without direct sales and marketing required.
- 4.1.3 These levels were set at 0%, 25% (i.e. 1 in 4) and 33% (i.e. 1 in 3) for SGN Natural Gas, FE and PNGL respectively.
- 4.1.4 Whilst it is positive that UR acknowledge there are differing levels of maturity involved, we feel that this isn't even close to being enough recognition of the issues SGN Natural Gas will face, especially at this stage of the business development, given we are a new entrant into an area within NI, that has never seen natural gas before.
- 4.1.5 We believe the one year delay to 2018, in the start of the SGN Natural Gas price control already has SGN Natural Gas at a disadvantage, given that our OO per connection rate starts at £520 per connection as opposed to the £550 in 2017.
- 4.1.6 The 'one size fits all' approach recommended as part of the draft determination does not fully reflect our business needs and we welcome the opportunity to respond to UR. Through our response, we aim to explore possible mechanisms that will allow UR to suggest an alternative allowance as part of their final decisions that allows SGN Natural Gas to achieve success in connecting as many domestic OO properties as possible throughout GD17 and beyond.

4.2 Draft Determination Key Discussion Points

- 4.2.1 In paragraph 6.200 of the DD, UR outline that the Connection Incentive in NI is unique and initially created to overcome difficulties the public had in relation to natural gas.
- 4.2.2 This resonates with our Licence area specifically, given the fact that with gas being available in NI for some 20 years, even when FE were starting in 2006, their level of incentives were significantly higher than those outlined for SGN Natural Gas. For example, PCR02 included incentives for both OO and SME connections.
- 4.2.3 In our view only an immaterial amount, if any, of the gas advertising performed by FE and PNGL is likely to have impacted the West area, given, natural gas has never been available in this part of the country, so is unlikely to have been noted to any great degree.
- 4.2.4 In paragraph 6.202 of the DD, UR state that GDNs recognise the need for a per unit connection allowance to increase 'gas awareness' to ensure it is the 'fuel of choice' in NI and the reduction is to reflect the increasing awareness in NI relating to natural gas.
- 4.2.5 Again, our Licence area is not likely to have been significantly impacted by previous A&M activities of the other GDNs, therefore, the zero non-additionality adjustment made for SGN Natural Gas, whilst welcomed, unfortunately does not go far enough to recognise the business conditions under which SGN Natural Gas will operate.

- 4.2.6 Whist we should be and are aware these allowances are not available in GB or ROI and will not last forever, we certainly would be requiring a higher level of allowance in our period of operation and not simply benchmarked to the current GDNs and the same allowances given.
- 4.2.7 In paragraph 6.218 of the DD, PNGL outline the need to decrease the OO connection allowance as development increases. Therefore, as we are in the early stages of our development we should be treated on a standalone basis in calculating a fair per OO connection allowance.
- 4.2.8 However, in paragraph 6.234 of the DD, UR outline that an initial investment of connection allowances are required to make gas the “fuel of choice in NI”, but clearly the SGN Natural Gas network area is nowhere near the stage where natural gas is the “fuel of choice”, as may be the case in the Greater Belfast and Ten Towns area.
- 4.2.9 If the mains suggested are laid within this price control period, prior GDN penetration records for OO connections (PNGL are at 48%¹ penetration and FE at 19%² penetration at around 20 and 10 years in business respectively) would suggest the fuel of choice is unlikely to be Natural Gas initially, but would occur progressively over time when education/awareness are gained through marketing & PR activities. It is fair to say that significant investment will be required in order for the West to be anywhere near this stage.
- 4.2.10 In paragraph 6.236 of the DD, UR outline that expectation was set in the GD14 document that they felt there was a need to cut connection allowances by 50% for GD17, as natural gas was seen as the “Fuel of choice” in the Greater Belfast Area. We note that this was after some 17 years of development and significant sums of advertising and marketing monies being provided historically.
- 4.2.11 Whilst we understand a reduction is necessary, we note that failure to achieve every OO connection impacts on large load diversification and a marginal positive impact on the Network (i.e. the positive value foregone through non connection).
- 4.2.12 We welcome URs intensions as set out in paragraphs 6.242/6.243 which welcomes views on a basis of calculation over a longer term, encouraging proposals and analysis from GDNs in response to the GD17 consultation.
- 4.2.13 This paper investigates the use of an SGN Natural Gas specific allowance in section 4.4 below.

4.3 Suitability for SGN Natural Gas as a ‘Greenfield’ Business

- 4.3.1 As previously stated, we feel the current suggested arrangement for OO connection allowances fail to recognise the ‘Greenfield’ nature of our business.
- 4.3.2 Natural gas is not the fuel of choice yet in the west area (given the new business is still in the early stages of its development), like it arguably is in other areas of NI, therefore, a ‘one size fits all approach’ is not currently relevant. SGN Natural Gas is an unrecognised and unknown brand in not only the west but across the whole of NI.

¹ Per table 52 of the Draft Determination document.

² Per table 24 of the Draft Determination document.

- 4.3.3 Arguably some assumptions should be tailored to the GDN. This would allow a specific allowance that reflects the current state of business, market conditions and enough help to aid the initial and continued development of the network area. We understand that some assumptions are more appropriate to broadly assumed across GDNs for fairness. As we previously alluded to, the failure to connect domestic properties does not allow a level of diversification of customer base, especially relevant in the West of NI network, which is so heavily dependent on large contract loads. Although we recognise that the network in the west of NI can only ever be partly diversified.
- 4.3.4 The desire to market and develop domestic connections, in particular fuel poor, including OO, are one of the key reasons for taking gas to the west of NI. It is important that we seize the opportunity to connect these customers while we have momentum and are laying mains in the towns, otherwise these connections could be lost for up to or exceeding 15 years. The problem in the early stages of our development is that each connection not made foregoes a positive future benefit that the network could have otherwise achieved. This is not ideal and we need to drive these early connections to ensure that prices remain constant and low across the revenue recovery period.
- 4.3.5 In section 4.4 below we try to propose a balanced view on an approach that would fit the needs of the SGN Natural Gas business in aiding driving connections growth, as well as meeting the needs of UR in ensuring the development of the network. All the time trying to make sure that early adopters to this gas network benefit over time from those connections made in subsequent years. All connections will pay their share of the network and nobody will be burdened unnecessarily.

