

Decision



Making a positive difference
for energy consumers

Bacton Terminal site re-development – Final Preferred Option

Publication date: 28/08/2024

Contact: Graham Craig, Senior Manager

Team: Price Control Operations

Email: graham.craig@ofgem.gov.uk

We are publishing our decision on the Bacton Terminal site re-development – Final Preferred Option. This decision has been informed by the responses we received following publication of our consultation on 27 June 2024. We are publishing the non-confidential responses we received in response to our consultation.

Separately we have issued a direction under Special Condition 3.10.11 to establish a new Re-opener window between 1 October 2024 and 31 October 2024.

© Crown copyright 2024

The text of this document may be reproduced (excluding logos) under and in accordance with the terms of the [Open Government Licence](#).

Without prejudice to the generality of the terms of the Open Government Licence the material that is reproduced must be acknowledged as Crown copyright and the document title of this document must be specified in that acknowledgement.

Any enquiries related to the text of this publication should be sent to Ofgem at:
10 South Colonnade, Canary Wharf, London, E14 4PU.

This publication is available at www.ofgem.gov.uk. Any enquiries regarding the use and re-use of this information resource should be sent to: psi@nationalarchives.gsi.gov.uk

Contents

Bacton Terminal site re-development – Final Preferred Option	1
Executive summary.....	4
Bacton Terminal site redevelopment - Final Preferred Option.....	4
1. Introduction.....	6
Context and related publications.....	6
Our decision-making process	6
General feedback	7
2. Background.....	8
Section summary.....	8
Overview of the RIIO-2 Re-Opener mechanism	8
Final Option Selection Report.....	9
Final Preferred Option.....	12
3. Summary of responses and our view	13
Section summary.....	13
Responses to specific questions.....	13
4. Conclusion	15
Our decision.....	15

Executive summary

Bacton Terminal site redevelopment - Final Preferred Option

In our RIIO-T2 Final Determinations we accepted the 'needs case' for investment at the Bacton Gas Terminal. This is to ensure the safe, reliable and compliant operation of the terminal beyond 2035, while continuing to meet the needs of network users, ensuring security of supply and the efficient operation of wholesale markets in Great Britain and Europe. In recognition of this we provided £10.50m (2018/19 prices) of baseline funding in the form of a Price Control Deliverable in National Gas Transmission's Gas Transporter licence.

However, given the level of uncertainty with respect to both the 'preferred option' and the level of funding required, we decided that the project would be subject to our Gas Transmission Project Assessment Process. This two-stage process is set out in Special Condition 3.10: Bacton Terminal site redevelopment Re-opener and Price Control Deliverable (BTRt and BTREt) (PCD). Under the PCD, National Gas Transmission is required to submit a Final Option Selection Report in February 2024 before submitting a Re-opener application seeking a funding direction. The Final Option Selection Report must contain a Final Preferred Option along with supporting evidence necessary for the Authority to make a determination. The Authority can

- Approve the proposed Final Preferred Option;
- Reject the proposed Final Preferred Option on the basis that the Authority considers no further work should go ahead at this time;
- Reject the proposed Final Preferred Option and approve one of the other options in the Final Option Selection Report; or
- Reject the proposed Final Preferred Option and set out additional information that should be provided to identify the best option before a resubmission of the Final Option Selection Report.

Our Decision

In accordance with Special Condition 3.10.9, we have decided to approve the Final Preferred Option identified by National Gas Transmission, Option 1 Base Case Asset Health.

In reaching our decision we have assessed the evidence presented in the Final Option Selection Report submitted by National Gas Transmission. Our assessment was set out in our Final Preferred Option consultation published on 27 June 2024. In reaching our decision we have also taken account of the three consultation responses received.

Separately we have decided to issue a direction under Special Condition 3.10.11 to establish a new Re-opener window between 1 October 2024 and 31 October 2024.

1. Introduction

Context and related publications

1.1. In compliance with Special Condition 3.10, National Gas Transmission submitted a Final Option Selection Report in February 2024 which identified the Final Preferred Option for Bacton Terminal site re-development.

