

## **Special Condition 4.4 Shrinkage Management output delivery incentive (SM<sub>t</sub>)<sup>227</sup>**

### **Introduction**

- 4.4.1 The purpose of this condition is to calculate the term SM<sub>t</sub> (the Shrinkage Management output delivery incentive term). This contributes to the calculation of the term ODI<sub>t</sub> (the output delivery incentives term), which in turn feeds into Calculated Revenue in Special Condition 2.1 (Revenue restriction).
- 4.4.2 The effect of this incentive is to reward or penalise the licensee for its performance in reducing shrinkage of gas by means of pressure management and gas conditioning.
- 4.4.3 This condition also requires the licensee to:
- (a) maintain and comply with the Shrinkage And Leakage Model; and
  - (b) report to the Authority on levels of Shrinkage.

### **Part A: Formula for calculating the Shrinkage Management incentive (SM<sub>t</sub>)**

- 4.4.4 The value of SM<sub>t</sub> is derived in accordance with the following formula:

$$SM_t = \max \left[ \min \left( (CBV_t - AL_t + PIV_t)(GPRC_t + CC_t), 0.0025 \cdot EABR \right), -0.0025 \cdot EABR \right] \cdot TIS$$

where:

- CBV<sub>t</sub> means the Gas Conditioning Baseline Volume;
- AL<sub>t</sub> means the Actual Leakage Volume;
- EABR means Ex-Ante Base Revenue;
- PIV<sub>t</sub> means the Pressure Impact Volume, derived in accordance with paragraph 4.4.5;
- GPRC<sub>t</sub> is derived in accordance with Part B;
- CC<sub>t</sub> means the Central Price of Carbon, multiplied by a GWh conversion factor of 1,226.42; and
- TIS means the Totex Incentive Strength.

- 4.4.5 The value of the term PIV<sub>t</sub> is derived in accordance with the following formula:

$$PIV_t = \begin{cases} PLDV_t - AvPV_t & \text{if } AvPV_t < PLDV_t \\ PUDV_t - AvPV_t & \text{if } AvPV_t > PUDV_t \\ 0, & \text{otherwise} \end{cases}$$

where:

**PLDV<sub>t</sub>** means the Pressure Lower Deadband Volume;

**AvPV<sub>t</sub>** means the Price Control Average Pressure Volume; and

**PUDV<sub>t</sub>** means the Pressure Upper Deadband Volume.

### **Part B: Formula for calculating the gas price reference cost (GPRC<sub>t</sub>)**

<sup>227</sup> Modification from Jonathan Gorrie on 1.6.22 to modify Special Conditions with effect from 28.7.22

4.4.6 The value of the  $GPRC_t$  term is derived in accordance with the following formula:

$$GPRC_t = CF \left( \frac{\sum_{d=1}^n GP_{d,t}}{n_t} \right) \cdot \frac{PI_{2018/19}}{PI_t}$$

where:

$CF$  means the conversion factor and is used to convert the average price from pence per therm to pounds sterling per gigawatt hour, and is equal to 341.2;

$d$  means a calendar day, where  $d_1$  means 1 April and all other days are numbered consecutively thereafter;

$n_t$  means the total number of calendar days in Regulatory Year  $t$ ;

$GP_{d,t}$  means the closing day ahead offer price of gas for calendar day  $d$ , as published in an Approved Market Price Report for delivery at the National Balancing Point. The price is typically published at close-of-business the day before calendar day  $d$ , and is otherwise the most recently published day ahead price before the day (eg published on Friday for a Sunday); and

$PI_t$  means the price index derived in accordance with Part F of Special Condition 2.1.

