# Net Zero Teesside Project

Planning Inspectorate Reference: EN010103

Land at and in the vicinity of the former Redcar Steel Works site, Redcar and in Stockton-on-Tees, Teesside

[The Net Zero Teesside Order]

## Document Reference: 5.5 Electricity Grid Connection Statement

The Infrastructure Planning (Applications: Prescribed Forms and Procedure) Regulations 2009 – Regulation 5(2)(p) and 6(1)(a)(i)

Applicants: Net Zero Teesside Power Limited (NZT Power Ltd) & Net Zero North Sea Storage Limited (NZNS Storage Ltd)

Date: July 2021

DOCUMENT HISTORY

| | | | |
|---|---|---|---|
| Document Ref | 5.5 Electricity Grid Connection Statement | | |
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| Author | AECOM | | |
| Signed | | Date | July 2021 |
| Approved By | | | |
| Signed | | Date | July 2021 |
| Document Owner | AECOM Ltd | | |

GLOSSARY

| Abbreviation | Description |
|---|---|
| AGI | Above Ground Installation |
| AOD | Above Ordnance Datum |
| CCUS | Carbon Capture, Usage and Storage |
| CEMP | Construction Environmental Management Plan |
| $CO_2$ | Carbon Dioxide |
| DCO | Development Consent Order |
| EPC | Engineering Procurement and Construction |
| ES | Environmental Statement |
| Ha | Hectares |
| HDD | Horizontal Directional Drilling |
| MLWS | Mean Low Water Springs |
| MOC | Minimum Offtake Connection |
| MW | Megawatt: the measure of power produced. |
| NG | National Grid |
| NGET | National Grid Electricity Transmission |
| NPS | National Policy Statement |
| NSIP | Nationally Significant Infrastructure Project |
| NZNS Storage | Net Zero North Sea Storage Limited |
| NZT | Net Zero Teesside |
| NZT Power | Net Zero Teesside Power Limited |
| PA 2008 | Planning Act 2008 |
| PCC | Power, Capture and Compressor Site |
| SoS | Secretary of State |
| STDC | South Tees Development Corporation |

## CONTENTS



TABLES

# 1.0 EXECUTIVE SUMMARY

1.1.1 Net Zero Teesside Power Limited and Net Zero North Sea Storage Limited (the Applicants) are seeking development consent for the UK's first commercial scale, full chain Carbon Capture, Usage and Storage ('CCUS') project (the 'Proposed Development') which will capture up to 4 million tonnes (Mt) of carbon dioxide ($CO_2$) emissions per annum in this first phase of the project. The Proposed Development will comprise a number of elements, including a new gas-fired Electricity Generating Station, with state-of-the art carbon capture technology; gas, water and electricity connections (for the Electricity Generating Station); a $CO_2$ pipeline network (a 'gathering network') for collecting $CO_2$ from a cluster of local businesses and industries on Teesside; a $CO_2$ compressor station and a $CO_2$ export/transport pipeline. The $CO_2$ captured from the Electricity Generating Station and local businesses/industries will be transported (via the export/transport pipeline) for secure storage within the Endurance saline aquifer located 145 kilometres offshore from Teesside under the North Sea. The export/transport pipeline has the capacity to carry up to 10Mt of $CO_2$ per annum. The Proposed Development will therefore make a significant contribution toward the UK reaching its net zero greenhouse gas emissions target by 2050.

1.1.2 This document sets out who will be responsible for designing and building the proposed electrical connection (the 'Electrical Connection') for the Proposed Development and demonstrates that there is no reason why an electrical connection will not be possible.

1.1.3 The preferred route for the proposed grid connection has been determined based on technical and environmental considerations. The Electrical Connection consists of a route corridor (Work No. 3) between NZT Power's new substation, forming part of the Low-Carbon Electricity Generating Station (Work No. 1) and National Grid's ('NG') Tod Point sub-station. This connection will comprise a 275 kV single circuit cable route and control system cables which will be installed below ground, along with a new interconnection substation at Tod Point (NZT Power's Tod Point sub-station).

1.1.4 The indicative route of the cable and substation areas area shown on Figure 1 and the limits of deviation within which the works would occur are shown on the Works Plans (Work No.3) (Document Ref. 4.4).

1.1.5 The Applicants have engaged with National Grid Electrical Transmission ('NGET') as outlined in Section 4, and Net Zero Teesside Power Limited has executed a connection agreement with National Grid on or before this submission of this document.

# 2.0 INTRODUCTION

## 2.1 Overview

2.1.1 This Electricity Grid Connection Statement (Document Ref. 5.5) has been prepared on behalf of Net Zero Teesside Power Limited and Net Zero North Sea Storage Limited (the 'Applicants'). It forms part of the application (the 'Application') for a Development Consent Order (a 'DCO'), that has been submitted to the Secretary of State (the 'SoS') for Business, Energy and Industrial Strategy, under section 37 of 'The Planning Act 2008' (the 'PA 2008').

