

**Final LDZ Shrinkage
Proposal for
Formula Year 2016/17**

**National Grid
12 February 2016**

Final LDZ Shrinkage Proposal for Formula Year 2016/17

Table of contents

Item No.	Item	Page No.
1	Purpose of Proposal.....	2
2	Summary of Proposal.....	2
3	Basis of Proposal	2
3.1	Leakage.....	2
3.2	Operational Usage (also known as Own Use Gas)	3
3.3	Theft of Gas.....	3
3.4	Summary of proposed Shrinkage Quantities	3
4	National Grid's Opinion	3
5	Extent to which the Proposal would better facilitate the relevant objectives	3
6	The implications for National Grid of implementing the Proposal	4
7	The implications of implementing this Proposal for Users	4
8	Analysis of any advantages or disadvantages of implementation of the Proposal	4
9	User Representations	4
10	Programme of works required as a consequence of implementing the Proposal	4
11	Proposed implementation timetable (including timetable for any necessary information systems changes)	4
12	Recommendation concerning the implementation of the Proposal	4
13	National Grid's Proposal	5
14	Further Information.....	5

Final LDZ Shrinkage Proposal for Formula Year 2016/17

1 Purpose of Proposal

The purpose of this paper is to present our final LDZ Shrinkage Proposals for the Formula Year 2016/17 as required under *Uniform Network Code Section N 3.1.7*.

UNC Users have had the opportunity to comment on the LDZ Shrinkage Initial Proposals for Formula Year 2016/17 issued on 24 December 2015. There were no User representations received in respect of National Grid's Initial Shrinkage Proposals.

2 Summary of Proposal

We propose to apply the Shrinkage Quantities outlined in the tables below for the Formula Year 2016/17 effective from 05:00hrs on 1 April 2016.

Table 1. Proposed 2016/17 Annual LDZ Shrinkage Quantity Values

LDZ	Total (GWh)
Eastern	198
East Midlands	234
North Thames	236
North West	333
West Midlands	282
National Grid	1,282

Table 2. Proposed 2016/17 Daily LDZ Shrinkage Quantity Values

LDZ	Total (kWh)
Eastern	543,028
East Midlands	640,896
North Thames	645,773
North West	912,004
West Midlands	771,107
National Grid	3,512,808

3 Basis of Proposal

The proposed LDZ Shrinkage Quantities for Formula Year 2016/17 are based on the data and methodologies outlined within our LDZ Shrinkage Initial Proposals for Formula Year 2016/17 issued on 24 December 2015.

The leakage in these proposals has been based on the Leakage Model v1.4.

Own Use Gas and Theft of Gas is based on predicted seasonal normal demand.

3.1 Leakage

Leakage from the low and medium pressure systems accounts for the majority of overall leakage within an LDZ. The leakage estimate has been derived from information obtained from the 2002/03 National Leakage Test programme combined with measured Monoethylene Glycol saturation levels, annual average system pressures and mains and services population data.

In addition, we have taken into account the leakage and operational venting from Above Ground Installations (AGIs). The magnitudes of these losses have been determined from the 2003 leakage survey of these sites.

Leakage, in terms of cubic metres of gas, is converted into energy by use of flow-weighted average CVs (measured in MJ/m³) that are detailed within the Initial Proposals.

3.2 Operational Usage (also known as Own Use Gas)

Under the UNC regime for Shrinkage, Own Use Gas is treated as a consolidated quantity that is calculated as a factor of seasonal normal annual LDZ consumption, to be procured on a flat daily basis. These were detailed within our Initial LDZ Shrinkage Proposals for Formula Year 2016/17 issued on 24 December 2015

3.3 Theft of Gas

The responsibility for Theft of Gas is split between Gas Transporters and Shippers.

The *Uniform Network Code Section N 1.3.2* directs that LDZ Shrinkage shall include, and National Grid is therefore responsible for, gas illegally taken upstream of the customer control valve and downstream where there is no shipper contract with the end-user.

