

NOTICE OF DECISION TO IMPOSE A FINANCIAL PENALTY PURSUANT TO SECTION 30A(3) OF THE GAS ACT 1986 AND 27A(3) OF THE ELECTRICITY ACT 1989

Date: 11 May 2021

Decision of the Gas and Electricity Markets Authority ("the Authority") to impose a financial penalty, following an investigation into National Grid Electricity System Operator Limited (referred to as "NGESO") and its compliance with its obligations under the electricity transmission licence (Standard Condition C16).

1. Summary

- 1.1. NGESO has admitted to breaching Standard Condition C16 of its transmission licence between April to July and October 2017. The Authority considers that NGESO did not deliberately set out to contravene the requirements of Standard Condition C16 of its transmission licence. However, the Authority considers that NGESO did not put in place adequate senior oversight and compliance controls to identify and mitigate this behaviour. As a result of inaccurate forecasting, NGESO benefited financially from an incentive scheme established by Ofgem. NGESO, as the GB electricity system operator, has a particular responsibility to provide accurate forecasts as some market participants may rely on them to inform the volumes of electricity they generate and purchase. Wholesale market participants who acted on these forecasts may have incurred increased wholesale costs.
- 1.2. The Authority proposes to impose a financial penalty on NGESO following an investigation by the Authority into NGESO's compliance with Standard Condition C16. The Standard Conditions set out the rules on how Licensees must operate within the terms of their electricity transmission licence.
- 1.3. The Authority finds that NGESO breached Standard Condition C16 which requires that:

"The licensee shall co-ordinate and direct the flow of electricity onto and over the national Electricity transmission system in an efficient, economic and co-ordinated manner".



In June 2017, Standard Condition C16 was amended to specifically include, by way of clarification, the fulfilment of term (f)(ii):

"producing and publishing accurate and unbiased forecasts of demand"

- 1.4. NGESO has admitted that it breached Standard Condition C16 of its licence as set out above. No further non-compliance with Standard Condition C16 was identified after October 2017.
- 1.5. NGESO has co-operated during the investigation and expressed a willingness to settle the case. The Authority has taken this into account whilst determining an appropriate level of penalty.
- 1.6. The Authority takes the breach set out above very seriously. As a monopoly organisation, NGESO plays a vital role in co-ordinating and managing the supply and demand of electricity. Publishing accurate electricity demand forecasts is a critical function of NGESO. Participants across the energy industry may rely on these forecasts in order to inform the volumes of electricity to generate and purchase. It is unacceptable for NGESO to publish inaccurate forecasts.
- 1.7. Applying the criteria in section 3 of this Notice, the Authority considers it appropriate to impose a penalty for the contravention. The penalty takes into account the breach and the respective breach period. In determining the amount of the penalty, the Authority has taken into consideration the factors set out in section 4 of this Notice. The Authority considers the penalty to be reasonable in all the circumstances of this case.
- 1.8. NGESO has indicated its willingness to make a voluntary redress payment into a fund approved by the Authority. The Authority considers that a voluntary redress payment will be of more benefit to energy consumers than the imposition of a financial penalty. Accordingly, it is considered appropriate for NGESO to pay a financial penalty of £1, provided it also pays the sum of £1.5m (less £1) in voluntary redress. If NGESO had not agreed to make these payments, to settle the case, then the Authority would have considered it appropriate to impose a higher penalty.



1.9. In these circumstances the Authority hereby gives notice under s27A(3) of the Electricity Act 1989 of its intent to impose a penalty of £1 on NGESO in respect of the contraventions set out above. This is subject to NGESO paying £1.5m (less £1) into the Voluntary Redress Fund¹. These payments are to be made within 42 days of the publication of the final Notice.