2.1.2 The Applicants are seeking development consent for the construction, operation and maintenance of the Net Zero Teesside Project ('NZT'), including associated development (together the 'Proposed Development') on land at and in the vicinity of the former Redcar Steel Works site, Redcar and in Stockton-on-Tees, on Teesside (the 'Site'). The former Steel Works site, along with other land required for the Proposed Development, lies within the boundary of the land controlled by the South Tees Development Corporation ('STDC'), which is now known as 'Teesworks'.

2.1.3 A DCO is required for the Proposed Development as it falls within the definition and thresholds for a 'Nationally Significant Infrastructure Project' (a 'NSIP') under Sections 14(1)(a) and 15 of the PA 2008, associated development under Section 115(1)(b) and by direction under Sections 35(1) and 35ZA of the same Act. The DCO, if made by the SoS, would be known as the 'Net Zero Teesside Order' (the 'Order').

2.1.4 The Proposed Development will be the UK's first commercial scale, full chain Carbon Capture, Usage and Storage project and will initially capture up to 4 million tonnes (Mt) of carbon dioxide ($CO_2$) emissions per annum. It will comprise a number of elements, including a new gas-fired Electricity Generating Station with post-combustion carbon capture plant; gas, water and electricity connections (for the generating station); a $CO_2$ pipeline network (a 'gathering network') for collecting $CO_2$ from a cluster of local industries on Teesside; a $CO_2$ compressor station (for the compression of the $CO_2$) and a $CO_2$ export pipeline.

2.1.5 The $CO_2$ captured from the Electricity Generating Station and local industries will be compressed and then transported (via the export pipeline) for secure storage within the Endurance saline aquifer located 145 kilometres offshore from Teesside under the North Sea. The export pipeline has the capacity to carry up to 10Mt of $CO_2$ per annum. The Proposed Development will therefore make a significant contribution toward the UK reaching its greenhouse gas emissions target by 2050.

## 2.2 The Applicants

2.2.1 NZT encompasses proposals to both decarbonise electricity generation and a cluster of carbon intensive industries on Teesside. In line with the CCUS business models published by BEIS in December 2020, there will be separate entities who will be responsible for:

- electricity generation with post-combustion carbon capture (including the gas, water and electricity connections);
- $CO_2$ gathering (from industrial emitters), $CO_2$ compression and $CO_2$ export and storage; and
- industrial (including hydrogen production) carbon capture and connections to the $CO_2$ gathering network.

2.2.2 The entities are set out in Table 2.1 below:

Table 2.1: NZT Entities

| Onshore works scope | Partnership | NZT Entity | Within the scope of the DCO Application? |
|---|---|---|---|
| Electricity Generating Station with post-combustion carbon capture (including the gas, water and electricity connections) | bp*, Eni, Equinor and Total | Net Zero Teesside Power Limited | Yes |
| $CO_2$ gathering network, $CO_2$ compression and the onshore section of $CO_2$ export pipeline | bp*, Eni, Equinor, National Grid, Shell and Total | Net Zero North Sea Storage Limited | Yes |
| Industrial and hydrogen production carbon capture and connection to the $CO_2$ gathering network | Individual industrial emitters | N/A | No |

*Operator on behalf of the relevant Partnership

2.2.3 NZT is being promoted by Net Zero Teesside Power Limited ('NZT Power') and Net Zero North Sea Storage Limited ('NZNS Storage'). NZT Power and NZNS Storage

(together the Applicants for the purposes of the DCO Application) have been incorporated on behalf of bp as operator of the two Partnerships.

2.2.4 The electricity generation with post-combustion carbon capture Partnership comprises bp, Eni, Equinor and Total, with bp leading as operator. NZT Power will be responsible for the Proposed Development in so far as it relates to the construction, operation and eventual decommissioning of the Electricity Generating Station together with its carbon capture plant (both within the scope of the DCO Application).

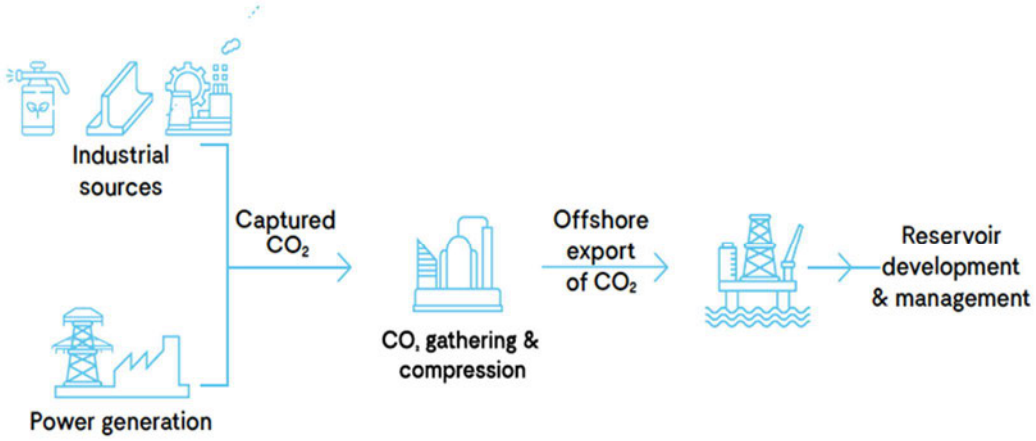
2.2.5 The $CO_2$ gathering network, $CO_2$ compression and onshore section of $CO_2$ export pipeline Partnership comprises bp, Eni, Equinor, National Grid, Shell and Total, with bp leading as operator. NZNS Storage will be responsible for the Proposed Development in so far as it relates to the construction, operation and eventual decommissioning of the equipment required for the high-pressure compression of $CO_2$ from the electricity generating station and industrial emitters via the $CO_2$ gathering network and the onshore section of the $CO_2$ export pipeline (these are all within the scope of the DCO Application).