4.4 Alternative SGN Natural Gas Specific Approach

- 4.4.1 As outlined previously as suggested in paragraphs 6.242 & 6.243 of the DD, UR would welcome our views and further analysis regarding an alternative approach to the per OO connection allowance.
- 4.4.2 With this in mind we have developed a model for scenarios that would calculate the allowance potentially available for allocation for OO connections over the remaining Licence period, as opposed to the estimated 15 year life of a domestic meter.
- 4.4.3 This method has a built in mechanism to naturally reduce the allowance over 20 years, by sharing the available amount per connection between the company and customers on a sliding scale. Over time this ensures that the earliest adopters to natural gas benefit 100% from each marginal positive network addition.
- 4.4.4 It is important to recognise that in the early years essentially all of the NPV available would be required by the company to ensure sufficient funds are available to make natural gas the “fuel of choice” for OO connections in the West of NI over time.
- 4.4.5 It is also important to ensure the connection incentive allowance is as specific as possible for the business, reflected in the inputs that are put through the model.
- 4.4.6 Making the Gas to the West extension a success requires the right amount of focused marketing and PR from the very start, otherwise, as previously outlined, we run the risk of losing potentially beneficial connections at an early stage, for a period of up to 15 years.
- 4.4.7 This focused marketing allows for the initial education around natural gas and the wider benefits the fuel brings, in an area that has no experience of this new energy source.
- 4.4.8 This also ensures potential customers are aware of the SGN Natural Gas business, allowing them some comfort regarding the professionalism and credibility our business has, when making any informed choice to make the switch.
- 4.4.9 The monies can also be used towards a contribution of the cost of conversion for many customers, whom without help, may never make the switch.
- 4.4.10 For this alternative approach, the key assumptions input to the model are as follows:

Table 8 - Connections Incentive Assumptions

Connection Incentive Assumptions - GD17		
Domestic Consumption	tpa	380
Recovery Period	yrs	40
Conveyance Tariff	ppt	35
RoR - GD17	%	6.20%
RoR - Post GD17	%	5.50%
Dom Service Value	£	736
Dom Meter Value	£	192
Infill Reduction	£	340
Sharing Mechanism - Excess NPV	100 : 0 split (Company : Customer) in year 1 reducing to 0 : 100 after 20 years	

Connection Incentive Value (GD17 Average)	£ / add. Conn	750
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- 4.4.11 As you can see this gives an average OO connection incentive for the GD17 period of £750 (£870 in 2018 dropping to £632 in 2022).
- 4.4.12 This aims to achieve 3 key objectives, namely;
- allowing a more company specific set of inputs;
 - allowing for a gradual reduction in connection allowance, to recognise that over time SGN Natural Gas aim to progressively achieve a situation whereby natural gas is the “fuel of choice” in the west of NI network; and
 - trying to make sure that early adopters to this new natural gas network benefit over time from those connections made in subsequent years, whilst ensuring that all connections pay their share of the network.
- 4.4.13 This is seen as a fairer approach by SGN Natural Gas, recognising that the level being discussed is lower than the other NI GDNs have had historically, but workable over the GD17 price control period.
- For example, in PCR02 FE received c£662³ (£2014)/OO connection for the 2009 year, this was then significantly revised upwards for 2010 to 2013 as part of the Market Development Review (MDR). Also, as part of PNGL12, PNGL received c£780⁴ (£2014)/OO connection, whereas this reduced to c£573⁵/OO connection in GD14 both GDNs, who were some 8 and 18 years into their licence revenue recovery periods.
- This approach appears to tick all the significant boxes required from SGN Natural Gas and UR’s perspective in a logical and clear way. We feel that all input assumptions could stand up to external scrutiny.

4.5 Conclusions

- 4.5.1 We request that UR continue to engage with us on an alternative basis of setting a rational and reasonable OO connection incentive allowance, to ensure SGN Natural Gas as a business can progress and achieve any reasonable connection target set by UR as part of GD17.
- 4.5.2 We also request that UR consider the ‘Greenfield’ nature of our extension and the significant issues we are likely to face in making OO connections a success. Consideration of a fixed ‘pot’ of money to help achieve the initial objectives of our business will hopefully form part of our continued engagement.

³ http://www.uregni.gov.uk/uploads/publications/PNGL12_Final_Decisions_FINAL.pdf - £681 per connection in £2010, c£780 per connection when uplifted to £2014

⁴ http://www.uregni.gov.uk/uploads/publications/PNGL12_Final_Decisions_FINAL.pdf - £681 per connection in £2010, c£780 per connection when uplifted to £2014.

⁵ Per paragraph 6.213 of the DD document

5. CAPEX unit rates

5.1 Introduction

- 5.1.1 SGN Natural Gas is a new business that aspires to become the most efficient natural gas network operator within Northern Ireland, once our business is established. As a 'Greenfield' business we have significant hurdles to overcome to both establish ourselves and develop a credible alternative energy proposition for customers within our Licensed Area.
- 5.1.2 The outcome of the price control process should recognise that we are different to the other established Gas Distribution Networks (GDNs) and are at a different stage in our development. The process should also recognise that regional differences between the GDNs exist. These differences together with other factors such as business maturity and low population density need to be accounted for within any benchmark analysis.
- 5.1.3 The introduction into Northern Ireland of a third gas distribution network operator will impact the market for contractor and supply services which we believe will be beneficial for customers in the long term. In the short term, however, until the market adjusts to this significant expansion then there will be greater demands on current contractor resources, inevitably driving price increases. The responses we have had to our recent Strabane contract tender would appear to support this view. (This information will be shared with the UR once we have fully completed our assessment of the contract returns.)
- 5.1.4 Within this section we will highlight the work we have undertaken since the submission of the our Business Plan last year and confirm why we believe the current benchmarking and 'Basket of Works' analysis does not recognise the differences between the existing GDNs and SGN Natural Gas.

5.2 Revised 40 years designs (Eight Towns)

- 5.2.1 Through submission of our business plan and during subsequent discussions with the Regulator (UR) SGN Natural Gas have consistently confirmed that we are at a different stage of network design and development in comparison to the other GDNs. We are committed to the development of an efficient network that meets all security of supply requirements, together with delivering value for the customers within our Licensed Area.
- 5.2.2 Our business plan, which we submitted in September 2015, was based on initial high level desk top designs prepared using the best information we had available at the time. We have now updated and enhanced the relevant data sets including the purchase of additional geography files to improve our understanding of the customer profiles within our Licensed Area. Based on this refresh and as confirmed to UR following submission of our business plan we have now updated our 40 year designs for the eight towns.
- 5.2.3 The refreshed designs, which include the improved geospatial information and data sets, show that for the 40 year build for the eight towns we expect to pass a total of **41,730** existing properties, as shown in **Table 9** below:

Table 9 - Properties Passed: April 2016 Updated Design

	Dungannon / Coalisland	Cookstown	Magherafelt	Omagh	Enniskillen	Derrylin	Strabane	Total
Existing Housing	7,837	4,819	3,413	8,844	6,410	233	5,444	37,000
Contract	6	5	0	7	3	4	2	27
Large	10	4	0	11	8	1	5	39
Small/Medium	1026	629	453	1158	844	84	470	4664
Total	8,877	5,457	3,866	10,018	7,265	319	5,921	41,730

Note: Included within the above totals are some 20 Contract / Large / Medium Properties that will be supplied directly from the IP system.