1.2. Special Condition 3.10 requires that a Final Option Selection Report is submitted in advance of any funding request. The Final Option Selection Report must contain a Final Preferred Option along with supporting evidence necessary for the Authority to make a determination. The Authority can

- Approve the proposed Final Preferred Option;
- Reject the proposed Final Preferred Option on the basis that the Authority considers no further work should go ahead at this time;
- Reject the proposed Final Preferred Option and approve one of the other options in the Final Option Selection Report; or
- Reject the proposed Final Preferred Option and set out additional information that should be provided to identify the best option before a resubmission of the Final Option Selection Report.

Our decision-making process

1.3 We published our proposed Final Preferred Option for consultation on 27 June 2024. This document provides a summary of the responses received and our consideration of these responses. Following publication of this decision and the accompanying direction, National Gas Transmission may in accordance with Special Condition 3.10.11 submit a Re-opener application seeking a funding direction in October 2024.

General feedback

1.4 We believe that consultation is at the heart of good policy development. We welcome any comments about how we have run this consultation. We would also like to get your answers to these questions:

1. Do you have any comments about the overall process of this consultation?
2. Do you have any comments about its tone and content?
3. Was it easy to read and understand or could it have been better written?
4. Were its conclusions balanced?
5. Did it make reasoned recommendations for improvement?
6. Any further comments?

Please send any general feedback comments to stakeholders@ofgem.gov.uk

2. Background

Section summary

This section provides an overview of the RIIO-2 Re-opener mechanism and the Bacton Terminal site re-development Final Option Selection Report.

Overview of the RIIO-2 Re-Opener mechanism

2.1. The gas transmission network in Great Britain is owned and operated by National Gas Transmission. Economic regulation of the network follows the RIIO (Revenue = Incentives + Innovation + Outputs) price control framework. The current RIIO-T2 price control period will last five years from 1 April 2021 to 31 March 2026. Prior to commencement of the price control period, we set out in Final Determinations¹ our policy on the economic regulation of the network during the period. These policy decisions were given effect by new Special Conditions in Part C of the National Gas Transmission Gas Transporter licence, which came into force on 1 April 2021.

2.2. In Final Determinations we accepted the 'needs case' for investment at the Bacton Gas Terminal. This is to ensure the safe, reliable and compliant operation of the terminal beyond 2035, while continuing to meet the needs of network users, ensuring security supply and the efficient operation of wholesale markets in Great Britain and Europe. In recognition of this we provided £10.50m (2018/19 prices) of baseline funding in the form of a Price Control Deliverable in National Gas Transmission's licence.

2.3. However, given the level of uncertainty with respect to both the 'preferred option' and the level of funding required, we decided that the project would be subject to our Gas Transmission Project Assessment Process. This two-stage process is set out in Special Condition 3.10 Bacton Terminal site re-development Re-opener and Price Control Deliverable (BTRt and BTREt).

- In February 2024, in accordance with Special Condition 3.10, National Gas Transmission submitted a Final Option Selection Report for investment at Bacton Gas Terminal. Following consideration of the Final Option Selection Report, we

¹ [Final Determinations - NGGT Annex Revised \(10\).pdf](#)

published our proposed Final Preferred Option for consultation on 27 June 2024. The consultation period closed on 25 July 2024, by which time we had received three responses. In reaching our decision we have given due consideration to these responses.

Final Option Selection Report

2.4. Bacton Gas Terminal is both a key system entry and exit point on the National Transmission System. Gas enters and exits the site through the following infrastructure:

- Two sub-terminals (Shell - two incomers and Peremco - four incomers) that process gas produced in the North Sea before entering the site, with a total baseline obligated entry capacity of 44.8 mscm/day. Future Entry Scenarios anticipate that supplies from this source will cease at some point after 2035.
- Two interconnectors (Interconnector UK and BBL) that can either import or export gas between Great Britain and Belgium, with a total baseline obligated entry capacity of 119.8 mscm/day and a total baseline exit capacity of 63 mscm/day. Future Energy Scenarios anticipate continued interconnector flows beyond 2050.
- Two offtakes (Cadent Gas Distribution Network and Great Yarmouth Power Station) that supply gas to end consumers, with a total baseline obligated exit capacity of 2.2 mscm/day with exit flows expected to continue beyond 2040.
- Five National Transmission System pipelines, three of which (Feeders 2,4 and 27) can operate in both directions, two of which (Feeders 3 and 5) only used for gas leaving the site.

