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Consultation on a Proposed Income Adjusting Event submitted by National Grid Electricity Transmission plc in relation to the 2015-17 Electricity System Operator Incentives Scheme: RWE Response

Dear Tom,

RWE welcomes the opportunity to respond to the Ofgem Consultation on a Proposed Income Adjusting Event submitted by National Grid Electricity Transmission plc in relation to the 2015-17 Electricity System Operator Incentives Scheme. We are responding on behalf of RWE companies operating in the UK. This response is non confidential.

We have assessed the Income Adjustment Event (IEA) in the context of the considerations that the Authority will take into account. These are the foreseeability of the event; the causality between the event and the costs incurred; the extent to which National Grid Electricity Transmission (NGET) had control over the costs incurred; and the extent of the discretion of the Authority¹.

- **The foreseeability of the event:** We believe that the closure of UK coal fired power stations including Fiddlers Ferry² and Rugeley³ cannot be considered to be an unforeseen event. Throughout 2015 there was clear evidence that future of UK coal fired power station remained in doubt. For example,
 - Scottish Power announced the closure of Longannet coal fired power station on 18th August 2015⁴;
 - The Government announced “*plans to close all coal-fired power stations by 2025 and restrict their use by 2023*” in a press release issued on 18th November 2015”. In a statement the Energy and Climate Change Secretary Amber Rudd said “*Our determination to cut carbon emissions as cost effectively as possible is crystal clear*”

¹ Consultation on a Proposed Income Adjusting Event submitted by National Grid Electricity Transmission plc in relation to the 2015-17 Electricity System Operator Incentives Scheme, Ofgem, 8th June 2016, page 5

² SSE Press Release 3rd February 2016 at <http://sse.com/newsandviews/allarticles/2016/02/consultation-on-future-of-sse-fiddlers-ferry-power-station/>

³ Rugeley Power Press Release 8th February at <http://www.rugeleypower.com/?article=19>

⁴ Scottish Power Press Release on 18th August 2015 at http://www.scottishpower.com/news/pages/longannet_power_station_to_close_in_march_2016.asp

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*and this step will make us one of the first developed countries to commit to taking coal off our system*⁵; and

- SSE announced on 11th December 2015 that coal fired Fiddlers Ferry power station has failed to win a capacity market contract. SSE stated that *“Thermal generation is continuing to operate in very challenging market conditions. Following this year’s auction round, SSE will continue to consider the options for the future operation of all of its power generating plant, including Fiddler’s Ferry.”*⁶

These statements were published prior to the deadline (31st December 2015) that NGET is obliged to make a submission to Ofgem in the preceding formula year with respect to the Black Start Cost Incentive target⁷. We do not accept therefore that the actual costs incurred (£113m) in relation to the Black Start contracts represents a reasonable or proportionate response to the problem which was well signalled to the wider electricity market and to NGET.

- **The causality between the event and the costs incurred:** There is no doubt that the closure announcement in February 2016 for Fiddlers Ferry formed the basis for the response from NGET in seeking to secure additional Black Start Contracts. However, as noted above, the potential closure was well signalled in advance both with respect to the future of coal fired power stations, state of the electricity market and the potential closure of Fiddlers Ferry power station.

In addition, NGET states that Drax announced the potential mothballing of the Drax coal units⁸. This appears to relate to press statements reflecting comments from the Drax chief executive Dorothy Thomson in response to Government plans to close coal fired units *“We may choose to mothball them, but what we are keen to [do] is to work with government and find the right solution”*⁹. However, the Preliminary Results notice issued by Drax on 23rd February 2016 included the statement that *“For the first time since the beginning of the last decade our coal units have started to two-shift, by which we mean they do not run in a continual, base load manner. We recognise that this is the future for these units, and our ability to respond in an ever more flexible way will help us better support the grid and, in being able to play a more active role in the prompt market, create incremental shareholder value”*¹⁰. In our view the statements from Drax do not comprise a firm announcement of mothballing coal units (an “event”) which would require an immediate response in the form of tendering for new black start contracts. We do not accept therefore that in this case there is a demonstrable causality between the event and the costs incurred.