5.2.4 Improvements over the September 2015 Designs include:

- Updated Geography files covering a wider area;
- Improved geospatial data sets; and
- Improvements to the demand allocation process.

5.2.5 The above adjustments have improved both our understanding of the potential demand requirements in and around each town and corresponding network designs have been further refined and expanded.

5.2.6 During our recent discussions with the UR we confirmed our intention to revise our designs for the eight principal towns. This exercise has now been completed and we have produced new designs. These designs reflect our 40 year build programme to ensure there is a pipe outside almost every property, to the extent this is economically viable. A summary of the revised pipe lengths for the full 40 years by diameter, category and town category was provided to the UR in an update paper on the 29th April 2016.

5.3 Revised GD17 build programme

5.3.1 Following the submission of our revised network designs and during a subsequent meeting with UR we confirmed that we were still working to produce our revised GD17 build programme. This work has only recently concluded and the details supporting our proposals are being prepared prior to being shared with UR. We plan to have all information available by the end of the first full week in June 2016.

A summary of our proposals is shown in the table below:

Table 10 - Revised build programme (Mains Lengths)

Spine & Infill	63	75	90	125	180	250	315	355	450	Total Length
2017	5,115	978	832	1,353	3,204	4,063	5,687	3,910	493	25,636
2018	37,779	5,176	7,583	8,845	11,304	8,499	3,166	1,021	145	83,518
2019	34,672	3,147	5,754	8,129	6,368	5,677	610	518	-	64,875
2020	36,395	2,817	4,155	7,094	2,987	327	-	-	-	53,775
2021	31,624	3,656	4,438	6,610	3,191	2,045	650	-	593	52,808
2022	27,073	3,082	7,117	6,589	4,349	557	279	11	-	49,057

	172,658	18,856	29,879	38,620	31,404	21,168	10,392	5,460	1,232	329,669
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Table 11 - Revised build programme (Properties Passed)

Spine & Infill	2017	2018	2019	2020	2021	2022	GD17 Total
Existing Housing (OO)	1,141	5,675	4,299	3,893	3,505	1,928	20,441
Existing Housing (NIHE)	409	1,368	1,177	551	418	185	4,108
New Housing	-	-	333	333	333	333	1,332
Commercial	161	882	1,094	216	631	773	3,757
	1,711	7,925	6,903	4,993	4,887	3,219	29,638

Note: Commercial numbers include a number of properties that will be fed directly at IP (69 No.)

5.4 Benchmarking

- 5.4.1 As set out in our July 2015 paper to UR we do not believe that a top-down approach to benchmarking including the use of regression analysis, of Northern Ireland and potentially GB GDNs, is appropriate for a new 'Greenfield' business such as SGN Natural Gas. The reasons for this are outlined in the sections below.

Developments in GB

- 5.4.2 In the 2013/14 Annual Report Ofgem did not present any regression based analysis to measure company efficiency. There are particular complexities that make regression analysis unreliable in benchmarking networks, while the bottom-up regressions failed to capture all expenditure and therefore fully measure efficiency. Benchmarking also needs to consider differing business models, as well as differences in the diameter mix and levels of workload.

Complexities in approach

- 5.4.3 The limited number of data points, due to both the small number of networks in Northern Ireland (two GDNs) and limited historical data (4 Years), makes regression analysis extremely unreliable as fluctuations in one network would have a significant impact on the frontier. Also the Northern Ireland networks have significantly different business models and structures that drive significantly different cost bases. For example, Firmus Energy (FE) are vertically integrated and are likely to benefit from cost synergies associated with group operations.
- 5.4.4 There are difficulties in calculating reasonable adjustments to account for regional factors such as the different labour rates across Northern Ireland. Further difficulties will be encountered when making adjustments for business maturity as well as increased costs associated with sparsity or low population density at one extreme and urbanity or high population density at the other.
- 5.4.5 The work programme in terms of the mix of diameters to be laid will also have a significant impact when comparing GDNs. This is further highlighted in section 5.7.20 and this would need to be adjusted for before benchmarking was undertaken.
- 5.4.6 Within each GDN there will be a relationship between capital work to be undertaken and the provision of labour for emergency services. These relationships will be unique and appropriate adjustments will be required if benchmarking is to be successful.

- 5.4.7 The three networks are also at significantly different levels of maturity and therefore have significantly different cost bases, organisational structures, business priorities and investment decisions. Phoenix Natural Gas Limited (PNGL) has been in operation for almost 20 years, while Firmus Energy (Distribution) Ltd. (FE) has been in operation for 10 years and SGN Natural Gas is a new business. This will make it extremely difficult to carry out direct comparison as the necessary adjustments would be extremely challenging to accurately calculate and will introduce additional risk.
- 5.4.8 Within the draft determination in section 7.38 the UR confirms
- Using tendered rates to price a determination assumes that a particular procurement process is efficient and that tendered rates should be passed through to consumers.
 - The application of current contract rates by each GDN foregoes the opportunity for benchmarking to identify efficient capital expenditure
- 5.4.9 For the reasons identified, regional issues, business maturity, workload mix, contact interdependencies, etc., SGN Natural Gas do not believe that the appropriate adjustments can be made to ensure equity in any benchmark comparison. Competitively tendered contract rates will provide the market view of costs applicable to the work SGN Natural Gas requires.

Alternative Approach

- 5.4.10 In relation to labour costs, work performed in Northern Ireland will be put out to competitive market tender.
- 5.4.11 This will reflect the most current competitive contractor rates relative to the scale and nature of our work and to meet our high safety and quality standards. Therefore we do not believe that the labour element of our regulated capital spend should be benchmarked against the other networks. Their rates will reflect different volumes of work during different time periods and under entirely different circumstances. If comparative analysis is required, we believe regional price effects and company specific factors should be incorporated and evidenced appropriately.
- 5.4.12 These can be achieved by adjustments to the synthetic rates for each company for these factors. Examples were provided in our original business plan submission and we still believe these present a credible option for a new developing business. If this is also considered to increase complexity then the use of competitive market tenders can be used to validate these adjustments.
- 5.4.13 In summary, while experience of operating in GB can be used to help inform assessment work there should be no direct benchmarking and regressions should not be used to set allowances. It should only be used as a high level sense check in GD17 with a view to further development for GD23.
- 5.4.14 Should the above alternative approach be viewed by the UR as not providing the same level company assessment then the only other option available would be to benchmark our business against the other two GDN's when they were at the same stage of development as ourselves.