2.5. A central ring-main (1,472m of 600mm pipework) within the site allows gas to be moved around the site between the various entry and exit points providing a high degree of operational flexibility. Figure 1 below provides a simplified diagram of the Bacton Gas Terminal.

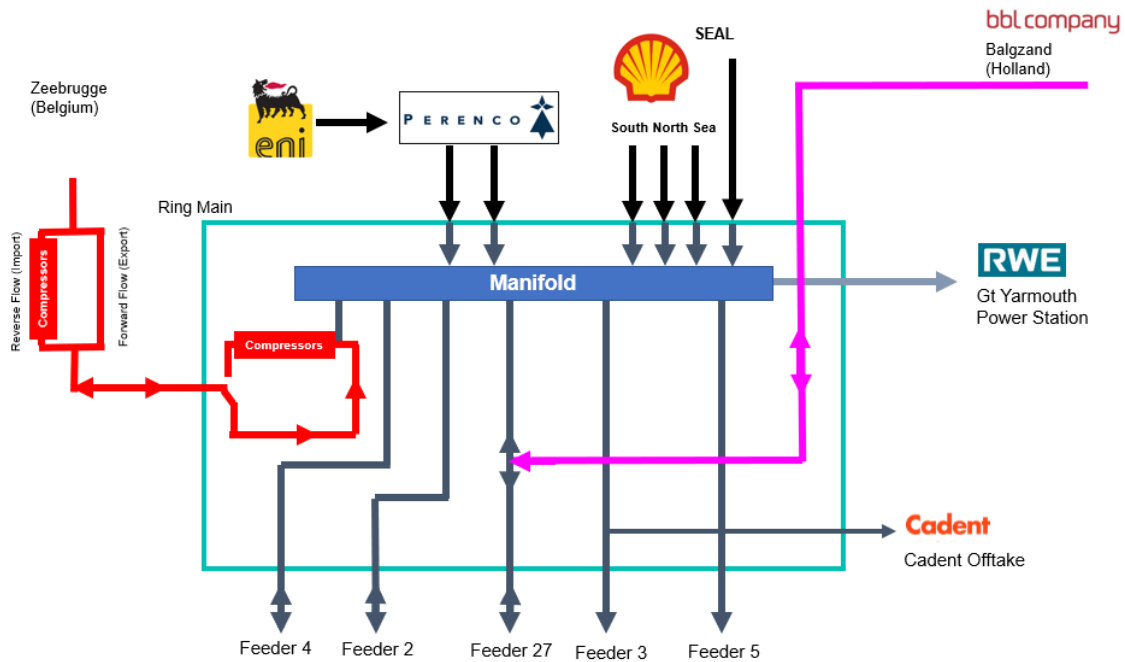


Figure 1 - Simplified Terminal Arrangement

2.6. National Gas Transmission identified a shortlist of three viable options that will the policy and regulatory objectives set out in our RIIO-2 Final Determinations. All three options have the same base case asset health investment requirements until at least 2035:

- Option 1 – Base Case Asset Health
- Option 2 – Major Rationalisation with Reduced Capacity
- Option 3a - New build within existing site (above ground, modular build, minimal reuse of assets)
- Option 3b - New build on an adjacent site (above ground, modular build, minimal reuse of assets)

2.7. During the option selection process the following studies were carried out with the assistance of competent third parties:

- Defect Review;
- Asset Review;
- Reliability, Availability, Maintainability (RAM) Study;
- Remnant Life Study;
- Deliverability Review;
- Stakeholder Engagement;

- Cost Estimate; and
- Front End Engineering Design.

2.8. National Gas Transmission and their external advisors drew up a list of criteria against which each option should be judged. Each criterion was given a weight using a pairwise comparison technique. Each option was then given a score between 1 and 10 against each criterion, before being adjusted to reflect the weight given to that criterion. The maximum score any option could receive is 10, in which case it would have received the maximum score against each criterion. Table 1 below summarises the scores received by each short-listed option against the relevant criteria.