- **The extent to which NGET had control over the costs incurred:** We do not accept that the circumstances that gave rise to the income and expenditure were outside the control of National Grid. Acting as System Operator, NGET is well placed to understand the state of the electricity market and to discuss ongoing operational activities with market participants. We would have expected that the situation with regard to the status of Fiddlers Ferry, Rugeley and Drax power stations would form the basis of an ongoing dialogue with operators throughout 2015. Given the public statements the announcements regarding the status of plant cannot

⁵ DECC Press Release, 18th November 2015 at <https://www.gov.uk/government/news/government-announces-plans-to-close-coal-power-stations-by-2025>

⁶ SSE Press Release 11th December 2015 at <http://sse.com/newsandviews/allarticles/2015/12/sse-statement-on-capacity-market-auction-provisional-results-fiddlers-ferry-power-station/>

⁷ Notice of an Income Adjusting Event, submitted under Part E1 of Special Condition 4C (Balancing Services Activity Revenue Restriction on External Costs) of National Grid Electricity Transmission plc’s Electricity Transmission Licence, National Grid 24th May 2016, page 3 (The IEA Notice)

⁸ IEA Notice, page 3, footnote 6

⁹ See for example a Reuters Article at <http://uk.reuters.com/article/uk-drax-results-idUKKCN0VW0T3>

¹⁰ Drax Preliminary Results stated that at <http://www.drax.com/media/66476/drax-group-preliminary-results-for-the-year-ended-31-december-2015.pdf>

have taken NGET by surprise. Therefore NGET should have signalled to the market a requirement for additional black start capability well in advance of the actual tender process that was initiated. This would have allowed NGET to secure economic and efficient alternatives to those actually procured. In the event the tender process appeared rushed and the unfortunate timing of the tender process directly lead to excessive costs incurred by NGET.

- **To exercise the discretion of the Authority:** We believe that in exercising its discretion, the Authority should consider the appropriateness of the actions taken by NGET. As noted above the closure of Fiddlers Ferry and Rugeley power stations and the status of Drax coal units cannot be regarded as unforeseen or unforeseeable events. The potential risk for black start should have been identified prior to the deadline associated with the Black Start Incentive target. With respect to the costs incurred (£113m) we submit that these are disproportionate and inefficient particularly given the extent to which National Grid has control over the costs incurred based on the ongoing dialogue regarding power station status with operators conducted by NGET. Finally in undertaking a rushed tender process, NGET incurred costs that are disproportionate (based on keeping Fiddlers Ferry open). Consequently the Authority should not allow the excessive costs to constitute an income adjusting event under the System Operator incentive scheme.

We are concerned about the wider effects of NGETs actions in the electricity and capacity market as a result of procuring black start in the manner identified in the claim for an IEA. In entering into the contracts at the level of costs indicated NGET may have caused distortions in both the electricity market (in terms of expectations of scarcity) and in the capacity market (by ensuring that a plant that would otherwise have closed remains on the system). We think that these effects are significant and material and have serious consequences for the economic and efficient operation of the wider market. The Authority should take these effects into account in considering the claim for an income adjusting event.

Our responses to the specific questions are included in Annex 1 to this document.

If you have any comments or wish to discuss the contents of this letter then please do not hesitate to contact me.

Yours faithfully

By email

Bill Reed
Market Development Manager

Annex 1: RWE Response to the Consultation Questions

CHAPTER: One Question 1: Do you believe that the event submitted by NGET as an Income Adjusting Event constitutes an Income Adjusting Event?

We do not believe that the event submitted by NGET as an Income Adjusting Event constitutes an Income Adjusting Event. The events that underpin the enhanced black start requirement could have been foreseen by National Grid acting as a reasonable and prudent System Operator. In particular the potential closure of coal fired power stations was well signalled to the electricity market in advance of the relevant incentive scheme deadline and National Grid should have had sufficient market intelligence through dialogue with plant operators to prepare an appropriate and proportionate response. In particular, National Grid should have tendered for additional black start at an earlier stage which could have resulted in more economic and efficient solutions.

- **Do you consider the proposed IAE to constitute force majeure as defined in the BSC or in the CUSC?**

We do not accept that the event submitted by NGET is an income adjusting event. Consequently we do not believe that the event can constitute force majeure as defined in the BSC or CUSC.