5.5 Company Specific Factors

Sparsity

- 5.5.1 In past regulatory determinations, Ofgem has applied regional labour cost differences across the different gas distribution networks (GDNs) in Great Britain to incorporate the differences in sparsity. While these adjustments were applied to account for emergency service obligations, Ofgem has highlighted that the driver of higher costs was due to the “productivity impact of sparsity”. Regional price effects adding upward price pressures on input costs were also recognised and applied by Ofcom in its Universal Service Obligation, the Competition Commission (CC) in the Northern Ireland Electricity (NIE) determination, and by UR and the Water Commission for NI Water and Scottish Water respectively. Therefore, based on regulatory precedent and the underpinning rationale, an adjustment to SGN Natural Gas’ costs to account for sparsity effects should be applied.

‘Greenfield’ Business

- 5.5.2 SGN Natural Gas are at a different stage of development to the other two more established GDNs. The other networks are at significantly different levels of maturity and therefore have significantly different cost bases, organisational structures, business priorities and investment decisions.
- 5.5.3 PNGL has been in operation for almost 20 years, while FE has been in operation for 10 years and SGN Natural Gas is a new ‘Greenfield’ business. In the long run we aim to demonstrate that we will be the most efficient natural gas network operator within Northern Ireland, however we have significant hurdles to overcome to establish ourselves and develop a credible alternative energy proposition for customers within our Licensed Area.

5.6 Frontier Shift - Productivity Efficiencies

- 5.6.1 With the Draft Determination in section 7.65 UR states:-

7.65 We have applied a frontier shift to capital investment in GD17 to reflect movements in capital expenditure input costs relative to RPI and the on-going efficiency gains attributable to productivity improvements. We have not applied a frontier shift to our projection of costs beyond GD17.

This process combines nominal input price forecasts with productivity expectations and RPI inflation:

$$\text{Frontier shift (in real terms)} = \text{input price increase} - \text{forecast RPI (measured inflation)} - \text{productivity increase}$$

- 5.6.2 While the requirements for this type of analysis to be included within a price control are understood and appreciated by SGN Natural Gas as a business. We believe that when this is applied to established businesses it can be effective in assisting in the identification of improvements. SGN Natural Gas are however not an established business. Our principal focus for GD17 must be on establishing both ourselves as a business and the use of natural gas within the towns in the west of Northern Ireland. While our goal will be to always push ourselves to the fore in terms of any industry efficiency measures we do not believe this is an appropriate measure for ourselves within GD17.

5.7 CAPEX Unit Rates

- 5.7.1 We have analysed the current contractor market within Northern Ireland and believe for the reasons identified below that there are a number of factors that will not allow us to obtain construction rates as favourable as those obtained by the existing two GDNs, PNGL and FE.

Current GDN Contracts

- 5.7.2 Both existing GDNs have many years of experience of working with and building relationships with the main contractors within the Northern Ireland market. Both have recently negotiated contracts during the current price control that will run through until they are either extended or renegotiated mid-way through the next price control, GD17. This contacting strategy will provide both of the incumbents with a degree of certainty that they can deliver against the benchmarks and units rates set by the UR.
- 5.7.3 We are aware that one GDN is currently about to start the 2nd year of a distribution contract with the same NI contractor. This is believed to be a 5 year contract with the possibility of up to an additional 3 years. This will not only provide a solid basis to achieve the targets set for GD17, but depending on how this contract is structured may allow the GDN to flex this contract for other network extension projects.
- 5.7.4 One of the benefits of this type of consistent contract that is known is that it operates on an “open book” basis where all actual costs are examined. This type of recording and reporting minimises the opportunity to misalign actual project costs, while the addition of plant and vehicles trackers also ensures cost transparency.
- 5.7.5 The two existing GDNs also benefit from labour flexibility by having contracts with the same primary contractor. The terms of this agreement permits the contractors labour resource to be flexed between the two existing GDNs, thereby allowing a smoothing of workload peaks.
- 5.7.6 In the many years that this GDN and contractor have worked together, considerable trust and confidence has been established. The GDN has confidence that all costs are being captured and reported upon correctly, that cost has been incurred efficiently, that target cost rates are accurate (typically within 1-2%) and that through the alliance nature of the contract collaborative processes are developed that benefit both parties.
- 5.7.7 As the new entrant into the Northern Ireland market, SGN Natural Gas brings a wealth of experience of working as SGN with contractors in GB. The majority of this experience is in operation of a large existing distribution network and in mains replacement. Despite this experience, entering into a new distribution contract in Northern Ireland will be the start of a process for SGN Natural Gas as it builds relationships with prospective contractors.
- 5.7.8 As with any new contract risk will be a key component and for two parties who do not currently have working relationships this risk will likely attract a price premium. The reverse is also true where contractors have a long established relationship, such as for the established GDNs, then the element of risk within current and future contracts will be priced low.
- 5.7.9 Employing an open book accounting contract is labour intensive on both parties as it takes time to build trust in each other through developing and establishing processes. SGN Natural Gas does not envisage employing this style of contract and does not believe that, given the relatively short period over which the majority of construction work will take place, there will be opportunities to successfully implement this type of contract. Our Opex proposals were based on employing a different contracting strategy and any move away from this will necessitate a subsequent change in requirements.

GD17 workload profiles

- 5.7.10 The existing GDNs have built their existing networks over a number of years and already have significant presence within their Licensed Areas. The proposals they have submitted for the next price control period will extend their areas further with significant construction programmes. The extent of these programmes and UR's initial views are given in the following extracts from the Draft Determination:

For FE UR confirmed:

- 1.26 Our initial conclusion is that a significant amount of infill mains is justified although not the whole amount FE requested as some of the projects proposed do not pass an economic test. Our draft determination is to allow 660km of mains for GD17, which is a significant increase on GD14 levels and facilitate 74k more customer having access to gas outside their property.

For PNGL UR has stated:

- 1.39 Our draft determination is to allow 362km of mains for GD17 and facilitate 35k more customer having access to gas outside their property.

The above total for PNGL includes the 7Bar and 4Bar network extension to the East Downs area.

- 5.7.11 These programmes taken together with the network build proposed by SGN Natural Gas for the Gas to the West area, circa 330km, will result in a significant collective programme of work over GD17. This programme consisting of over 1300km of distribution mains (<7Bar) will stretch the ability of the contracting resources within Northern Ireland to meet this demand.
- 5.7.12 This level of activity is unprecedented in that never before have three separate natural gas distribution businesses within Northern Ireland competed for access to the contract labour and suppliers market.
- 5.7.13 Furthermore over the same timeframe the high pressure build for the HP/IP transmission system for Gas to the West will also require resources from the same contracting community and will be looking to secure this early in 2017. This additional requirement can only compound the situation and make access to this resource limited, hence our view that we will incur pricing premiums to attract suitably competent operatives. This view is validated by the recent contract returns for the Strabane low pressure network build. This is discussed in greater detail in the following section.