Criteria	Weighting	Option 1 (2025-35)	Option 1 (2035+)	Option 2 (2035+)	Option 3a (2035+)	Option 3b (2035+)
Allows for hydrogen compatible design	2.13%	0.03	0.03	0.08	0.15	0.16
CAPEX	19.16%	1.61	1.57	1.02	0.61	0.52
Constructability Risk (less SIMOPS)	17.02%	1.23	1.20	0.85	0.78	1.00
Greenfield t – planning conditions	14.89%	1.37	1.37	1.34	1.26	0.36
Opex should be reduced	8.51%	0.39	0.42	0.52	0.52	0.55
Permits reuse of existing assets	8.51%	0.70	0.66	0.55	0.28	0.25
Reduces current gas inventory (COMAH)	1.06	0.02	0.03	0.07	0.06	0.06
Terminal operations simplified	5.32	0.11	0.14	0.30	0.35	0.36
Minimal environmental impacts	14.89	0.97	0.89	0.84	0.72	0.42
Above ground piping is minimal	8.51	0.65	0.65	0.50	0.32	0.30
Total	100	7.07	6.96	6.08	5.07	3.97

Table 1 – Shortlisted Option Assessment Criteria Weighted Scoring

Based on these various analyses, National Gas Transmission’s Final Option Selection Report identified Option 1 Base Case Asset Health as the Final Preferred Option.

Final Preferred Option

2.9. On 27 June 2024 we published a consultation setting out our assessment of the evidence presented in the Final Option Selection Report. We proposed approval of the option identified by National Gas Transmission as the Final Preferred Option, Option 1 Base Case Asset Health. This includes no regrets asset health interventions out to 2035. Followed by reduced site operations after the cessation of gas supplies from the Shell and Peremco sub-terminals.

2.10. Separately, we proposed issuing a direction under Special Condition 3.10.11 to establish a new Re-opener application window between 1 October 2024 and 31 October 2024.

2.11. The consultation period closed on 25 July 2025, with responses being received from National Gas Transmission (NGT), BBL Company (BBLC) and Interconnector UK (IUK). Those not marked as confidential have been published alongside this decision.

3. Summary of responses and our view

Section summary

This section contains a summary of the responses we received and our views on the various issues raised.

Responses to specific questions

Question 4.1: Do respondents agree with our assessment of the evidence presented in the Final Option Selection Report?

3.1. Neither of the two respondents who commented (NGT and BBLC) disagreed with our assessment of the evidence presented in the Final Option Selection Report. One respondent (NGT) noted our comments with respect to:

- The inclusion of a market-based solution in any option selection process.
- The inclusion of more detailed cost estimates with a higher level of cost confidence in the actual Re-opener application for a funding direction.

Our View

3.2. We welcome the support expressed by respondents for our assessment of the evidence.

Question 5.1: Do respondents agree with our proposed Final Preferred Option?

3.3. All three respondents (NGT, IUK and BBLC) supported our proposed Final Preferred Option.

Our View

3.4. We welcome the support expressed by respondents for our proposed Final Preferred Option.

Question 5.2: Do respondents agree with our proposed direction to establish a new Re-opener window?

3.5. All three respondents (NGT, IUK and BBLC) supported our proposed direction to establish a new Re-opener window.

Our View

3.6. We welcome the support expressed by respondents for our proposed direction to establish a new Re-opener window.

4. Conclusion

Our decision

4.1. In reaching our decision we have assessed the evidence presented in the Final Option Selection Report submitted by National Gas Transmission. Our assessment was set out in our Final Preferred Option consultation published on 27 June 2024. In reaching our decision we have also taken account of the three consultation responses received.

4.2. In accordance with Special Condition 3.10.9, we have decided to approve the Final Preferred Option identified by National Gas Transmission, Option 1 Base Case Asset Health. This includes no regrets asset health interventions out to 2035. Followed by reduced site operations after the cessation of gas supplies from the Shell and Peremco sub-terminals. We consider that Option 1 includes the sufficient asset health interventions to meet the policy and regulatory objectives set out in our RIIO-2 Final Determinations. This option does not prevent available rationalisation opportunities being realised when preparing the Re-opener application.

4.3. This decision should not be taken as an approval of the individual asset health interventions proposed for the period 2025-35. These can only be determined once a Re-opener application under Special Condition 3.10.11 has been submitted. Although the Final Preferred Option extends to 2035, it is unlikely that at this stage we would determine allowances beyond the end of the RIIO-T3 price control period.

4.4. Separately we have decided to issue a direction under Special Condition 3.10.11 to establish a new Re-opener window between 1 October 2024 and 31 October 2024.