### **Part C: Maintenance of the Shrinkage And Leakage Model**

- 4.4.7 The licensee, together with all other DN Operators, must have in place a Shrinkage And Leakage Model approved by the Authority.
- 4.4.8 The licensee must have in place a methodology to apply the Shrinkage And Leakage Model in a way that is consistent with all other DN Operators, such that the resulting Shrinkage and Leakage volumes are comparable.
- 4.4.9 The Shrinkage And Leakage Model and the licensee's methodology must be designed to facilitate the accurate calculation and reporting of Shrinkage and Leakage.
- 4.4.10 The licensee must, by 31 July in each Regulatory Year, make publicly available and provide to the Authority a report that sets out:
- (a) Actual Leakage Volumes; and
  - (b) Actual Shrinkage Volumes as calculated in accordance with the Shrinkage And Leakage Model for each Distribution Network for the preceding Regulatory Year.
- 4.4.11 Subject to the provision of at least 28 days' notice by the Authority, the licensee must allow the Authority, or a duly authorised representative of the Authority, such access to the licensee's staff, records and facilities as the Authority may reasonably require, for the purpose of establishing to the Authority's reasonable satisfaction that:
- (a) the Shrinkage And Leakage Model complies with the requirements of this condition; and
  - (b) the licensee is complying with its methodology for the Shrinkage And Leakage Model.
- 4.4.12 The licensee must not make any modification to the Shrinkage And Leakage Model except where it is directed to do so by the Authority under Part D.

4.4.13 The licensee must not make modifications to its methodology for the Shrinkage And Leakage model where the changes would have a material impact on the calculation of Shrinkage volumes under the Shrinkage And Leakage Model, except where it is directed to do so by the Authority under Part D.

**Part D: Modification of the Shrinkage And Leakage Model and methodology**

4.4.14 The licensee must keep the Shrinkage And Leakage Model under review, and propose such revisions to it as may be appropriate in order to ensure that it maintains or improves the accuracy of its calculation of Shrinkage and Leakage.

4.4.15 The licensee, together with other DN Operators, must annually review their methodologies for the Shrinkage And Leakage Model to verify the comparability of the Shrinkage and Leakage volumes produced by each DN Operator.

4.4.16 The licensee must, together with the other DN Operators, submit a report to the Authority on or before 31 March in each Regulatory Year, which must include:

- (a) details of how they have complied with paragraphs 4.4.14 and 4.4.15; and
- (b) any representations relating to the workings of the Shrinkage And Leakage Model that have been submitted by Gas Shippers and other interested parties.

4.4.17 Before proposing any revisions to the Shrinkage And Leakage Model or its methodology, the licensee must:

- (a) consult other DN Operators, Gas Shippers and other interested parties for their views on whether the proposed revisions would better achieve the objective set out in paragraph 4.4.9;
- (b) allow them a period of not less than 28 days in which to make representations;
- (c) together with other DN Operators, consider whether the proposed revision requires review by an independent expert, and if so, appoint such an expert to provide a report setting out their opinion on the extent to which the proposed revisions to the Shrinkage And Leakage Model would better achieve the objective set out in paragraph 4.4.9; and
- (d) during the period of 28 days beginning with the date of the close of that consultation, make publicly available and submit to the Authority a report in accordance with paragraph 4.4.18.

4.4.18 The report must set out:

- (a) the revisions proposed, including the original form of those revisions if they changed as a result of the consultation under paragraph 4.4.17;
- (b) any impact on RIIO-GD2 Outputs;
- (c) the non-confidential representations (if any) that were made to the licensee by other DN Operators, Gas Shippers or other interested parties and not withdrawn;
- (d) either:
  - i. a copy of the independent expert's report required by paragraph 4.4.17(c); or
  - ii. an explanation of why the DN Operators did not consider it appropriate to appoint an independent expert;
- (e) an explanation of how the proposed modifications would better achieve the objective set out in paragraph 4.4.9; and

(f) a timetable for implementing the proposed modifications, including the proposed date that they would take effect.

4.4.19 If requested by another person, the licensee must provide all the non-confidential information reasonably required to enable them to propose a change to the Shrinkage And Leakage Model, even if the licensee does not agree that the modification better meets the objective set out in paragraph 4.4.9.

4.4.20 The Authority will:

(a) approve the revisions proposed by the licensee;

(b) reject the proposed revisions; or

(c) reject the proposed revisions and give recommendations as to alternative revisions that it considers should be made.

**Part E: Review requirements in respect of modifications**

4.4.21 Except where the Authority otherwise consents, the licensee must, together with other DN Operators, and before the end of the period of 12 months beginning with the date of implementation of a modification to the Shrinkage And Leakage Model, appoint an independent expert to review and report on that implementation.

4.4.22 The licensee must, together with other DN Operators, ensure that the independent expert's report prepared under paragraph 4.4.21 is made publicly available, and that a copy of that report is sent to the Authority.

