

NOTICE UNDER SECTION 11(2) OF THE ELECTRICITY ACT 1989

The Gas and Electricity Markets Authority (the "Authority") hereby gives notice pursuant to section 11(2) of the Electricity Act (the "Act") as follows:

1. The Authority proposes to modify the electricity transmission licence held by Scottish Power Transmission Ltd (company number SC189126) ("SPTL") by amending Special Condition J5 - (Restriction of transmission charges: Total incentive revenue adjustment) in the manner set out in Appendix 1 of this Notice.
2. The purpose and effect of this licence modification is to amend the provisions of part 4 of Special Condition J5 in relation to the Sulphur Hexafluoride (SF₆) incentive scheme.
3. The reasons why the Authority proposes to modify these special conditions are set out in the Explanatory Notes in Appendix 2 of this Notice. In summary, the effect of the proposed licence modifications is to insert values for TLK_t into the licence, to enable SPTL (the licensee) to be subject to the SF₆ incentive scheme from relevant year commencing 1 April 2008.
4. Further detail on the purpose and effect of this modification can be found in the document published by the Authority on 4 December 2006 - [Transmission Price Control Review: Final Proposals](#). This document, which was part of a suite of consultation documents on the SF₆ incentive scheme, sets out the background and rationale to the proposed licence modification detailed in this Notice. A printed copy of the document is available free of charge from the Ofgem library, 9 Millbank, London, SW1P 3GE.
5. Any representations or objections to the proposed modifications must be made in writing on or before 24 March 2008 to David Hunt at the Office of Gas and Electricity Markets (Ofgem), 9 Millbank, London SW1P 3GE, or via e-mail to david.hunt@ofgem.gov.uk.

Robert Hull

A handwritten signature in black ink, appearing to read 'Robert Hull', with a horizontal line underneath.

Director, Transmission

Authorised on behalf of the Authority

Date

25 February 2008

Appendix 1 - Proposed drafting of Scottish Power Transmission Ltd's Special Condition J5

Special Condition J5 - (Restriction of transmission charges: Total incentive revenue adjustment)

Part 4 - adjustment to restriction of transmission charges due to SF₆ incentive

19. The purpose of this condition is to provide for adjustments to allowed revenue to reflect performance of the licensee in relation to its Sulphur Hexafluoride (SF₆) incentive scheme.
20. The licensee shall within 3 months of receiving a notice from the Authority submit to the Authority a leakage rate of SF₆ methodology statement consistent with best industry practice, setting out the methodology by which the licensee will determine the leakage rate of SF₆ gas, required for the calculation of the actual leakage rate of SF₆ gas, ALK_t, and the target leakage rate of SF₆ gas, TLK_t.
21. Unless the Authority directs otherwise within 2 months of the date on which the licensee submits the statement to the Authority in accordance with paragraph 20, the licensee shall take all reasonable steps to apply the methodology set out in that statement.
22. Before revising the methodology referred to in paragraph 20 the licensee shall submit to the Authority a copy of the proposed revisions to the methodology.
23. Unless the Authority directs otherwise within 1 month of the Authority receiving any proposed revisions to the methodology under paragraph 22, the licensee shall take all reasonable steps to apply the methodology revised in accordance with such proposed revisions.
24. The provisions of paragraphs 26 to 31 of this special licence condition shall not take effect until such time as directed by the Authority.

25. For the purposes of paragraph 1 of this special condition, SFI_t shall take the value zero until such time as the Authority directs that the provisions of paragraphs 26 to 31 shall take effect.
26. For the purposes of paragraph 1, where $ALK_t < TLK_t$, SFI_t shall be calculated in accordance with the following formula:

$$SFI_t = 0.002 \times PR_t$$

otherwise: SFI_t shall take the value zero (0).

Where:

PR_t means the licensee's base transmission revenue, as defined in paragraph 3 of special condition J2 (Restriction of transmission charges: revenue from transmission owner services)

ALK_t means the actual leakage rate of SF_6 gas in relevant year t as a percentage of inventory of SF_6 gas as reported by the licensee pursuant to the revenue reporting Regulatory Instructions and Guidance issued in accordance with standard condition B16 (Price Control Revenue Reporting and Associated Information)

TLK_t means the target leakage rate of SF_6 gas in relevant year t as a percentage of inventory of SF_6 and shall take the values in the table below:

| Relevant year t | 2007/08 | 2008/09 | 2009/10 | 2010/11 | 2011/12 |
|-----------------|---------|---------|---------|---------|---------|
| TLK_t | N/A | 2.00% | 1.83% | 1.67% | 1.50% |

27. Where:

- (a) the licensee considers that any event on the licensee's transmission system that causes leakage of SF₆ gas has been wholly or partially caused by an exceptional event;
- (b) the licensee has notified the Authority of such event within 14 days of its occurrence;
- (c) the licensee has provided details of the exceptional event and such further information, if any, as the Authority may require in relation to such an exceptional event; and
- (d) the Authority is satisfied that the event notified to it under sub-paragraph (b) is an exceptional event

the Authority may, by notice to the licensee, direct that actual leakage of SF₆ gas and the value of ALK_t in relevant year t shall be adjusted as specified in that direction. In directing the value of any adjustment to ALK_t in relevant year t pursuant to this paragraph, the Authority shall reserve the right to modify the value of any proposed adjustment notified by the licensee that may be made to ALK_t in relevant year t.

- 28. For the purpose of paragraph 27, any adjustment directed by the Authority shall be based on the extent to which the Authority is satisfied that the licensee had taken reasonable steps to prevent the event from resulting in the leakage of SF₆ and to mitigate its effect (both in anticipation and subsequently).
- 29. A direction under paragraph 27 shall not have effect unless, before it is made, the Authority has given notice to the licensee:
 - (a) setting out the terms of the proposed direction;
 - (b) stating the reasons why it proposes to issue the direction; and

- (c) specifying the period (not being less than 14 days from the date of the notice) within which the licensee may make representations or objections

and the Authority has considered such representations or objections and given reasons for its decision.

