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National Grid Gas, gas shippers  
and other interested parties

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Date: 7 March 2011

Dear Colleague,

**Consultation Letter: Income Adjusting Event claim for the Canatxx incremental entry capacity signal at Fleetwood**

**Responses requested by 1 April 2011**

**Introduction**

Within the framework of the System Operator (SO) Activity Revenue Restriction (Special Condition C8C) of National Grid Gas's (NGG's) Gas Transporter licence, Centrica Energy has given notice to Ofgem<sup>1</sup> that it believes an Income Adjusting Event (IAE) has occurred in 2010/11. The claim is associated with the Canatxx Shipping Limited signal for entry capacity at Fleetwood. The purpose of this consultation letter is to invite views on the proposed IAE notice.

**Background**

In the September 2006 Quarterly System Entry Capacity (QSEC) auctions<sup>2</sup>, bids were placed for incremental capacity for a new entry point at Fleetwood by Canatxx<sup>3</sup> Shipping Limited. Its bids signalled a requirement for 650GWh/day of incremental capacity to meet the needs of two inter-related projects.

The main project, to have been developed by Canatxx Gas Storage Limited (CGSL), was to create a salt cavern gas storage facility at Preesall, near Fleetwood. After the first phase of development, this facility was to be capable of storing 1,300 million cubic metres (mcm) of natural gas and delivering 113 mcm per day to the National Transmission System (NTS). For comparison, the largest existing UK natural gas storage facility, the Rough depleted gas field, has a capacity of 3,300 mcm. The second project was a Liquefied Natural Gas (LNG) unloading and re-gasification terminal at Amlwch,

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<sup>1</sup> See Appendix 1 for a copy of Centrica's letter and further clarification details

<sup>2</sup> The main features of the GB Transmission system and the allocation of entry capacity are described in Appendix 2.

<sup>3</sup> Canatxx is a US based development company which operates through a number of subsidiary companies. The name "Canatxx" in this document refers to Canatxx Shipping Limited unless otherwise indicated.

Anglesey, to be developed by Canatxx LNG Limited. This facility was to link to Fleetwood via a 70 mile undersea pipe.

Canatxx's auction bids were sufficient to pass NGG's test for the release of incremental entry capacity and Ofgem did not veto the signal. This triggered the release of up to £200m revenue (in 2004/05 prices) to fund the development. Allowing for the scale and complexity of the work, we approved a 48 month lead time. Hence, their signal resulted in NGG taking on an obligation to provide 650GWh/d of entry capacity at Fleetwood entry point from October 2010.

The Canatxx signal was made in advance of its storage project being granted planning permission. This was subsequently refused, and in October 2007 an appeal by CGSL was rejected by the Secretary of State. In 2010 CGSL lost a further appeal on this decision. In July 2010, CGSL changed its name to Halite Energy Group Limited and the storage project was subsequently relaunched under new ownership<sup>4</sup>. However, it appears that this proposal will initially be significantly smaller in scale<sup>5</sup>.

Canatxx should have posted security in October 2009 but did not do so. As a consequence its capacity for the quarter from 1 October 2010 lapsed, and the quarter from 1 January 2011 also subsequently lapsed. Canatxx's rights to capacity in later years are unaffected. As a result, capacity rights are still held by Canatxx but have not been used to date.

A key feature of Canatxx's situation was that it did not hold any capacity rights at other entry points prior to the bid at Fleetwood and it was making a large bid for capacity. This has identified a deficiency in NGG's credit arrangements as set out in the Uniform Network Code (UNC). Users who buy capacity at QSEC auctions are required to provide NGG with security 12 months prior to the capacity flow date. If this is not provided, the user's QSEC capacity holdings for that quarter will lapse across all entry points where they had booked capacity. It had previously been considered that the prospect of losing capacity across all a firm's capacity holdings would be sufficient deterrent from default. However this case has illustrated that for a single entry point shipper with no other commitments to the system, there is no deterrent to default.

## **Impact on NGG**

In light of CGSL's difficulties with obtaining the appropriate planning permissions for the storage project, NGG cancelled construction projects and put off the bulk of the expenditure that would have been required to make the necessary reinforcements to the NTS to deliver the capacity signalled. However, NGG can still benefit from the full incentive revenue for the provision of this capacity because of the 2002-7 entry capacity incentive arrangements in the licence.

Because no Fleetwood entry capacity auction revenue was received by NGG from Canatxx for the two quarters commencing October 2010 and January 2011, there has been a shortfall in NGG's revenue relative to its allowed revenue. The treatment of revenues from the initial signal to the 2017 formula year at Fleetwood is explained in greater detail in Appendix 3<sup>6</sup>. Under the 2002-7 entry capacity incentive arrangements, incremental allowed revenue in relation to Fleetwood entry capacity is £10.890m in 2010/11.

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<sup>4</sup> Majority ownership was acquired by the D. E. Shaw group, a global investment firm.

<sup>5</sup> Infocus (Newsletter of Halite Energy Group) January 2011.

<sup>6</sup> This is an update of Appendix 4 in "User Commitment for National transmission System Quarterly Entry Capacity Initial Impact Assessment on modification proposals" Ofgem, 7 October 2009.