2. The Authority's decision on the contravention

- 2.1. The Authority considered the evidence gathered during the course of the investigation in coming to its decision. It is satisfied that NGESO committed a breach of Standard Condition C16 of the electricity transmission licence.
- 2.2. Under Standard Condition C16, NGESO is required to "co-ordinate and direct the flow of electricity onto and over the national electricity transmission system in an efficient, economic and co-ordinated manner". In June 2017, the condition was amended for clarificatory purposes to include the production and publication of "accurate and unbiased forecasts of: demand".
- 2.3. On examination of the evidence, the Authority found that NGESO did not comply with the requirement of Standard Condition C16 between April July 2017 and again in October 2017.
- 2.4. A review of the evidence revealed that during this period NGESO, in respect of the 7-day ahead demand forecast, did not comply with the licence obligation to publish accurate and unbiased demand forecasts. In these months, NGESO's forecasts were periodically either over or under GB demand, with the result that these 7-day ahead forecasts were inaccurate. This resulted in the oscillatory trend shown in Annex 1 below.

¹ The Authority's Voluntary Redress Fund was established on 24 August 2017. The Voluntary Redress Fund gathers and distributes funding in the consumer interest.



- 2.5. The evidence revealed that the internal controls within NGESO, with regards to oversight of the 7-day ahead electricity demand forecasts, were inadequate with insufficient senior oversight and compliance controls. In April 2017 senior management within NGESO were made aware that the forecasts were oscillating within month. The oscillations however still continued until the end of July 2017 and then reoccurred in October 2017.
- 2.6. The Authority views this as a serious breach of NGESO's electricity transmission licence. NGESO stood to gain a maximum of £442,892 in financial returns, comprising of a maximum of £312,000 from avoided penalties and £130,892 from the incentive scheme². Inaccurate forecasts had the potential to harm wholesale market participants.
- 2.7. Some market participants use NGESO's demand forecasts to decide how much electricity to buy and sell. Others, who produce their own forecasts or who purchase demand forecasts from a third party, may factor NGESO's forecasts into their own decision making processes. Acting on inaccurate information had the potential to increase costs across the market which over time can be passed on to consumers.
- 2.8. It is inherently difficult to model what decisions market participants would have taken in a counterfactual scenario, therefore it is not possible to estimate the financial harm to the market with any accuracy. However, NGESO's failure to comply with the licence condition had the potential to increase costs to wholesale market participants.

3. The Authority's decision on whether to impose a financial penalty

3.1. In deciding whether it is appropriate to impose a financial penalty, the Authority has considered all the circumstances of the case including, but not limited to, the specific

The incentive incentivised forecasts that were unbiased and not systematically above or below outturn. The scheme had a maximum payment of £20,800 in each calendar month for each forecast (1, 2 and 7 day), if the forecasts were 50:50 above and below outturn. This incentive payment reduced as the proportional imbalance between forecasts above and below increased. If 60% of forecasts were above or below outturn it became a penalty, reaching a maximum penalty of £20,800. In addition, if over the month any two cardinal points were 70% above or below outturn, the maximum penalty would be incurred for that month.



matters set out in its 2014 Penalty Statement and representations made by NGESO. These matters are examined in detail below.

General criteria for the imposition of a penalty

3.2. The Authority is required to take into consideration all of the particular facts and circumstances of the contravention or failure, and has done so. We set out the criteria below that apply in this particular case.

Factors tending to make the imposition of a financial penalty more likely

The contravention or failure damaged, or could have damaged, the interests of consumers and/or other market participants

3.3. The Authority considers that the breach could have had a significant detrimental impact on market participants. The demand forecasts published by NGESO are used by some market participants in order to inform how much electricity to purchase, in order to cover consumer consumption. Buying too much energy can result in selling energy back to the market at a loss, while buying too little can result in paying more to cover the shortfall. This has the potential to increase the costs incurred by market participants

The contravention or failure damaged, or could have damaged, the confidence that consumers and/or other market participants have in the market

3.4. The Authority considers that NGESO's actions could have damaged the confidence of market participants. NGESO holds a unique monopoly position within the market and is obligated to produce accurate and unbiased electricity demand forecasts. Some market participants rely on these forecasts to inform what volumes of electricity to purchase. These participants expect NGESO's electricity demand forecasts to be reliable and that they have been produced consistently. The fact that during 2017 some of these forecasts were inaccurate had the potential to undermine NGESO's credibility to produce this type of forecast and damage the confidence of those participants who utilised them.

A penalty and/or a consumer redress order is necessary to deter future contraventions or failures and to encourage compliance



3.5. The Authority considers that imposing a financial penalty in this case is necessary to encourage future compliance and deter any future breach. The imposition of a penalty in this case will encourage NGESO to ensure future compliance with this and all Standard Conditions.