- **Do you believe that the event submitted by NGET was unforeseen?**

The event submitted by NGET was not unforeseen. As noted above, the future of coal fired power stations including Fiddlers Ferry was in doubt prior to the setting of the black start cost incentive. We would have expected that dialogue between National Grid and the power station operators would have flagged the risks well in advance of actual closure notices and that NGET should have acted accordingly to secure the resilience of the transmission system.

Please provide evidence to support your view where possible.

- **Do you believe that the proposed IAE costs were beyond the reasonable control of NGET?**

We do not believe that the proposed IAE costs were beyond the reasonable control of NGET. As noted above the events that lead up to the closure of Fiddlers Ferry could have been reasonably foreseen. The rushed tender process undertaken by NGET resulted in excessive costs for customers and should not be allowed as an income adjusting event.

Question 2: Assuming the event is an IAE, do you consider that any or all of the costs set out in NGET's notice were caused by the relevant IAE?

We are concerned about the assessment criteria used to justify the expenditure. NGET suggest that the costs should be considered in relation to the avoided value of lost load associated with the potential delay to customer restoration in the event that a black start contract is not secured (in terms of additional hours of interruption). In this context we note that:

- **The probability of an event should be taken into account in the assessment:** Black start events are high impact (customer interruptions) but rare. Therefore in assessing the cost we would have expected that the probability of an event would be taken into account. Such a probability should be based on the Loss of Load Expectation analysis that underpins the assessment of capacity market. A low probability of an event would significantly impact in the assessment of the avoided cost of an interruption.

- **A Value of Lost Load of £67,780/MWh¹¹ does not make sense:** We do not understand why NGET has assessed the cost of an interruption using a VoLL of £67,780. Note that we assume this means £67,780/MWh based on the statement that the “*value in £/MWh being four times higher for a four hour outage*”. The London Economics report¹² which is based on an assessment of the costs for customers of a potential **one hour** interruption makes no mention of a VoLL of £67,780/MWh in relation to four hours of interruption. The correct estimate of costs should be based on the relevant VoLL (rate/hour), the duration of the event (in hours) and the volume under consideration (in MWh). It is incorrect to multiply the rate by the number of hours (which results in a spurious measure of VoLL) and then by the volume.
- **The London Economics VoLL for one hour is £16,940/MWh:** London Economics “*concluded that we should calculate a headline VoLL figure using the willingness to accept (WTA) CE [choice experiment] results, as a load-share weighted average across domestic and SME users for the winter peak weekday figures*” and that the “*Load-share weighted average across domestic and SME [small and medium sized businesses] users for winter, peak, weekday*” is “£16,940 £/MWh” (London Economics Report, Page xvi). Therefore, the starting point for any evaluation should be the London Economics’ VoLL for one hour. It is plausible that the VoLL for subsequent hours is less than £16,940/MWh (for some customers the subsequent VoLL could of course be higher). It also is clear from the London Economics assessment of the costs associated with a 4-hour interruption that the costs are roughly four times the hourly cost (see Tables 9 and 10 in the London Economics Report¹³).
- **The current VoLL is actually £3,000/MWh:** VoLL in the energy market has been set at £3000/MWh and not £16,940/MWh as a pragmatic approach towards the capping of forward prices. An assessment based on the prevailing market level of VoLL results in materially lower benefits associated with the IEA contracts (Table 1). At this market level of VoLL the maximum benefit of the Fiddlers Ferry contract is £63m and the maximum benefit of the Drax contract is £48m (Total £111m, which is less than the actual contracted value of £113m)

Table 1: Assessment of National Grid analysis with different levels of VoLL

		Fiddlers Ferry		Drax		Drax	
Duration	hours	4	6	3	4	3	4
Demand	MW	3,500	3,500	2,000	2,000	4,000	4,000
MW per Hour	Total MWh	14,000	21,000	6,000	8,000	12,000	16,000
VOLL 1 Hour	£/MWh	16,940	16,940	16,940	16,940	16,940	16,940
VOLL 4 Hours	£/MWh	67,780	67,780	67,780	67,780	67,780	67,780
VOLL at Cashout	£/MWh	3,000	3,000	3,000	3,000	3,000	3,000
Cost VOLL at 1 Hour	£m	237	356	102	136	203	271
Cost VOLL at 4 Hours	£m	949	1,423	407	542	813	1,084
Cost VOLL at Cashout	£m	42	63	18	24	36	48