Shortfalls in revenue are collected via a neutrality mechanism: the SO commodity charge. The SO commodity charge is levied at a uniform rate for all shippers. Therefore the increased charge to recover the revenue shortfall is smeared across all users.

### **Details of the IAE notice**

On 7 February 2011, Centrica Energy submitted notice to Ofgem that an IAE had occurred under Special Condition C8C 3 (b) (iii).

In the notice, Centrica Energy suggest that the refusal of planning permission for the Canatxx gas storage facility at Fleetwood has resulted in there being no foreseeable requirement for the entry capacity that had previously been signalled for the entry point. It notes that NGG is entitled to recover SO revenues due to it as a result of Canatxx's Fleetwood entry capacity bid for the 5 year period starting October 2010. These are in the order of £40m in total and it is claimed that a significant proportion of these charges would fall on British Gas Trading (BGT). Centrica Energy identifies the trigger event for this IAE as 1 October 2010, being the date NGG was due to collecting Canatxx revenues through the SO commodity charge. The nature of the IAE identified by Centrica Energy indicates that it would fall under the provisions of C8C 3 (b)(i) (D) being an event other than those described in more detail in clause (i) which is an IAE, in the opinion of the Authority.

Centrica Energy indicates that its reason for raising the IAE is that it is wrong for a price control mechanism to permit a low risk, regulated monopoly, to be entitled to collect the full amount of the Fleetwood revenues owing to it from shippers other than Canatxx. While Centrica Energy agrees that NGG should recover revenue for costs it has incurred to date to deliver new capacity at the Fleetwood entry point, any other amounts recovered are "unearned revenue" amounting to a "windfall gain" to NGG. It notes that it is very likely that these costs will ultimately fall to consumers to pay.

Centrica Energy proposes that NGG be allowed to collect no more than £1 million in the year commencing 1 October 2010 for the Fleetwood signal instead of the current Allowed SO revenue. This figure is based on Centrica Energy's understanding that no physical extension network development has actually taken place and its estimate that NGG's total expenditure would be around £5 million (for comparison NGG estimate that its expenditures have been in excess of £10.5 million (in £2010/11 prices) but this has to be verified).

Because of the recurring nature of NGG's revenue entitlement, Centrica Energy suggests that an IAE will need to be raised for every year in which NGG stands to benefit from a windfall revenue gain.

### **IAE Provisions**

IAE provisions in NGG's gas transporter licence fall under Special Condition C8C "NTS System Operation Activity Revenue restriction". The System Operation (SO) Activity Revenue restriction is designed to ensure that SO actual revenues (raised by NGG charges) do not exceed maximum allowed revenues (set by Ofgem).

The IAE provisions are contained in C8C paragraph 3 (b) "Determination of any adjustment factor to be applied to maximum NTS system operation revenue (SORA<sub>t</sub>)" (reproduced in Appendix 4). IAE's are generally intended to provide protection for both NGG and customers when events occur that result in increased or decreased values of costs against its target that were not envisaged at the time the SO parameters were defined.

The key provisions of C8C paragraph 3 (b) in this context are reproduced as a flow diagram in Appendix 5.

The main questions for the Authority in considering whether system operator allowed revenues should be disallowed are:

- Whether any or all the costs/expenses referred to in the notice were incurred or saved as a result of an IAE.
- Whether the IAE has increased or decreased the relevant system operation costs by more than the £2 million threshold.
- If so, the appropriate amount of the adjustment to be made so that NGG's financial position and performance is, insofar as reasonably practical, the same as if the income adjusting event had not taken place.

Should the Authority determine that no adjustment to NGG's allowed revenues is required, then £10.89m will be collected from shippers by NGG in 2010/11. If the Authority determines an IAE in which either all or a proportion of the SO amount is disallowed, then this will appear as an end of year adjustment which is passed through to the next formula year (adjusted for interest) via the NTS SO revenue adjustment term.

### **Additional Factors**

We consider that an important additional factor for consideration is that by not investing significant sums ahead of the decisions on planning permission, NGG has acted in an economic and efficient manner. By proceeding to collect the capacity revenues within the framework of the price control settlement, NGG is accepting future capacity risks in return for the incentive payment. Although it has not built the capacity at Fleetwood, it is still required to offer it as if it had been built. This has two consequences:

- A new developer could access this capacity within lead times quicker than NGG could respond through building. NGG would then be exposed to the buy-back<sup>7</sup> risk on capacity it could not provide. Moreover, by 2017, this capacity could be transferred, traded or substituted<sup>8</sup> to meet capacity needs at other entry points. With substitution, if an incremental signal occurred nearby (e.g. Barrow) then NGG would be required to accept the capacity obligations at the bidding entry point with no system investment. In these circumstances NGG could be exposed to considerable buy-back risk.
- If the capacity rights are unaffected by the IAE then system modelling would have to include the potential for Fleetwood flows at a level of 650 GWh per day. This introduces a considerable degree of uncertainty into the forecast of system flows and planning of the NTS.

NGG is responsible for the adequacy of its capacity credit arrangements. There is a question as to the extent to which these may have been a contributory factor in allowing this situation to develop.

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<sup>7</sup> NGG may buy back capacity it has previously sold in order to meet its obligations.