Whether the contravention or failure was deliberate or reckless

3.6. The contravention stems from NGESO's inaccurate electricity forecasts. The Authority considers that NGESO did not deliberately set out to contravene the requirements of Standard Condition C16 of its transmission licence. However, NGESO should have identified that their forecasts were not compliant with the licence requirement and did not provide sufficient senior oversight of the forecasting function.

The circumstances from which the contravention or failure arose were or should have been within the control of the regulated person under investigation

3.7. NGESO is responsible for balancing the supply and demand of electricity across Great Britain. Publishing electricity demand forecasts is a core function of NGESO's role. The Authority considers that publishing accurate forecasts was within the control of NGESO through the periods of contravention.

The contravention or failure (or possibility of it) would have been apparent to a regulated person acting diligently

3.8. The Authority considers that it should have been apparent to NGESO that publishing inaccurate forecasts would amount to a contravention of Standard Condition C16. More effective oversight of the electricity demand forecasting function could have prevented the contravention from occurring.

A lack of effective remedial action after the contravention or failure became apparent to the regulated person

3.9. The Authority notes that NGESO did attempt to take some remedial action in May 2017.
However, that action was both late and ineffectual, with the contravention continuing until



July 2017 and recurring in October 2017. The Authority considers that NGESO's actions should have been more effective at preventing the breach from occurring sooner.

The regulated person has a record of previous contraventions or failures, similar or otherwise

3.10. NGESO legally separated from National Grid Electricity Transmission (NGET) on 1 April 2019. It has no record of past contraventions.

Factors tending to make (a) the imposition of a financial penalty and/or (b) the making of a consumer redress order less likely

The contravention or failure is of a very minor nature

3.11. The Authority does not consider the contravention to be minor or trivial, rather the opposite. Publishing inaccurate forecasts has the potential to mislead the market and cause significant financial harm.

The contravention or failure (or possibility of it) would not have been apparent to a regulated person acting diligently.

- 3.12. NGESO failed to put preventative measures in place and implemented ineffectual and late remedial actions. Therefore, the contravention would have been an apparent risk to any regulated person acting diligently.
- 3.13. After considering the factors set out above, the Authority is of the view that it is necessary to impose a financial penalty in the circumstances.

4. Criteria relevant to the level of financial penalty

4.1. In accordance with section 270 of the Electricity Act 1989 the Authority may impose a financial penalty of up to ten per cent of the turnover of the relevant licence holder.



Turnover is defined in an Order made by the Secretary of State.³ The Authority is satisfied that the proposed penalty does not exceed ten per cent of NGESO's turnover.

2014 Penalty Statement

- 4.2. The 2014 Penalty Statement requires that a six step process is followed in order to determine the level of financial penalty:
 - 1. Calculate the detriment to consumers and calculate the gain to the regulated person.

 Consider whether a consumer redress order is appropriate to remedy the consequences of the contravention identified or to prevent a contravention of the same or a similar kind from being repeated.
 - 2. Consider the seriousness of the contravention or failure to determine the appropriate penal element.
 - 3. Consider any aggravating and mitigating factors that may increase or decrease the penal element.
 - 4. Consider the need for a deterrence uplift to the penal element, having regard to the principle that non-compliance should be more costly than compliance and that enforcement should deliver strong deterrence against future non-compliance.
 - 5. Where a case is settled, apply a discount to the penal element.
 - 6. Establish the total financial liability.
 - 1 Calculate the gain and detriment