National Grid has applied a factor of 0.02% of seasonal normal LDZ consumption for Transporter-responsible theft, which is consistent with the level assumed since 2005/06.

As with Own Use Gas, Theft of Gas is treated as a consolidated quantity procured on a flat daily basis. These were detailed within our Initial LDZ Shrinkage Proposals for Formula Year 2016/17 issued on 24 December 2015.

3.4 Summary of proposed Shrinkage Quantities

Table 3, below, shows the proposed annual and daily Shrinkage Quantity values for the 2016/17 Formula Year:

Table 3. Proposed 2016/17 LDZ Shrinkage Quantity Values

LDZ	Annual (GWh)	Daily (KWh)
Eastern	198	543,028
East Midlands	234	640,896
North Thames	236	645,773
North West	333	912,004
West Midlands	282	771,107
National Grid	1,282	3,512,808

4 National Grid's Opinion

We believe that it is appropriate to implement the proposed Shrinkage Quantities in respect of LDZ Shrinkage for the period from 1 April 2016 to 31 March 2017.

The LDZ Shrinkage Quantities have been determined by utilising the best information and data available and by application of robust methodologies, which are consistent with those used in previous proposals.

5 Extent to which the Proposal would better facilitate the relevant objectives

The proposal provides National Grid's best forecast of the level of LDZ shrinkage for the Formula Year 2016/17. The proposal is based on robust methodologies and the best information available to National Grid.

This proposal is intended to further the efficient and economic operation of the system through more appropriate cost targeting.

6 The implications for National Grid of implementing the Proposal

Including:

a) implications for the operation of the System:

National Grid is unaware of any such implications that would result from implementing this proposal.

b) development, capital cost and operating cost implications:

The proposed LDZ Shrinkage Quantity values lead to a fair allocation of operating costs between LDZ systems.

c) extent to which it is appropriate for National Grid to recover the costs, and proposal for the most appropriate method for National Grid to recover the costs:

It is appropriate for each LDZ to incur a share of the overall shrinkage energy dependent upon the actual shrinkage in that LDZ.

d) analysis of the consequences (if any) this proposal would have on price regulation:

The proposal is consistent with the establishment and operation of Distribution Network specific transportation charging formula.

7 The implications of implementing this Proposal for Users

This proposal improves the equitability and accuracy of cost targeting for Users.

8 Analysis of any advantages or disadvantages of implementation of the Proposal

- **Advantages:** Better reflective of the actual system usage and losses with improved cost targeting.
- **Disadvantages:** National Grid is not aware of any disadvantages.

9 User Representations

Users have had the opportunity to comment upon these proposals. There were no representations received in respect of National Grid's 2016/17 Initial Shrinkage Proposals.

10 Programme of works required as a consequence of implementing the Proposal

The only required modification is the input of LDZ Daily Shrinkage Quantity values into GEMINI.

11 Proposed implementation timetable (including timetable for any necessary information systems changes)

Under *Uniform Network Code Section N 3.1.8*, Users have until the 15 March 2016 to request that Ofgem issue a Standard Special Condition A11 (18) disapproval of this proposal.

If the disapproval is not given, the revised LDZ Shrinkage Quantities detailed in this proposal will be implemented at the start of the Gas Day on 1 April 2016.

12 Recommendation concerning the implementation of the Proposal

We recommend that the proposed LDZ Shrinkage Volumes be implemented with effect from 05:00hrs on 1 April 2016.

13 National Grid's Proposal

This report contains our proposal for the LDZ Shrinkage Quantities for the Formula Year 2016/17. In summary, we propose that the LDZ Shrinkage Quantities should be set at the levels indicated in Table 2 within these proposals.

14 Further Information

Communication relating to the content of this report should be directed to:

Matt Marshall, Shrinkage Specialist, National Grid Gas Distribution.

Email: +44 (0) 7812 651 792

Write to: Matt Marshall, National Grid, Block 2, Brick Kiln Street, Hinckley. LE10 0NA.

**National Grid
12 February 2016**