<sup>8</sup> Entry capacity substitution is the process by which unsold non-obligated entry capacity is permanently moved from one or more NTS entry points to meet the demand for incremental obligated capacity at another entry point.

## Consultation Questions

The licence obliges Ofgem to consult on the issues and for the Authority to make a determination within three months (i.e. by 7 May 2011 in this case). To inform our decision on this matter we are seeking views to the following questions:

Q1a) Do you consider that an IAE has occurred?  
b) What is the basis of your conclusion?

Q2. Do you consider that any or all the costs saved by NGG are associated with the IAE?

Q3. Has the IAE increased or decreased the relevant system operation costs by more than the £2 million threshold?

Q4. If the Authority concludes that an IAE has occurred, how should we calculate an adjustment figure that ensures that the financial position and performance of NGG is, so far as reasonably practicable, the same as if the IAE had not occurred?

Q5. Are there any additional factors or evidence which you think Ofgem should take into account to inform the Authority's decision?

## Next Steps

We would like to hear the views of any interested parties regarding the issues raised in this letter. Following closure of this open letter consultation, and careful consideration of the respondent's views, the Authority may make a determination under paragraph 3 (b) of Special Condition C8C or may seek and consider further information before making a decision. If a determination is made, the Authority will publish a notice stating the income adjustment allowance and giving reasons for the determination. A shortened consultation period has been given in this instance to ensure that these matters can be brought to the Authority within the three months IAE process.

All responses will be published on Ofgem's website and held in the Research and Information Centre. However, if respondents do not wish their response to be made public then they should clearly mark their response as not for publication. Ofgem prefers to receive responses in an electronic form so that they can be placed easily on the Ofgem website.

Responses should be made on or before 1 April 2011 to:

Paul O'Donovan  
Head of Gas Transmission  
Office of Gas and Electricity Markets  
9 Millbank  
London SW1P 3GE

Or by e-mail to

[gas.transmissionresponse@ofgem.gov.uk](mailto:gas.transmissionresponse@ofgem.gov.uk)

If you have any comments or questions on this letter please contact Paul O'Donovan on +44 20 7901 7293 or [gas.transmissionresponse@ofgem.gov.uk](mailto:gas.transmissionresponse@ofgem.gov.uk) in the first instance.

Yours sincerely,

**Hannah Nixon**  
**Partner, Transmission**

## Appendix 1: Centrica Notice of IAE and follow up e-mail



British Gas Trading Limited  
Millstream  
Maidenhead Road  
Windsor  
Berkshire SL4 5GD  
www.centrica.com

Mr. Stuart Cook  
Senior Partner, Transmission and Governance  
Ofgem  
9 Millbank  
London  
SW1P 3GE

7 February 2011

Dear Stuart,

### **Income Adjusting Event against National Grid Gas NTS**

The purpose of this letter is to formally commence Income Adjusting Event (IAE) proceedings against National Grid Gas plc (NGG) under Special Condition C8C 3(b) (iii) of NGG Gas Transporter Licence.

#### Background

In 2006 Canatxx, being a licensed gas shipper and Registered User under the Uniform Network Code, bid in the Quarterly System Entry Capacity (QSEC) auction for 650GWh/day of incremental entry capacity at a newly created NTS entry point at Fleetwood. That process resulted in NGG taking on an obligation to provide that 650GWh/d of entry capacity at Fleetwood from October 2010.

Subsequent to making the bid in the QSEC process, and the bid volume being allocated by NGG, planning permission for the Canatxx gas storage project at Fleetwood was refused, with two separate planning appeals – one in October 2007 and another in 2010 – being rejected by the Secretary of State. As a result, there is no foreseeable requirement for the capacity previously signalled at Fleetwood; indeed it is British Gas Trading's (BGT's) opinion that any capacity requirement at Fleetwood is at least five years away and probably on much smaller scale than originally planned, that is assuming that any project goes ahead at all.

Canatxx is in a somewhat unusual position, being a single entry point shipper, with no other capacity holdings and, as far as BGT is aware, no other capacity aspirations. This position has allowed it to exploit a loophole that exists in the UNC. We are aware, from primary capacity being made available to other shippers in the short term auctions, that Canatxx has failed to pay the credit to NGG required from October 2009 onwards, however it has still retained rights over future capacity as its NTS auction "commitment" is not thereby invalidated. We are also aware that Canatxx has subsequently sold its interests in the Fleetwood project.

NGG is entitled to recover System Operator revenues due to it as a result of Canatxx's Fleetwood entry capacity bid for the 5 year period starting October 2010, and figures previous circulated to industry participant indicate that the SO revenues due are in the order of £40m over this period, of which BGT will be required to bear a significant proportion.

It is our understanding that, as a result of Canatxx defaulting on its credit payments to NGG, under prevailing rules entry capacity invoices will not even be issued. Therefore, until such time as there is a requirement for entry capacity at Fleetwood or the expiry of the revenue allowance period, the balance of the entry shipping community will be liable for the revenue charge through the capacity neutrality charging mechanism.