³ http://www.legislation.gov.uk/ukdsi/2002/0110394267/article/3



- 4.3. Calculating a reliable figure of financial gain and detriment is challenging in these circumstances. Establishing a figure of gain involves identifying the forecasts that were inaccurate and resulted in financial gains or avoided penalties (as opposed to accurate forecasts that resulted in legitimate financial gains and avoided penalties).
- 4.4. The Authority has identified that by issuing inaccurate demand forecasts NGESO may have received, through the bias incentive, a financial gain of up to £130,892 and avoided penalties up to £312,000.
- 4.5. In total, the Authority concludes that NGESO may have received financial gains and avoided costs of up to a maximum £442,892.
- 4.6. However, this is a maximum possible figure and therefore not a quantifiable figure which accurately represents NGESO's gain. Due to the difficulties calculating a quantifiable figure the Authority concluded it is not possible to accurately quantify the level of financial gain and avoided costs.
- 4.7. NGESO may have caused harm to the wholesale electricity market. The scale of the harm is dependent on a number factors including the buying and selling decisions made by market participants following the forecasts. It is inherently difficult to calculate the scale of harm to the wholesale market.
- 4.8. Therefore, due to the difficulty calculating reliable figures, the Authority concludes the tangible value of gain and detriment to be unquantifiable. As the 2014 Penalty Statement makes clear where the Authority is unable to calculate any gain or consumer detriment, the Authority may still impose a financial penalty. In such cases, the Authority will normally consider first the seriousness of the contravention or failure, in accordance with the steps set out below.

2 Assess seriousness



- 4.9. To assess seriousness,⁴ the Authority has considered the nature and impact of the breach, whether it was deliberate and whether more ought to have been done to prevent the contravention.
- 4.10. Publishing accurate electricity demand forecasts is a key function of NGESO. The forecasts serve as a vital tool to assist balancing efficiency between the supply and demand of electricity across Great Britain. Any inaccuracies can result in flawed decision-making by market participants who rely on these forecasts. Ultimately this has the potential to significantly increase costs to wholesale market participants..
- 4.11. Senior management failed to put adequate compliance measures in place at an early stage in April 2017 and the contravention continued and finally ended in October 2017. The Authority considers the intervention taken was too late and inadequate and that senior management could and should have done more to achieve compliance.
- 4.12. Furthermore, while NGESO does not appear to have deliberately set out to contravene Standard Condition C16 insofar as there is no apparent intention to cause a contravention or avoid its detection, the Authority nevertheless considers that NGESO should have done more to prevent the contravention. NGESO did not put sufficient oversight and compliance measures in place or give sufficient consideration to the possibility that the conduct in question might result in a contravention.
- 4.13. Taking the above into consideration, the Authority considers this a very serious contravention.
 - 3 Consider aggravating or mitigating factors
- 4.14. The Authority considers that three aggravating factors and no mitigating factors apply in this case. The aggravating factors are explained below.

⁴ Outlined in paragraphs 5.10 to 5.14 in the 2014 Penalty Policy https://www.ofgem.gov.uk/publications-and-updates/statement-policy-respect-financial-penalties-and-consumer-redress



Factors tending to increase the penal element

Continuation of the contravention or failure after becoming aware of it

4.15. NGESO senior management implemented ineffectual remedial actions in May 2017. The contravention continued and ended in October 2017, therefore the Authority considers that this aggravating factor applies.

A lack of sufficient senior management involvement to prevent the contravention or failure

4.16. Preventative compliance measures were not put in place. Remedial action taken by senior management did not result in a return to compliance in good time. A lack of sufficient oversight allowed the contravention to continue. Therefore, the Authority considers that this aggravating factor applies.

The absence of any evidence of internal mechanisms or procedures intended to prevent contravention or failure / the absence of any evidence that such internal mechanisms and procedures as exist within the regulated person have been properly applied and kept under appropriate review by senior management

4.17. Senior management guidance provided to staff was not adequate. No further internal mechanisms to prevent the contravention have been identified. If any internal mechanisms were in place, they were not effective. Therefore, the Authority considers this factor applies.

4 Consider an adjustment for deterrence

4.18. The Authority considers that an upward adjustment for deterrence to the penal element is not appropriate in this case. The Authority has considered the 2014 Penalty Statement and the factors which may indicate that an adjustment for deterrence is appropriate. The Authority determines those factors do not apply to this case and that £2.15m is an appropriate overall penal element under the 2014 Penalty Policy.



5 Apply a discount in settled cases

4.19. The Authority notes that NGESO has agreed to settle in the early settlement window thus attracting a 30% reduction on the penal element of this penalty. With this discount applied the penal element is reduced to £1.5m

6 Establish the total financial liability

4.20. The Authority has established the total financial liability of NGESO under the 2014 Penalty Statement of £1.5m. The Authority proposes to impose a financial penalty of £1 on the condition that NGESO pays the balance of the £1,499,999 to the Authority's Voluntary Redress Fund. The Authority considers the proposed penalty to be reasonable in all the circumstances of the case.