- 30. For the purpose of paragraph 27, an “exceptional event” means an event or circumstance that is beyond the reasonable control of the licensee and which results in or causes the leakage of SF₆ gas and includes (without limitation) an act of the public enemy, war declared or undeclared, threat of war, terrorist act, revolution, riot, insurrection, civil commotion, public demonstration, sabotage, act of vandalism, fire (not related to weather), governmental restraint, Act of Parliament, any other legislation, bye law or directive (not being any order, regulation or direction under section 32, 33, 34 and 35 of the Act) or decision of a Court of competent authority or the European Commission or any other body having jurisdiction over the activities of the licensee provided that lack of funds shall not be interpreted as a cause beyond the reasonable control of the licensee.
- 31. Without prejudice to paragraph 30, an “exceptional event” may include circumstances where a significant danger to the public gives rise to the licensee prioritising health and safety over the reduction of leakage of SF₆ gas at a particular site.

Appendix 2 – Explanatory Notes

1. As part of Ofgem's proposals for the Transmission Price Control Review 2007-12¹, we set out our intention to make provisions in the electricity transmission licence for an incentive scheme designed to reduce the overall leakage rate of Sulphur Hexafluoride (SF₆), an insulating gas, from high voltage switchgear.
2. SF₆ is a greenhouse gas and is around 22,200 times more potent than carbon dioxide. Because SF₆ is outside of the scope of the European Union Emissions Trading Scheme (EU ETS), there is little in terms of direct incentive to reduce the leakage rate of SF₆ from transmission equipment. Over time, given that SF₆ is considered to be a superior technology to other methods of insulation, it is expected that its use will grow. Consequently, it is also expected that the leakage of the gas will also grow over time. Whilst we do not intend to apply an incentive based on the absolute leakage of gas in kg, we do consider it is appropriate to incentivise the leakage rate as a percentage of total inventory of the gas, as set out in our Transmission Price Control Review documents.
3. Historically, the monitoring and management of SF₆ has varied by transmission licensee. At the time the price control was approved and the licence amended in March 2007, National Grid Electricity Transmission plc (NGET) was the only transmission licensee that could demonstrate its systems were capable of monitoring and recording the leakage of SF₆ gas from its assets to a level of accuracy that was sufficient for the purposes of the incentive scheme. However, since the implementation of the price control both Scottish Power Transmission Ltd (SPTL) and Scottish Hydro Electric Transmission Ltd (SHETL) have been working on their internal monitoring and compliance procedures.
4. In accordance with the requirements in Special Condition J5, paragraphs 19 to 23, following notice from SPTL on 26 September 2007 of its submission of a leakage rate of SF₆ methodology statement, consistent with best industry practice, the Authority subsequently did not veto the methodology statement within the two month window set out in the licence. SPTL is therefore required under the provisions of its licence to take all reasonable steps to apply that methodology.
5. The leakage rate of SF₆ methodology statement is required to provide sufficient detail to enable the Authority to make calculations of TLK_t and ALK_t as set out in paragraph 20 of Special Condition J5.
6. Following consideration of the provisions of the leakage rate of SF₆ methodology statement, and subsequent information provided by SPTL. The Authority is now in a position to make the necessary amendments to Special Condition J5 to insert values for TLK_t.
7. As we have come to understand, it has been difficult for the Scottish transmission licensees to separate out SF₆ information from their associated distribution assets. As a consequence there is only limited information available on historical leakage patterns from transmission assets. This therefore makes the task of setting appropriate targets for TLK_t quite difficult. However, as we made clear for NGET's scheme, there is a balance to be struck to capture an appropriate

¹ Please see the suite of documents at the following location:
<http://www.ofgem.gov.uk/Networks/Trans/PriceControls/TPCR4/ConsultationDecisionsResponses/Pages/Consultationdocumentdecisionsresponses.aspx>

incentive effect between directly managing and reducing leakage rates, as well as developing appropriate auditing and reporting processes.

8. SPTL's systems were unable to separate out SF₆ leakage from transmission and distribution equipment prior to financial year 2006/07. We therefore have one full year and one partial year of information on which to base our figures for TLK_t, as below:

2006/07 The estimated inventory and leakage mass for 2006/07 is 38,600 kg and 850 kg (2.3%).

2007/08 SPTL's partial calculation for the estimated inventory and leakage mass for 2007/08 is 38,800 kg and 930 kg (2.4%).

9. In coming to a view of the appropriate targets, SPTL forecast its assets in use up to 2011/12 and assessed the expected level of SF₆ inventory. On this basis, Ofgem and SPTL negotiated a series of values for TLK_t which are intended to provide a challenging but ultimately attainable target for the period 2008/09 to 2011/12. When setting values for TLK_t, we are mindful of complicating factors that need to be taken into account. These include:

- Increase in inventory over time;
- Increase in leakage due to age of equipment;
- New equipment having a higher specification of design standard, hence a lower leakage rate;
- Improving handling and control during top-ups, installation and removals;
- Repairs to equipment, where possible, that is repeatedly leaking, and
- Ensuring any low pressure SF₆ remaining in bottles returned to the supplier are discounted from total.

10. Taking all of these factors into consideration we therefore consider that an appropriate range of values for TLK_t are as follows:

| Relevant year t | 2007/08 | 2008/09 | 2009/10 | 2010/11 | 2011/12 |
|------------------|---------|---------|---------|---------|---------|
| TLK _t | N/A | 2.00% | 1.83% | 1.67% | 1.50% |