#### Reason for Raising an Income Adjusting Event

We welcome the recent change which Ofgem has made to correct NGG's Gas Transporter licence in order to allow the raising of an IAE by a shipper, and are taking this opportunity to avail ourselves of this reinstated right. It is manifestly wrong, given the circumstances set out above, for a price control mechanism to permit NGG, being a low risk, regulated monopoly, to be entitled collect the full amount of the Fleetwood revenues owing to it from shippers other than Canatxx. Notwithstanding the rights afforded to them under their licence, we also consider it disappointing that NGG should continue to pursue the full amount of these revenues.

We absolutely agree that NGG must be allowed to recover costs that it has genuinely incurred in respect of work undertaken to date to deliver new capacity at the Fleetwood entry point, however it is our understanding that no physical work has been undertaken in order to deliver enhancements to the NTS as a result of the Canatxx bid, and that any costs incurred by National Grid will have been as a result of "desk" work and possibly cancelled orders for materials and labour. We would therefore expect such costs to be relatively low. We regard any amounts in excess of this to be unearned revenue amounting to a windfall gain, and it is this excess amount that we ask Ofgem to assess and subsequently disallow.

Whilst it is clearly for each shipper to decide how they treat these charges within their individual businesses, it would appear very likely that most or all of these costs will eventually fall to customers to pay. Needless to say, in the current environment of financial uncertainty and hardship for many customers and business alike, an issue such as this is likely to reflect extremely poorly on all those involved with the gas industry.

#### Next steps

We recognise that the raising of an IAE by a shipper is a rare (even, possibly, unprecedented) event and we are also aware that the transporter licence sets out certain defined steps. First we note that where the Authority fails to make a determination within the permitted timescale laid down for consideration of an IAE, an adjustment will be applied as set out in the notice (i.e. this letter). We also believe that given the recurring nature of NGG's revenue entitlements in respect of Fleetwood, an IAE will need to be raised for every year in which NGG stands to benefit from a windfall revenue gain.

As set out above, we believe that it is appropriate for NGG to be compensated for its direct costs and disbursements to date in respect of the Fleetwood entry point. NGG has previously estimated this figure to be £10m, although we have seen no evidence to support this and find it incredibly high given that no network reinforcement has actually taken place. With this in mind, we propose that NGG be allowed to collect £1m for the year commencing 1 October 2010. Any amount in excess of this must be subject to rigorous Ofgem scrutiny.





While we sincerely hope that this letter suffices to formally trigger an IAE against NGG, we would appreciate any further, timely, guidance from Ofgem about the steps that are required of us should this not be the case. We are, of course, available to discuss this matter in person; please don't hesitate to contact me directly, or my colleague Chris Wright (01753 431059 or [chris.wright@centrica.co.uk](mailto:chris.wright@centrica.co.uk)).

Yours sincerely,

Paul Hallas  
Head of Regulatory Policy, Centrica Energy

**Follow-up email from Chris Wright (Centrica) to Paul O'Donovan (Ofgem) March 2 2011.**

Following further consideration, I thought it might be helpful to drop you a line clarifying a few points raised by our recent IAE letter.

I would like to clarify that the trigger event for Centrica to have raised this IAE is the commencement of the collection of Canatxx revenues by NGG through the SO commodity charge, which commenced on 1 October 2010. We believe in this instance it is appropriate to raise an IAE against NGG since, in our view, the revenues to be collected not only do not reflect the costs incurred by NGG in delivering the signalled capacity, but also do not reflect the change in NGG's ongoing operational costs.

Very little information has been made available to the industry by NGG in respect of the costs it has actually incurred to date in preparation for the Fleetwood entry point. We have seen a figure of £10m, but would point out that this figure was not provided in any formal statement of costs by NGG. We do not have powers to formally require NGG to provide accurate expenditure detail. We therefore treat this figure of £10m as being a rough, worst case estimate, and not to be relied upon. Nevertheless, we would consider a figure of £10m to be incredibly high for a number of reasons. First, it is our understanding that no physical network development – normally the most expensive element of any network reinforcement/extension project - has actually taken place. Second, it would have become evident to NGG at a very early stage of the Fleetwood development process that planning permission had not been granted to Canatxx, and that therefore the entire project was jeopardised. This means that as a prudent operator, NGG should have suspended further work, and therefore expenditure, on the project before significant financial commitments had been made. Significant expenditure committed after this stage would, in our view, suggest imprudence.

The figure of £1m stated in our IAE submission is therefore based upon our reasonable estimate of a total expenditure by NGG of £5m on the Fleetwood project, divided by five (on the basis that an IAE would appear to be required for each of the five years across which the SO revenues are to be collected).

## Appendix 2: GB Transmission system

1.1. National Grid Gas (NGG) National Transmission System (NTS) is the owner and operator of the high-pressure gas pipeline system in Great Britain. The pipeline system transports gas from Aggregate System Entry Points (ASEPs), such as coastal terminals and storage facilities, to system exit points. Exit points are predominantly connections to Gas Distribution Networks (GDNs), but also include storage sites, and direct connections to large industrial consumers and other systems, such as interconnectors to other countries.