Strabane low pressure tender

- 5.7.14 We have started the procurement process for the installation of the Strabane low pressure network and have just received the returned tenders from suitable contractors. This also confirmed in our paper “**2016-01-29 SGN Natural Gas GD17 Unit Rates Paper.docx**” submitted to the UR in January this year. These tendered rates will give SGN Natural Gas a strong indication of what our actual unit rates will be for the GD17 period and the contractor’s view of sparsity, work type (mix), risk of working with a new entrant and other regional issues.

It should also be stressed that this contract is being awarded slightly in advance of other network extension works and may not fully reflect the market adjustments when resources will be further stretched.

- 5.7.15 This contract information will be shared with the UR once we have completed our review towards the end of June 2016.
- 5.7.16 We have not, at this stage, fully evaluated these submissions but will complete this work over the next few weeks. We have however carried out some high level comparisons on the mainlaying rates. From this we have concluded that SGN Natural Gas, being a new entrant into an established market, will not be able to agree contracts on the same or similar basis to the established GDNs. Should these rates reflect the current market expectations, then SGN Natural Gas will be required to agree unit rates in excess of what UR considers efficient.

Errors in data used

- 5.7.17 For their ‘Basket of Works’ analysis UR has confirmed that they have used four years’ worth of historical data provided by both PNGL and FE. As SGN Natural Gas have not been required to provide any information to support this analysis it would not be appropriate to comment in detail on the quality or consistency of the information provided.

We would however highlight that the level of information issued by UR was grouped at a category level which did not allow full interrogation of their workings.

Dis-aggregation of the Basket of Works

- 5.7.18 The information provided by the UR to support their ‘Basket of Works’ calculations, as stated previously, was based on historic costs for PNGL and FE. These are established business that have been developing and growing their businesses for some 20 years and 10 years, respectively. Their basket of work is therefore likely to be different to that of SGN Natural Gas, as a new business at a very early stage of development.
- 5.7.19 The large diameter spine mains that currently support the development of their networks were laid when they were in the early stages of deployment, as such their proportion of large diameter mains will be significantly different to ours.
- 5.7.20 Using the designs for our 40 year build programme we have produced the following table to demonstrate the implications of this.

Table 12 - Cumulative percentage (40 year Build)

	63	75	90	125	180	250	315	355	450
Infill	67.6%	74.6%	83.0%	89.9%	96.8%	99.0%	99.6%	99.8%	100.0%
Spine and Infill	56.3%	62.8%	72.3%	81.9%	90.2%	95.9%	98.5%	99.7%	100.0%

5.7.21 As shown in Table 12 - **Cumulative percentage (40 year Build)** above including the Spine mains shifts the balance of the percentage by diameter which reflects the greater proportion of mains that will be laid in the larger, more costly, diameter bands.

5.7.22 Our returned tender information confirms that there is a larger cost differential for the larger diameter bands when compared to the benchmark rates provided by the UR. This will affect the respective weightings and should be accounted for before any comparison work is carried out.

Should it not be possible to normalise for the implication of the different diameter mix UR could consider benchmarking our business against the other two GDNs when they were at the same stage of development as ourselves.

Historic Costs Analysis

5.7.23 The information provided by UR in relation to 'Other Mains' is reproduced in the tables below.

Table 13 - UR Historical Costs from 'Basket of Works' worksheets

Costs		2011	2012	2013	2014	2011-14
FE	Other Mains	7,601,730	4,533,531	5,598,932	5,187,277	22,921,470
PNGL	Other Mains	2,990,329	1,785,188	2,674,713	4,608,895	12,059,125
Joint	Other Mains	10,592,059	6,318,719	8,273,645	9,796,172	34,980,595

Quantity		2011	2012	2013	2014	2011-14
FE	Other Mains	99,537	77,676	75,667	62,499	315,378
PNGL	Other Mains	47,479	28,527	39,860	37,407	153,273
Joint	Other Mains	147,016	106,203	115,527	99,906	468,651

Unit Costs		2011	2012	2013	2014	2011-14
FE	Other Mains	76.4	58.4	74.0	83.0	72.7
PNGL	Other Mains	63.0	62.6	67.1	123.2	78.7
Joint	Other Mains	72.0	59.5	71.6	98.1	74.6

5.7.24 Based on the above historical costs provided by both PNGL and FE there is a considerable range to the unit costs produced over the 4 year period (Min = £58.4 and Max = £123.2), as shown in the table below:-

Table 14 - Basket of Works: Range of Unit Rates

Unit Costs		Min	Max
FE	Other Mains	58.4	83.0
PNGL	Other Mains	62.6	123.2
Joint	Other Mains	59.5	98.1

5.7.25 From the information that has been provided it is not possible to identify the underlying reasons for the significant differences in the recorded unit rates. A major contributing factor will be the different mix in pipe diameters laid in any particular year. This would support our previous analysis and shows that as we have a significantly different diameter mix compared to the other GDNs this should be taken into account prior to any benchmarking exercise.

5.8 Conclusions

- 5.8.1 We look forward to engaging with UR over the coming months in order to agree an overall package that ensures the long term viability of the Gas to the West extension.
- 5.8.2 It should be noted however that SGN Natural Gas is at a very different stage of development in comparison to the other GDNs operating within Northern Ireland. Our introduction into the existing market for accredited contractors will have implications for unit rates. This market may expand over time as it evolves to cater for three established GDNs with relatively predictable workloads. In the short term however prior to any adjustment taking place there will be a price premium to ensure we can obtain suitable contractors to complete our work programmes.
- 5.8.3 SGN Natural Gas believe that;
- A significant reduction in rates is unachievable in the Gas to the West towns, as borne out by the high level analysis undertaken for the Strabane low pressure build;
 - The tendered rates for Strabane provide a more realistic indication of what the actual unit rates will be for the GD17 period and the contractor's view of sparsity, work type (mix), risk of working with a new entrant and other regional issues;
 - SGN Natural Gas would recommend that the competitive tender information is used to judge the efficiency of the companies and the relevant market rates applicable to each region. The benchmarking should only be used where appropriate adjustments can be made to cater for different Companies, working in different regions, at different stages of maturity, with a different workload profiles;
 - The various reports we have provided demonstrate that there are material underlying cost differences between SGN Natural Gas and both PNGL and FE; and
 - The use of an efficiency frontier shift when comparing established businesses to a new one is not appropriate.