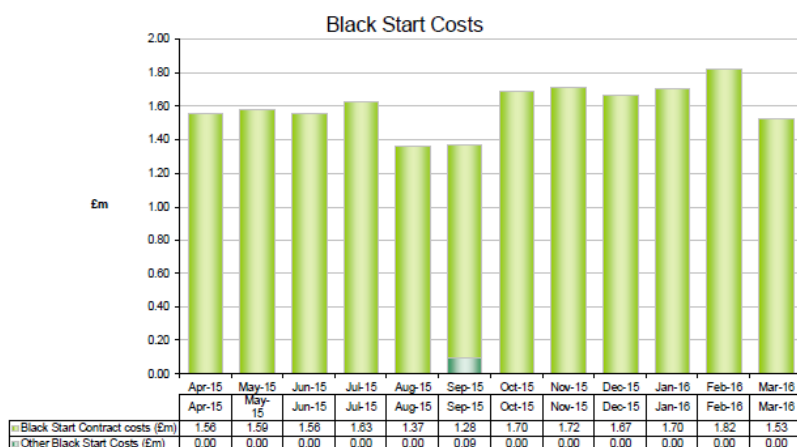
¹¹ Note that we have used the figure of £67,780 from page 2 of the NGET Notice in the IEA, though the Notice also refers to a VoLL of £67,760 on page 12

¹² The Value of Lost Load (VoLL) for Electricity in Great Britain, Final report for Ofgem and DECC, Prepared by London Economics, July 2013 at https://www.ofgem.gov.uk/sites/default/files/docs/2013/07/london-economics-value-of-lost-load-for-electricity-in-gb_0.pdf, (the London Economics Report)

¹³ London Economics Report, page 20

- **The avoided cost of interruption is not a sound basis for this analysis:** The benefits of the Black Start contract should be assessed in terms of costs associated with the physical requirement for emergency restoration. This relates to the fixed costs associated with the relevant generating unit under contract and the variable costs associated with its dispatch. Unfortunately there is no information that enables us to determine the cost reflectivity of the contract on this basis. However, we are concerned that the contracts may not be cost reflective since the value exceeds the costs of delivering the service.
- **The costs for Black Start in the IEA claim is disproportionate:** In 2015/16 NGET maintained 15 black start units at a cost of £21.4m for 2015/16 (£1.42m per contract on average)¹⁴. It is reasonable to assume that Fiddlers Ferry and/or Drax may have black start contracts within this cost envelope. This contrasts with the 2 contracts for the IEA claim in 2016/17 which cost £113m (£56.5m per contract).

Figure 1: Black Start Costs, April 2016 to Mar 2016



Note that NGET have indicated that in 2016/17 there are 18 black start contracts and the April monthly cost was £0.88m¹⁵.

- **Are there any additional interactions between costs incurred that need to be taken into account?**

The IEA relates to the Black Start contracts with Fiddlers Ferry and Drax entered into by NGET. There are no additional costs identified in the claim, and we are not aware of any additional interactions between costs incurred that need to be taken into account.

- **Do you consider that NGET acted economically and efficiently in procuring Black Start in this event?**

We do not believe that NGET acted economically and efficiently in the procurement of Black Start in this event. The event itself could have been reasonably foreseen, given the public statements associated with coal plant closures during 2015, and in particular with respect to the future of Fiddlers Ferry. Consequently, NGET should have organised tenders earlier than

¹⁴ MBSS Report, March 2016, at <http://www2.nationalgrid.com/UK/Industry-information/Electricity-transmission-operational-data/Report-explorer/Services-Reports/>

¹⁵ MBSS Report, April 2016, at <http://www2.nationalgrid.com/UK/Industry-information/Electricity-transmission-operational-data/Report-explorer/Services-Reports/>

the one undertaken and allowed competitive market based solutions to be developed. This could have resulted in more economic and efficient solutions than the ones identified in the event. Furthermore, the NGET tender process was rushed and unsatisfactory. The costs of the contract appear disproportionate by comparison with existing black start contracts. Consequently we do not believe that the IEA should be allowed by Ofgem.