1.2. In order to obtain rights to flow gas into the NTS, Shippers must bid for system entry capacity at a number of entry capacity auctions. These auctions vary in the length they allocate rights to flow gas onto the NTS. The Quarterly System Entry Capacity (QSEC) offers long-term capacity rights to flow gas for between 2 and 16 years in advance at each ASEP. These rights are sold in quarterly blocks of system entry capacity entitling the holder to enter gas onto the NTS up to the allocated quantity for each day in the quarter.

1.3. At QSEC, Shippers can bid for two types of capacity: existing unsold baseline<sup>9</sup> capacity, and additional entry capacity which is in excess of baseline (called incremental obligated entry capacity). NGG use bids for incremental obligated entry capacity as the user signal to provide new entry capacity.

1.4. NGG provide a price schedule for each ASEP showing the price for each quantity of entry capacity. The baseline or reserve price ( $P_0$ ) is derived using the Gas Transmission Transportation Charging Methodology. The incremental obligated entry capacity is usually offered in 20 price steps derived from the Incremental Entry Capacity Release (IECR) methodology statement. The auction invitation also lists the estimated cost of investing to deliver the incremental amounts of capacity.

1.5. During the auction, shippers bid for entry capacity at the different price levels in the schedule for each of the entry points and quarters in which they want entry capacity. NGG makes a final allocation of capacity 60 days after the close of bidding. The decision process for determining whether to release incremental obligated entry capacity is contained in the IECR methodology statement.

1.6. When bids show that demand is greater than supply, NGG conducts a Net Present Value (NPV) test. If the NPV of the revenue from the bids for incremental entry capacity in eight consecutive years equals at least 50% of the estimated project value then NGG seeks approval from the Authority to treat additional entry capacity as incremental obligated entry capacity.

1.7. If the request is approved by the Authority, NGG is obliged to release this incremental entry capacity within a default investment lead time of 42 months. NGG has an incentive to release this incremental obligated entry capacity on an accelerated timescale, but it has a limited number of opportunities to extend this default investment lead time. On releasing incremental entry capacity, in response to demand which is backed by financial commitment from users, NGG's allowed revenue automatically increases via the revenue driver mechanism (unless the capacity requirement is wholly met through entry capacity substitution).

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<sup>9</sup> Baselines define the levels of capacity that the transmission licensee is obligated to release. Baselines also determine the level above which incremental capacity is defined.

1.8. NGG earns additional revenue as determined by the revenue driver amount for a fixed five year period. The allowed revenue is determined by the product of a unit revenue allowance and the incremental capacity released. Essentially, the revenue drivers fund the depreciation and return on a deemed amount of capex, with an allowance for opex.

### Appendix 3 Fleetwood Allowed Revenues

1.1. The calculation of NGG NTS's allowed revenues for incremental entry capacity depends on whether the capacity was signalled before or after 1 April 2007. The Fleetwood signal was received before 1 April 2007 and Annex A to Special Condition C8D of the Licence provides details on how the allowed revenue is derived. There are two streams from which NGG derives revenue from any incremental entry capacity – the System Operator (SO) and Transmission Owner (TO) - and within each of these streams are distinct time periods on which the calculation of allowed revenue depends.

1.2. The SO allowed revenue is derived as follows for the following time periods:

- Five years immediately following the contractual delivery of entry capacity (the 'Incentive Period') - the SO allowed revenue is calculated by capacity released multiplied by the unit cost allowance (the latter has an implicit rate of return of between 6.25% and 12.25%)
- The period immediately after the Incentive Period until the end of the current price control period - the SO allowed revenue is calculated again from capacity released multiplied by the unit cost allowance (this time with a 6.25% rate of return)

1.3. The TO allowed revenue is derived as follows for the following time periods:

- Immediately following contractual delivery of the entry capacity until the start of the next price control period - the TO allowed revenue is zero
- During the entire five year price control period which follows the contractual delivery of capacity - the TO RAV is adjusted by *actual investment less deemed SO RAV*<sup>10</sup> and the adjusted TO RAV provides NGG NTS with its allowed revenue via items for return, depreciation and opex
- After this price control period - the deemed SO investment is included in the TO RAV and this provides NGG NTS with a TO allowed revenue via items for return, depreciation and opex

1.4. The spreadsheet that follows shows the various terms used to derive the allowed revenues from Fleetwood. As the signal for Fleetwood was received at the 2006 QSEC auction then the derivation of its allowed revenue is per the description above. The signal was for 650 GWh/day (or 237,250 GWh per non-leap year) from 1 October 2010. Therefore NGG NTS's SO allowed revenue for the period (row A):

- 1 October 2010 - 30 September 2015: is at the rate of return of between 6.25% and 12.25% (between £11m and £22m)
- 1 October 2015 - 31 March 2017: is at the rate of return of 6.25% (£16m to £19m)

1.5. NGG NTS's TO allowed revenue for the period (row C):

- 1 October 2010 - 30 March 2012: is zero
- 1 April 2012 - 31 March 2017: the TO RAV is adjusted by the actual investment less the deemed SO investment which then provides for a TO Allowed revenue via a return, depreciation and opex. As there is very little actual investment compared to the deemed SO investment the TO RAV is actually adjusted downwards which reduces NGG NTS's allowed revenue by between £13m and £20m.