6. Innovation

6.1 Introduction

- 6.1.1 Innovation is an integral part of SGN's operation and management culture, operating under the GB RIIO framework (Revenue = Incentives + Innovation + Outputs) introduced in the current GB gas and electricity price controls (RIIO-GD1 and ED1). The overriding objective of the RIIO Model is to encourage energy network companies to play a full role in the delivery of a sustainable energy sector, reduce network costs for current and future customers and share best practice so all customers can benefit. Additionally it is recognised that innovation can have a positive impact on a variety of outputs including safety and reliability of the network, customer service, fuel poor and other social objectives.
- 6.1.2 Innovation involves different and generally greater risks compared to business-as-usual activities. As it may not always generate successful outcomes - the risks create costs in the short term which require some form of financial support for natural monopoly industries regulated by periodic price controls, in which any outperformance may not be retained long term.
- 6.1.3 Under RIIO GD1 this financial support, or innovation stimulus, is provided by four incentive mechanisms: Network Innovation Competition, Discretionary Reward Scheme (DRS), Network Innovation Allowance (combined into the DRS for the purposes of our Business Plan), and Innovation Rollout Mechanism. As we are just about to embark on the build on a new network we welcome the opportunity to submit innovation projects, through the ring fenced uncertainty mechanism (paras 8.9 and 9.26 of the draft determination,) as we become more embedded in the NI gas distribution industry during GD17.
- 6.1.4 SGN Natural Gas would want the Uncertainty Mechanism threshold for innovation projects to be brought down from the £150,000 level to £25,000. We believe this is appropriate given the size of the N.I. market and the fact that it would allow projects of a similar scale to the smaller projects funded through the GB Network Innovation Allowance. We also note that the very stringent assessment criteria in para 8.7 may limit the proposal of the higher risk, higher cost saving to consumer projects, as well as increasing the costs of submissions due to the time and resource required relative to level of funding. We would like to work with the UR to address these concerns.
- 6.1.5 SGN Natural Gas are still of the view there should be a competition for funding of flagship innovation projects of a commercial, operational or technical nature. We believe our proposal recognised the relative size of the NI market compared to GB, as NI GDNs were to compete for up to £2.0m of funding a year, to be recovered through postalised transmission charges. This is on a much smaller scale than the GB mechanism and, contrary to 8.17, competition for funds naturally raises the standard of projects submitted versus individual GDN submissions on an ad hoc basis, and raises the profile of innovation and its benefits.
- 6.1.6 Also we note that although the scale of the NI gas distribution industry is smaller than GB, the number of ownership groups is the same and the competition for innovation funds works well in GB. Furthermore we believe that an Innovation Roll Out mechanism in N.I., whereby GDNs can take up best practice through funding provided, would maximise the benefits from individual GDNs successful projects.
- 6.1.7 Finally we agree with the UR's sentiment in para 8.18 that the key focus for all three GDNs should be network development. However it is worth noting that in GB the various innovation packages are operated side by side with a substantial mains replacement programme.

- 6.1.8 We would welcome the opportunity to discuss our feedback and our GD17 innovation proposals with the UR.

7. Uncertainty Mechanism

7.1 Introduction

- 7.1.1 Chapter 9 of the GD17 Draft Determination (DD) document outlines the mechanisms that are in place in order to reduce risk for or incentivise GDNs to deliver the regulatory outputs that The Regulator (UR) has set.
- 7.1.2 Collectively all the individual mechanisms form part of an overall “Uncertainty Mechanism”, whereby, determined output based, pass through and ring fenced allowances are adjusted based on actual performance and events at the point of the next Price Control (PC) period.
- 7.1.3 Such adjustments are inclusive of rate of return from the year in which the adjustment relates to and are outlined to be adjusted on a post efficiency basis.
- 7.1.4 In line with paragraph 6.360 of the DD document, there are no efficiency adjustments made for SGN Natural Gas in respect of operating expenses for the GD17 period.

7.2 Capex Related Uncertainty Adjustments

- 7.2.1 Having reviewed the capex items subject to uncertainty mechanism adjustment, we are broadly content with the basis of adjustment for each, however, we note some areas we would suggest be included in some form, due to current uncertainties.
- 7.2.2 We would welcome further engagement around the current uncertainty surrounding the HP and IP build, with respect to planning and build duration. This will have a significant impact on the GD17 allowances and targets and if this is not resolved prior to FD publication, then some arrangement for a re-opener would be wholly appropriate.
- 7.2.3 Special Engineering Difficulties (SPEDS), as confirmed in our paper “**2016-01-29 SGN Natural Gas Review of River Crossing SPEDs.docx**” submitted in January 2016, should be included in the uncertainty mechanism adjustments as ring-fenced allowances, given these are estimates and additional information surrounding actual costs will be confirmed over time.
- 7.2.4 It is desirable that we include an appropriate sharing mechanism in respect of capex roll out over the GD17 period and welcome further engagement in this area to ensure protection for both GDN and consumer, should any unforeseen efficiencies/inefficiencies occur. This is in line with paragraph 12.138 of the DD document.

7.3 Opex Related Uncertainty Adjustments

- 7.3.1 Having reviewed the opex items subject to uncertainty mechanism adjustment, we are broadly content with the basis of adjustment for each. All appear appropriate in the circumstances.

7.4 Materiality Thresholds

- 7.4.1 The increase of the materiality threshold to £150k from the £100k set in GD14 appears inappropriate for the SGN Natural Gas business since we are in the start-up phase of our development.
- 7.4.2 Whilst the £150k may be appropriate for more mature GDNs, £75k would be a fairer reflection for SGN Natural Gas.

- 7.4.3 Whilst we do not want to be submitting multiple business cases over GD17, we feel a more reflective level of materiality would protect our business in its early stage of development.

7.5 Conclusions

- 7.5.1 We look forward to engaging with UR over the coming months in order to ensure appropriate mechanisms are in place to meet the key objective of minimising the risk of our business at our current stage of development as well as also encouraging us to deliver on the regulatory outputs.
- 7.5.2 To this end, it is vital to ensure we receive an overall package that sets achievable targets and allows sufficient incentives to enable reasonable outperformance, or alternatively and symmetrically discourages underperformance.
- 7.5.3 The scheduled period of engagement from now to the publication of the FD is vital in ensuring the feasibility of the Gas to the West extension.