5. The Authority's Decision

- 5.1. The Authority finds that NGESO breached Standard Condition C16 of its electricity transmission licence. The Authority hereby proposes to impose a penalty of £1 on NGESO which it considers to be reasonable in the circumstance of this case.
- 5.2. The proposed financial penalty takes into account that NGESO will pay £1.5m (less £1) into the Voluntary Redress Fund and such payment will be made within 42 days of the publication of the final Notice that is proposed to be issued by the Authority under Section 27A (5) Electricity Act 1989.
- 5.3. In reaching its decision the Authority took the relevant factors under the 2014 Penalty Statement into account including:
 - NGESO's failure to produce accurate electricity demand forecasts.
 - The serious nature of the breach of Standard Condition C16.
 - The potential for financial and non-financial harm, created by the contravention, across market participants and end consumers.



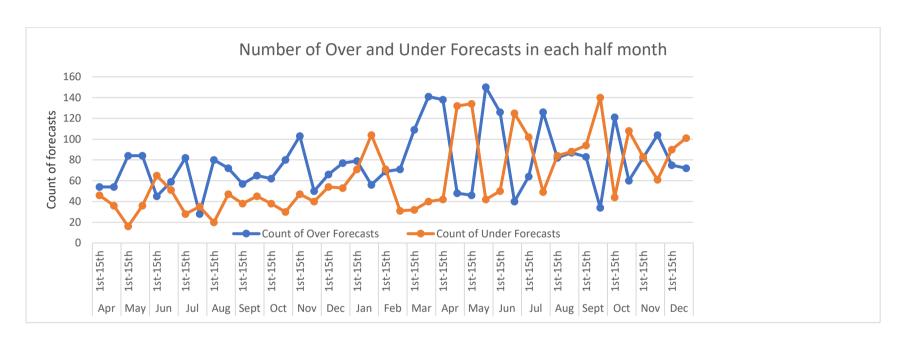
- The potential for NGESO to gain a maximum of £442,892 in financial returns and avoided penalties from the regulatory incentive scheme.
- The three aggravating factors which apply to the case.
- 5.4. The Authority hereby gives notice under section 27A(3) of the Electricity Act 1989 of its proposal to impose a penalty of £1 on NGESO in respect of the contravention set out above.
- 5.5. NGESO has agreed to settle the investigation on the basis of paying a financial penalty of £1 and to pay the sum of £1.5m (less £1) by way of voluntary redress.

Gas and Electricity Markets Authority

Date: 11 May 2021



Annex 1: Total number of over and under forecasts in each half month for NGET's 7 day ahead demand forecast between April 2016 and December 2017





Annex 1: data table

	Apr 16		May 16		Jun 16		Jul 16		Aug 16		Sept 16		Oct 16		Nov 16		Dec 16		Jan 1	.7
		16th-																		
	15th	30th	15th	31st	15th	30th	15th	31st	15th	31st	15th	31st	15th	31st	15th	31st	15th	31st	15th	31st
Count of Over Forecasts	54	54	84	84	45	59	82	28	80	72	57	65	62	80	103	50	66	77	79	56
Count of Under Forecasts	46	36	16	36	65	51	28	35	20	47	38	45	38	30	47	40	54	53	71	104

	Feb	17	Mar	17	Apr :	17	May	17	Jun :	17	Jul 1	7	Aug	17	Sept	17	Oct :	17	Nov	17	Dec	17
	1st-	16th-	1st-	16th-	1st-	16th-	1st-	16th-	1st-	16th-	1st-	16th-	1st-	16th-	1st-	16th-	1st-	16th-	1st-	16th-	1st-	16th-
	15th	31st	15th	31st	15th	30th	15th	31st	15th	30th	15th	31st	15th	31st	15th	31st	15th	31st	15th	31st	15th	31st
Count of Over Forecasts	-	71	109	141	138	48	46	150	126	40	64	126	82	87	83	34	121	60	82	104	75	72
Count of Under Forecasts		31	32	40	42	132	134	42	50	125	102	49	84	88	94	140	44	108	83	61	90	101