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<sup>10</sup> The deemed SO RAV results from the SO investment deemed to have occurred from the incremental entry capacity after accounting for depreciation. The deemed SO investment is calculated by the unit cost allowance multiplied by the capacity released.

- 1 April 2017 onwards: the deemed SO RAV is added to the TO RAV which provides NGG NTS with the TO allowed revenue via a return, depreciation and opex on the small amount of actual investment made.

	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	
<b>SO</b>		High return period					Low return period				
<b>TO</b>											
<b>SO</b>		11	22	22	22	22	19	16			
<b>TO</b>				-13	-20	-20	-19	-19			
<b>Total</b>		11	22	9	2	2	0	-3			

1.6. Therefore when total allowed revenues are aggregated for TO and SO (row D in spreadsheet), NGG will earn a net revenue of £33m until the next price control periods starts in April 2012. After that the positive SO allowed revenues are offset by the negative TO allowed revenues resulting from the fact that the TO RAV is reduced from there being very little actual investment compared with the deemed SO investment.

<b>Ofgem Model of Canatxx signal at Fleetwood: Allowed SO and TO revenue</b>												
All figures £m (2010/2011)												
<b>Year commencing 1 April</b>	<b>2006</b>	<b>2007</b>	<b>2008</b>	<b>2009</b>	<b>2010</b>	<b>2011</b>	<b>2012</b>	<b>2013</b>	<b>2014</b>	<b>2015</b>	<b>2016</b>	<b>2017</b>
Days in year	365	366	365	365	365	366	365	365	365	366	365	365
Capacity released (GWh) IPOEC < 5 yrs					118,300	237,900	237,250	237,250	237,250	118,950		
Capacity released (GWh) IPOEC > 5 yrs										118,950	237,250	
Max allowed revenue					19.66	39.42	39.42	39.42	39.42	19.71		
Min allowed revenue					10.89	21.84	21.84	21.84	21.84	10.92		
Normal revenue (SOREVIBECT)										10.38	20.60	
Auction revenue					9.82	19.75	19.69	19.69	19.69	9.87	15.59	
Allowed SO revenue (A)					10.89	21.84	21.84	21.84	21.84	19.71	20.60	
<b>Actual Investment</b>												
Opening SO RAV		0.32	8.22	8.77	10.12	9.92	9.72	9.52	9.32	9.12	8.92	
Investment (B)*	0.32	7.90	0.73	1.55								
Depreciation		0.01	0.18	0.20	0.20	0.20	0.20	0.20	0.20	0.20	0.20	
Closing SO RAV	<b>0.32</b>	<b>8.22</b>	<b>8.77</b>	<b>10.12</b>	<b>9.92</b>	<b>9.72</b>	<b>9.52</b>	<b>9.32</b>	<b>9.12</b>	<b>8.92</b>	<b>8.72</b>	
<b>Deemed Investment</b>												
Opening deemed SO RAV				45.21	225.05	220.03	215.01	209.98	204.96	199.94	194.91	
Deemed investment (20:80 split)			45.21	180.85								
Depreciation				1.00	5.02	5.02	5.02	5.02	5.02	5.02	5.02	
Closing deemed SO RAV			<b>45.21</b>	<b>225.05</b>	<b>220.03</b>	<b>215.01</b>	<b>209.98</b>	<b>204.96</b>	<b>199.94</b>	<b>194.91</b>	<b>189.89</b>	
<b>TO Control</b>												
Opening TO RAV								-200.46	-195.64	-190.81	-185.99	8.72
RAV adjustment							-205.29					
Depreciation							-4.82	-4.82	-4.82	-4.82	-4.82	0.20
Closing RAV							<b>-200.46</b>	<b>-195.64</b>	<b>-190.81</b>	<b>-185.99</b>	<b>-181.16</b>	<b>8.53</b>
<b>TO allowed revenue</b>												
TO allowed return							-6.26	-12.38	-12.08	-11.78	-11.47	0.54
TO allowed depreciation							-4.82	-4.82	-4.82	-4.82	-4.82	0.20
TO allowed opex							-1.50	-2.97	-2.90	-2.83	-2.75	0.13
TO allowed revenue (C)							<b>-12.59</b>	<b>-20.17</b>	<b>-19.80</b>	<b>-19.43</b>	<b>-19.05</b>	<b>0.87</b>
<b>Revenue summary</b>												
Allowed SO revenue					10.89	21.84	21.84	21.84	21.84	19.71	20.60	
Allowed TO revenue							-12.59	-20.17	-19.80	-19.43	-19.05	0.87
Total revenue (D)					<b>10.89</b>	<b>21.84</b>	<b>9.25</b>	<b>1.67</b>	<b>2.04</b>	<b>0.28</b>	<b>1.54</b>	<b>0.87</b>
* Total investment £10.5m												

## Appendix 4 Relevant Licence Conditions

### 1. Special Licence Condition C8A:

“relevant system operation costs” means those costs associated with the licensee’s conduct of the NTS system operation activity and/or NTS transportation owner activity.