8. Financial Aspects

8.1 Introduction

- 8.1.1 The Financial Aspects chapter of the DD document is mostly focused on rate of return for PNGL and FE, as SGN Natural Gas' cost of capital had already been set in the bid process. However there is a section on the tax treatment in the rate of return. The Utility Regulator (UR) are minded to continue to maintain the historical approach to tax for PNGL and FE, applying a tax wedge adjustment to the cost of equity in line with the statutory corporation tax rate. The reason given is that there are 'significant computational difficulties' in calculating tax allowances, linked to pre funding and profile adjustment assessment, if PNGL and FE are transferred to a post-tax vanilla WACC with tax allowance.
- 8.1.2 In contrast the UR state they are minded to switch SGN Natural Gas from its bid pre-tax, to a post-tax WACC with a tax allowance, in line with the regulatory practice adopted by a number of regulators. We fundamentally disagree with this minded to approach for a number of reasons set out below. Additionally the Draft Determination discusses the need for PNGL's and FE's financeability to be assessed – the financeability of SGN Natural Gas also needs to be considered when GD17 package is being finalised, and we will be engaging the UR on this during the forthcoming weeks.

8.2 Fundamental Principles Surrounding a Proposed Move to a Vanilla WACC

Expected Shareholder Returns for Gas to the West Build

- 8.2.1 The submitted pre-tax WACC for Gas to the West was based on a minimum expected final return from the project (i.e. post-tax) to our shareholders, which was incorporated in the overall costs of the project that won a competitive bid process. SGN Natural Gas acknowledge that the majority of UK regulatory industries have their WACC set on a Vanilla WACC basis as per para 10.86 of the Draft Determination. However the bid was done on pre-tax basis so there are two clear options – maintain a pre-tax WACC as per the bid, or move to a post-tax WACC with tax allowance whilst keeping SGN Natural Gas NPV neutral to the change.
- 8.2.2 In order to keep SGN Natural Gas NPV neutral the change would need to be done using the effective tax rate that SGN Natural Gas incurs based on actual tax payments, rather than the statutory corporation tax rate. Unfortunately if SGN Natural Gas are not kept NPV neutral to such a change, a revaluation of the project will need to take place including the extent of actual network build - as the expected WACC based returns were a key part of our bid.

Consistency in Regulatory Treatment

- 8.2.3 It is simply not equitable for SGN Natural Gas to move to a post-tax WACC, unless the move is done using an effective tax rate. This is because, as detailed in the DD (para 10.83), FE would receive a pre-tax WACC, but not be paying tax, and Phoenix has been receiving a pre-tax WACC since 1996 and not paying tax. Furthermore we note in other sections of the DD the UR has argued for consistency in treatment, despite the NI GDNs being at very different stages of development and maturity.

Significant Regulatory Uncertainty

- 8.2.4 Changing the tax treatment post bid and not keeping SGN Natural Gas NPV neutral to the change, and unequitable treatment compared to other NI GDNs, would not be good regulatory practice. There would need to be an increase in the asset beta element of SGN Natural Gas' Cost of Equity due to the increase in regulatory uncertainty in Northern Ireland.
- 8.2.5 Notwithstanding these points it should be noted that the potential change is being flagged up at a very late stage in the process. The Gas to the West GD17 price control process, which ends in September 2016, effectively started back in February 2014, when the competitive bid process was launched including the submission of a pre-tax WACC.
- 8.2.6 To only provide details of a potential Vanilla WACC and tax allowance calculations in late May 2016, and less than a week before the Draft Determination response is due, is not good regulatory practice. Additionally one could argue that significant resources and time have already been invested, due to the start-up nature of the business and 'Gas On' expectations, on the assumption of a pre-tax WACC.

Pre Tax WACC Range

- 8.2.7 If SGN Natural Gas is not to be kept NPV neutral through the use of an effective tax rate when converting to a post-tax WACC then SGN Natural Gas' pre-tax WACC should be moved towards the top of the pre-tax range (6.2% to 6.9% for GD17), that was submitted as part of the competitive bid process. This is in order that SGN Natural Gas are kept NPV neutral to the change to a post-tax WACC, and address the issue of the impact of regulatory uncertainty on the WACC

Impact on Ability to Raise Debt

- 8.2.8 See comment details in confidential appendix.

8.3 Computational Difficulties in Calculating a Post-Tax WACC

- 8.3.1 Notwithstanding all the points above against a move to a post-tax WACC on a statutory corporation tax basis – there are significant computational difficulties as a significant element of the bid GD17 WACC was not calculated on a CAPM basis. As part of a competitive bid process SGN Natural Gas chose the bottom end of a pre-tax WACC range based on start-up and NI risk premiums added to the CAPM based WACC of more mature distribution networks in GB (RIIO-ED1 to GD1). It should be noted we did not deliberately select the RIIO ED1 WACC and add the start-up and NIE risk premium to that, instead selecting a WACC from the overall WACC range of 6.2%-6.9%.
- 8.3.2 So even though the specific building blocks of the GD17 pre-tax WACC can be inferred, due to being at the end of a range unlike the post GD23 WACC, *'neither SGN nor OXERA explicitly identified a value for the SGN vanilla WACC at any point in their submissions.'* (First Economics 'SGN Years 1-5 Vanilla WACC paper, section 2). Therefore there is the important issue of how would a post-tax risk premium is calculated.

- 8.3.3 Assuming all of the risk premium is additional equity return and thus a tax rate is applied to the whole 1.9% risk premium generating a Vanilla WACC of 5.3%, as per section 3.1 of the First Economics paper, does not stand up to any degree of scrutiny. Firstly the start-up risk was based on the difference between the GDPCR1 pre-tax WACC and Firmus's pre-tax WACC. The GDPCR1 pre-tax WACC of 6.1% had a gearing of 62.5%, and Firmus WACC must have had a significant gearing element – unless it was thought that Firmus's shareholders were going to fund 100% of the investment for the 10 year period 2006-2016 without taking out any debt, when given the 7.5% pre-tax WACC for this period? Furthermore the NI risk premium was calculated using a gearing of 45% as shown in table 1.1 of Oxera's paper, using NIE's gearing.
- 8.3.4 The need to recognise the cost of debt element of the risk premium is backed up by the practical reality that the risks of lending to a company during start-up phase are higher and thus the Cost of Debt will go up with the addition of a risk premium to the WACC, as well as the Cost of Equity. I.e. there is a start-up debt premium as well as NI debt premium.
- 8.3.5 However there is no evidence in their paper to support First Economics statement (section 3.2) that a 50:50 cost of debt: cost of equity split of the risk premium is extreme and thus the consequent vanilla WACC of 5.5% should be the top end of a potential range. Additionally the vanilla WACC calculation in section 3.3 is flawed as a fundamental part of the bid WACC was a range of RIIO ED1 –GD1 WACC calculated using a gearing of 65% - so it is not legitimate to change it to 55% post bid generating a vanilla WACC of 5.25%. Therefore the three scenarios that First Economics *'have assembled [to] give estimates of the vanilla WACC of 5.3%, 5.52% and 5.25%'*, are flawed.
- 8.3.6 However the more fundamental point is that there is no correct way to calculate a post-tax risk premium because one, to quote First Economics (section 3.2), *'could make all manner of assumptions about the split between additional return to lenders and additional return to shareholders'*. Should the conversion of the risk premium use the 65% ED1 and GD1 gearing, 45% NIE gearing, 62.5% GDPCR1 gearing or a gearing somehow implied from FE's pre-tax WACC? As per Firmus and Phoenix there are significant computation difficulties with changing how tax is allowed for (para 10.84), and on this basis alone a pre-tax WACC should be retained.

