

Final LDZ Shrinkage Quantity Proposals Formula Year 2023/24

February 2023
Notification of Volumes



Final LDZ Shrinkage Proposals

Formula Year 2023/24

Contents

Section	Content	Page
1	Purpose of Proposal	3
2	Summary of Proposal	3
3	Basis of Proposal	4
3.1	Leakage	4
3.2	Operational Usage (Own Use Gas)	4
3.3	Theft of Gas	4
3.4	Summary of Proposed Shrinkage Quantities	5
4	Cadent Gas Ltd's Opinion	6
5	Extent to which the Proposal would better facilitate the relevant objectives	6
6	The implications for Cadent Gas Ltd of implementing the Proposal	6
7	The implications of implementing this Proposal for Users	6
8	Analysis of any advantages or disadvantages of implementation of the Proposal	6
9	User Representations	7
10	Programme of works required as a consequence of implementing the Proposal	7
11	Proposed implementation timetable (including timetable of any necessary information system changes)	7
12	Recommendation concerning the implementation of the Proposal	7
13	Cadent Gas Ltd's Proposal	7
14	Further information	7

Final LDZ Shrinkage Proposals

Formula Year 2023/24

Purpose of Proposal

1. The purpose of this paper is to present our proposals in respect of Cadent LDZ Shrinkage for the Formula Year 2023/24, as required under Section N of the Uniform Network Code.

UNC Users have had the opportunity to comment on the LDZ Shrinkage Initial Proposals for Formula Year 2023/24 issued in December 2022. There were no User representations received in respect of Cadent Gas Ltd's Initial Shrinkage Proposals.

2. Summary of Proposal

We propose to apply the Shrinkage Quantities outlined in the tables below for the Formula Year 2023/24 effective from 05:00hrs on 1 April 2023.

Table 1. Proposed 2023/24 LDZ Shrinkage Quantities

	Proposed Shrinkage Quantities 2023/24 (GWh)
Eastern	171.2
East Midlands	185.0
North Thames	180.4
North West	253.6
West Midlands	232.1
Cadent	1,022.2*

*Please note, Cadent total is not an exact summation of LDZ quantities due to rounding of volumes to nearest GWh.

Table 2. Proposed LDZ Daily Shrinkage Quantity Values for 2023/24 Formula Year

	Proposed Daily Shrinkage Quantities (kWh)
Eastern	467,624.5
East Midlands	505,419.4
North Thames	492,988.1
North West	692,814.7
West Midlands	634,061.3
Cadent	2,792,908.0

*Please note, Cadent total is not an exact summation of LDZ quantities due to rounding of volumes.

3. Basis of Proposal

The proposed LDZ Shrinkage Quantities for Formula Year 2023/24 are based on the data and methodologies outlined within our LDZ Shrinkage Initial Proposals for Formula Year 2023/24 issued December 2022.

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 the 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 LDZ consumption, to be procured on a flat daily basis. These were detailed within our Initial LDZ Shrinkage Proposals for Formula Year 2023/24 issued in December 2022.

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 Cadent Gas Ltd 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.

Cadent Gas Ltd has applied a factor of 0.02% of seasonal normal LDZ consumption for the 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 in our Initial LDZ Shrinkage Proposals for Formula Year 2023/24 issued in December 2022.

3.4. Summary of proposed Shrinkage Quantities

Table 3, below, shows the proposed annual and daily Shrinkage Quantity values for the 2023/24 Formula Year:

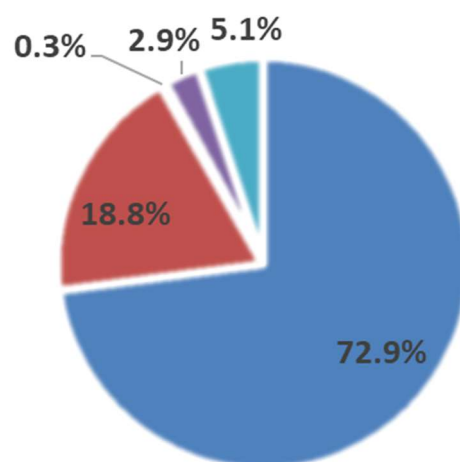
Table 3. Proposed 2023/24 LDZ Shrinkage Quantity Volumes

	Annual (GWh)	Daily (KWh)
Eastern	171.2	467,624.5
East Midlands	185.0	505,419.4
North Thames	180.4	492,988.1
North West	253.6	692,814.7
West Midlands	232.1	634,061.3
Cadent	1,022.2*	2,792,908.0

*Please note, Cadent total is not an exact summation of LDZ quantities due to rounding of volumes.

The chart below demonstrates the percentage contribution of each component of Shrinkage.

Shrinkage Component Breakdown



- Mains Leakage
- AGI Emissions
- 3rd Party Damages
- Own Use Gas
- Theft of Gas

4. Cadent Gas Ltd'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 2023 to 31 March 2024.

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 Cadent Gas Ltd's best forecast of the level of LDZ Shrinkage for the Formula Year 2023/24. The proposal is based on robust methodologies and the best information available to Cadent Gas.

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

6. The implications for Cadent Gas Ltd of implementing the Proposal

Including:

a) Implications for the operation of the System:

Cadent Gas Ltd is unaware of any such implications that would result from implementing the 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 Cadent Gas Ltd to recover the costs, and proposal for the most appropriate method for Cadent Gas Ltd 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: Cadent Gas Ltd 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 Cadent Gas Ltd's 2023/24 Initial LDZ 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 of any necessary information system changes)

Under Uniform Network Code Section N 3.1.8, Users have until 15 March 2023 to request that OFGEM issue a Standard Special Condition A11 (18) disapproval of this proposal.

If the disapproval is not given, the LDZ Shrinkage Quantities detailed in this proposal will be implemented at the start of the Gas Day on 1 April 2023.

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 2023.

13. Cadent Gas Ltd's Proposal

This report contains our proposal for the LDZ Shrinkage Quantities for the Formula Year 2023/24. 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, Cadent Gas Ltd.

Email: matt.marshall@cadentgas.com