### 2. Special Licence Condition C8C 3 (b):

#### **(b) Determination of any adjustment factor to be applied to maximum NTS system operation revenue ( $SORA_t$ )**

- (i) An income adjusting event may arise from any of the following:
  - (A) an event or circumstance constituting force majeure under the network code;
  - (B) an event or circumstance resulting in the declaration of a network gas supply emergency (having the meaning given to such term in the network code);
  - (C) where the licensee serves a termination notice (having the meaning given to that term in the network code) on a gas shipper and the revenues derived by the licensee from the sale of that obligated entry capacity are less than the revenues that would have been derived from the original sale of that capacity had the original purchaser of the capacity not been served with a termination notice (having the meaning given to that term in the network code); and
  - (D) an event or circumstance other than listed above which is, in the opinion of the Authority, an income adjusting event and is approved by it as such in accordance with paragraph 3(b)(ix) of this condition,

where the event has, for relevant formula year t:

- (aa) increased or decreased the value of “relevant system operation costs” (having the meaning given to that term in Special Condition C8A (Revenue restriction definitions in respect of the NTS transportation owner activity and NTS system operation activity)) by more than £2,000,000 (the “threshold amount”). This threshold amount does not apply in respect of sub-paragraphs 3(b)(i)(B) or 3(b)(i)(C) above; or
- (bb) increased or decreased the value of  $IOC_t$  (having the meaning given to that term in paragraph 1(b) of Special Condition C8G (NTS system operator internal incentives, costs and revenues))



or  $ICE_t$  (having the meaning given to that term in paragraph 1(c) of Special Condition C8G (NTS system operator internal incentives, costs and revenues)) by more than £1,000,000 (the "internal threshold amount") and is demonstrably not included in  $IOIT_t$  or  $ICET_t$  respectively (having the meaning given to those terms in paragraphs 1(b) and 1(c) of Special Condition C8G (NTS system operator internal incentives, costs and revenues) respectively) for formula year t. This internal threshold amount does not apply in respect of sub-paragraphs 3(b)(i)(B) or 3(b)(i)(C) above.

- (ii) Where the licensee considers, and can provide supporting evidence that, in respect of relevant formula year t, there have been costs and/or expenses that have been incurred or saved by an income adjusting event, then the licensee shall give notice of this event to the Authority.
- (iii) Where any shipper considers, and can provide supporting evidence that, in respect of formula year t, there have been costs and/or expenses that have been incurred or saved by an income adjusting event, then that shipper may give notice of this event to the Authority.
- (iv) A notice provided to the Authority under paragraphs 3(b)(ii) or 3(b)(iii) shall, in the case of the licensee, and should in so far as is practicable in the case of any shipper, give particulars of:
  - (A) the event to which the notice relates and the reason(s) why the person giving the notice considers this event to be an income adjusting event;
  - (B) the amount of any change in costs and/or expenses that can be demonstrated by the person giving the notice to have been caused or saved by the event and how the amount of these costs and/or expenses has been calculated;
  - (C) the amount of any allowed income adjustment proposed as a consequence of that event and how this allowed income adjustment has been calculated; and
  - (D) any other analysis or information which the person submitting the notice considers to be sufficient to enable the Authority and shippers to fully assess the event to which the notice relates.
- (v) If the Authority considers that the analysis or information provided in sub-paragraphs 3(b)(iv)(A) to 3(b)(iv)(D) above is insufficient to enable both the Authority and shippers to assess whether an income adjusting event has occurred and/or the amount of any allowed income adjustment that should be approved, the Authority can request that the supporting evidence be supplemented with additional material that it considers appropriate.
- (vi) A notice of an income adjusting event shall be given as soon as is reasonably practicable after the occurrence of the income adjusting event,

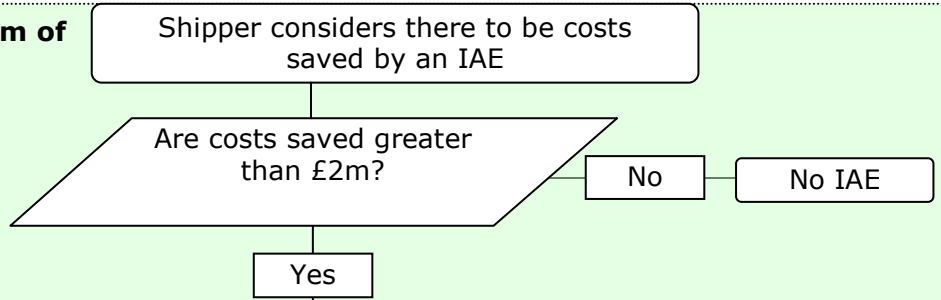
and, in any event, not later than three months after the end of the relevant formula year  $t$  in which it occurs.