9. Outputs, Outcomes and Allowances

9.1 Risk Sharing Mechanism

- 9.1.1 As we have outlined in section 10.3 of this document, we have previously discussed with UR, the fact that the rollers contained within our licence require simplification for clearer understanding and application in practice.
- 9.1.2 In general we feel that appropriate incentives that drive the correct behaviour, form an important part of our business, and would welcome ongoing discussions with UR and the other GDN's concerning GB incentives and in particular the RIIO process. These include incentives concerning customer service and shrinkage as referenced in chapter 11.23- 11.54 of the Draft Determination (DD) document.
- 9.1.3 Again, we note that per paragraph 11.8 of the DD, it is the intention of UR to have our rollers "switched off" for the GD17 period. That said, we fully support discussions concerning the proposed sharing mechanism mentioned in chapter 11.12 – 11.18 of the DD and how these mechanisms would be put into place.
- 9.1.4 We also feel the symmetrical nature of the reopeners (for example, the $\pm 15\%$ on volumes), provide our business with some comfort concerning the uncertainties that are attached to being a business in its growing phase, developing in a completely new area of NI.

9.2 Designated Parameters and Determination Values

- 9.2.1 This is the first price control for SGN Natural Gas and at present, our final designs are still being developed, the result of which will have a direct impact on certain designated parameters and determination values.
- 9.2.2 There are currently material uncertainties regarding the build duration at present, which directly affect the final designated parameters and determination values. We would like to ensure that they will be further discussions concerning the parameters as the process continues during the design phase and onto final determination.
- 9.2.3 We will continue to engage with UR until the stage when final designated parameters and determination values are set, in the hope that we will receive appropriate designated parameters and determination values.

9.3 Under-recoveries

- 9.3.1 Given current market conditions whereby oil is cheaper than gas at present and as our business is in the early stages of development there may be a need to incentivise connections by using the under-recovery mechanism.
- 9.3.2 Should this be the case throughout GD17 to drive connections and make natural gas a more attractive proposition for customers, we feel there may be a discussion to be had with UR regarding current Libor +2% rate of recovery.
- 9.3.3 This is a designated parameter that could be used to increase the incentive to the business to drive connections through this mechanism, by allowing a reasonable higher return on under-recoveries.
- 9.3.4 We hope that we can discuss such a proposal with UR over the coming months through our planned engagement, in order to ensure SGN Natural Gas are in the best position possible to make the Gas to the West extension a success and ensure the long term viability of the project.

9.4 Supplier of Last Resort (SoLR)

- 9.4.1 Whilst we appreciate the fact that there are options whereby “allowed costs” reimbursement in respect to a SoLR event could be recoverable through a mid PC review or through the Uncertainty Mechanism, we have previously outlined concern in this regard at GMOG with UR.
- 9.4.2 We continue to have significant concern around the quantification of what would be allowed within the Price Control (PC), should a SoLR event occur. Given the event is likely to have a significant cost attached and getting this right is of fundamental importance from both a business cash flow and tariff point of view.
- 9.4.3 We appreciate the work UR have put in to ensure that there will be a mechanism to recover these costs, but fundamentally we would prefer that this process be included explicitly within our licence.
- 9.4.4 We would like to engage further on this subject with UR in the coming months to come to a solution that benefits all parties involved and reduces the risks to SGN Natural Gas, for an event that could occur completely outside the businesses control.

9.5 Conclusions

- 9.5.1 We will work and engage with UR throughout the coming months to ensure these areas are discussed and agreement made in order to allow the business to succeed over the GD17 period and beyond.

10. Licence Implications

10.1 Introduction

- 10.1.1 We understand that after the Final Determination (FD) is issued, licence modifications are necessary in order to reflect the updated values for designated parameters (and any other necessary modification), linked to the final decisions.
- 10.1.2 We also understand the need to simplify some conditions in the licence for future use, recognise LMA and correct simple errors that have come to light since the licence award.
- 10.1.3 We look forward to engaging with The Regulator (UR) so that we can agree an overall package and agree representative designated parameters that allow the SGN Natural Gas business to succeed over the GD17 period and beyond.

10.2 Designated Parameters and Determination Values

- 10.2.1 As outlined in section 9, this is our first price control and we are continuing to refine our final build roll out for the GD17 period.
- 10.2.2 This is combined with the fact there are material uncertainties regarding the build duration at present.
- 10.2.3 The FD is not due for publication until mid-September, therefore, we will continue to engage with UR until the stage when final designated parameters and determination values are set, in the hope that we will receive appropriate designated parameters and determination values.

10.3 Use of Opex and Capex Rollers

- 10.3.1 We have previously discussed with UR, the fact that Opex and Capex rollers contained within our licence require simplification for clearer understanding and application in practice.
- 10.3.2 Per paragraph 11.8 of the DD, we note it is the intention of UR to have these rollers “switched off” for the GD17 period. Whilst we welcome this approach, we hope that we can engage over the coming months to find an appropriate solution that enables SGN Natural Gas to achieve some benefit and protection around the use of opex and capex rollers.
- 10.3.3 We understand this may be late in the process, however, feel this is worth due consideration over the engagement planned in the coming months.

10.4 LMA Modifications

- 10.4.1 Having reviewed the changes drafted in relation to LMA in the SGN Natural Gas conveyance licence, at this point, whilst they appear appropriate, we will discuss them further with UR in the meeting we have set up for 6th June 2015 and beyond, in order that we are in full agreement with any changes that are being made.

10.5 Correction of Licence Errors

- 10.5.1 Having reviewed the changes drafted in relation to the correction of licence errors in the SGN Natural Gas conveyance licence, at this point, whilst they appear appropriate, we will discuss them further with UR in the meeting we have set up for 6th June 2015 and beyond, in order that we are in full agreement with any changes that are being made.

10.6 Conclusions

- 10.6.1 We will work and engage with UR throughout the coming months to ensure any licence modifications are appropriate for the SGN Natural Gas business and an overall package is agreed to allow the business to succeed over the GD17 period and beyond.