- (vii) The Authority will make public the notice and supporting evidence and information, excluding any confidential information, which it has received under paragraph 3(b)(ii) or 3(b)(iii) of this condition.
- (viii) Any notice submitted to the Authority under either paragraphs 3(b)(ii) or 3(b)(iii) above shall clearly identify whether any of the information contained in the notice is confidential information. The Authority shall make the final determination as to whether the information is confidential information for the purpose of paragraph 3(b)(vii) having regard to:
  - (A) the need to exclude from disclosure, so far as is reasonably practicable, information whose disclosure the Authority considers would or might seriously prejudicially affect the interests of a person to which it relates; and
  - (B) the extent to which the disclosure of the information mentioned in sub-paragraph 3(b)(viii)(A) is necessary for the purpose of enabling shippers to fully assess the event to which the notice relates.
- (ix) Following consultation with such parties as the Authority considers likely to be affected by its determination, including the licensee and shippers, the Authority shall determine:
  - (A) whether any or all of the costs and/or expenses referred to in a notice pursuant to paragraphs 3(b)(ii) or 3(b)(iii) of this condition were incurred or saved as a result of an income adjusting event;
  - (B) whether the event or circumstance has increased or decreased the value of relevant system operation costs (having the meaning given to that term in Special Condition C8A (Revenue restriction definitions in respect of the NTS transportation owner activity and NTS system operation activity)) by more than the threshold amount or has increased or decreased the value of  $IOC_t$  or  $ICE_t$  (having the meaning given to those terms in paragraphs 1(b) and 1(c) of Special Condition C8G (NTS system operator internal incentives, costs and revenues) respectively) by more than the internal threshold amount, save in the case of sub-paragraphs 3(b)(i)(B) and 3(b)(i)(C) where the threshold amount and internal threshold amount shall not apply; and
  - (C) if so, whether the amount of the proposed income adjustment ensures that the financial position and performance of the licensee are, insofar as is reasonably practicable, the same as if that income adjusting event had not taken place, and if not, what allowed income adjustment would secure that effect.
- (x) In relation to formula year  $t$ , the approved allowance in respect of an income adjustment ( $SORA_t$ ) shall be:

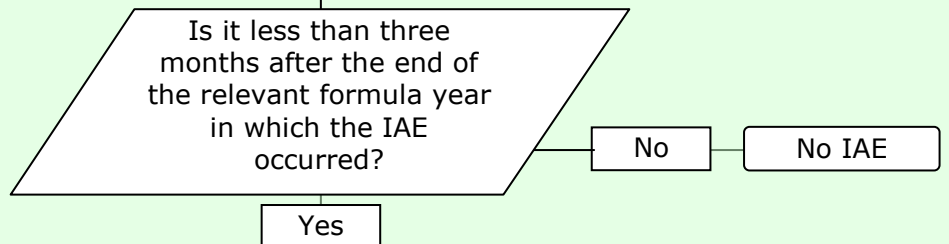
- (A) the value determined by the Authority under paragraph 3(b)(ix) of this condition; or
  - (B) if the Authority has not made a determination under paragraph 3(b)(ix) of this condition within three months of the date on which the notice of an income adjusting event was provided to the Authority, the amount of the allowed income adjustment proposed as a consequence of the event in the notice given to the Authority under paragraph 3(b)(iv)(C); or
  - (C) in all other cases zero, including situations where the Authority has not made a determination under paragraph 3(b)(ix) of this condition within three months of the date on which notice under paragraphs 3(b)(ii) or 3(b)(iii) was provided to the Authority and the Authority has, before the end of that three month period, informed the relevant parties that the Authority considers that the analysis or information provided in accordance with paragraphs 3(b)(iv) and/or 3(b)(v) is insufficient to enable the Authority and shippers to assess whether an income adjusting event has occurred and/or the amount of any allowed income adjustment.
- (xi) The Authority's decision in relation to any notice given under paragraphs 3(b)(ii) or 3(b)(iii) shall be in writing, shall be copied to the licensee and shall be published.
  - (xii) The Authority may revoke an approval of an income adjusting event and allowed income adjustment with the consent of the licensee, following consultation with the licensee and shippers. Revocation of any income adjusting event and allowed income adjustment shall be in writing, shall be copied to the licensee and shall be in the public domain.

**Appendix 5 Flow Diagram of IAE steps for Centrica's notice**

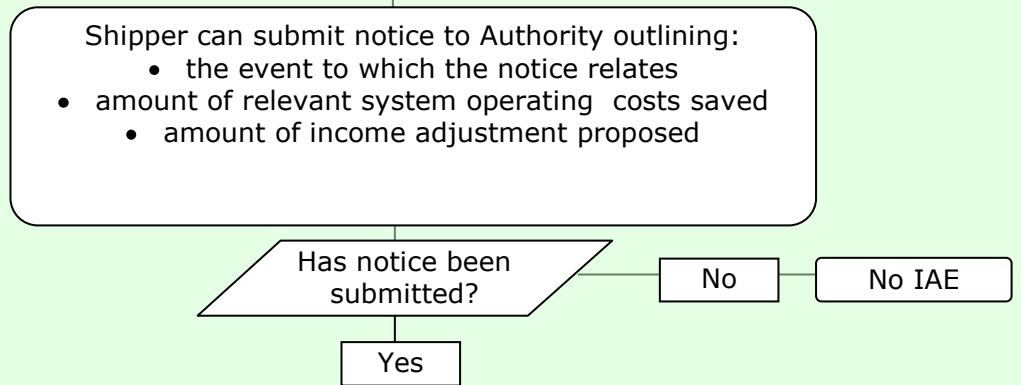
**Provision: C8C3(b) (iii)**



**C8C3(b) (vi)**



**C8C 3 (b) (iv)**



**C8C 3 (b) (ix) and (x) - Authority**