2.2.6 NZNS Storage will also be responsible for the offshore elements of NZT, comprising the offshore section of the $CO_2$ export pipeline (below Mean Low Water Springs ('MLWS')) to a suitable offshore geological $CO_2$ storage site under the North Sea, $CO_2$ injection wells and associated infrastructure. The offshore elements of NZT (with the exception of the gas and $CO_2$ pipeline crossings of the River Tees and the water outfall from the Electricity Generating Station) do not form part of the DCO Application.

## 2.3 What is Carbon Capture, Usage and Storage?

2.3.1 Carbon Capture, Usage and Storage ('CCUS') is a process that removes $CO_2$ emissions at source, for example emissions from an Electricity Generating Station or industrial installation, and then compresses the $CO_2$ so that it can be safely transported to secure underground storage sites. It is then injected into layer of solid rock filled with interconnected pores where the $CO_2$ becomes trapped and locked in place, preventing it from being released into the atmosphere. Figure 2.1 below shows what is involved in the process.

Figure 2.1: CCUS Process




2.3.2 The technologies used in CCUS are proven and have been used safely across the World for many years. Storage sites are located several kilometres underground and are subject to stringent tests to ensure that they are geologically suitable. In the UK, it is expected that the storage sites will be located offshore, in areas such as the North Sea.

2.3.3 CCUS is one of a number of technologies that are crucial to reducing $CO_2$ emissions and combatting global warming. The UK Government has committed to achieving 'Net Zero' in terms of greenhouse gas emissions by 2050. This is a legally binding target.

2.4 The Site

2.4.1 The Site lies within the administrative boundaries of both Redcar and Cleveland Borough Council and Stockton-on-Tees Borough Council. It also partly lies within the boundary of the Teesworks area that is controlled by the STDC.

2.4.2 Most of the Site lies within the administrative area of Redcar and Cleveland Borough Council, although parts of Site (for the Electricity Generating Station's gas supply connection to the National Transmission System for gas and the $CO_2$ gathering network) cross the River Tees into the administrative area of Stockton-on-Tees Borough Council. At this location, the River Tees is tidal. In addition, there are elements of the Site which extend into South Gare, Coatham Sands and the North Sea. Those sections of the Site that are below MLWS are outside the jurisdiction of either local authority being part of the UK marine area.

2.4.3 The Site extends to approximately 462 hectares ('ha') in area. Much of it comprises previously developed (including part of the former Redcar Steel Works Site) and existing industrial land, some of which was reclaimed from the Tees Estuary in the late C19th and during the C20th. The Site is relatively flat and low-lying and sits at a level of between sea level and approximately 9 metres Above Ordnance Datum ('AOD'). The area surrounding the Site is largely characterised by industrial and

commercial uses, although there are open areas of land to the north in the form of South Gare and Coatham Sands, which are used for recreational purposes and that are of nature conservation importance.

2.4.4 A more detailed description of the Site and its surroundings is provided at Chapter 3 'Description of the Existing Environment' in the Environmental Statement ('ES') Volume I (Document Ref. 6.2).

2.5 The Proposed Development

2.5.1 The Proposed Development will work by capturing $CO_2$ from the Electricity Generating Station in addition to a cluster of local industries on Teesside and transporting it via a $CO_2$ export pipeline to the Endurance saline aquifer under the North Sea. The Proposed Development will initially capture and transport up to 4Mt of $CO_2$ per annum, although the $CO_2$ export pipeline has the capacity to accommodate up to 10Mt of $CO_2$ per annum thereby allowing for future expansion.

2.5.2 The Proposed Development comprises the following elements:

- a combined cycle gas turbine ('CCGT') Electricity Generating Station with an electrical output of between 750 and 860 megawatts and post-combustion carbon capture plant;
- cooling water, gas and electricity grid connections and infrastructure for the Electricity Generating Station;
- a $CO_2$ gathering network (including connections under the tidal River Tees) to collect and transport the captured $CO_2$ from industrial emitters to a $CO_2$ compressor station (the industrial emitters using the gathering network will be responsible for consenting their own carbon capture plant and connections to the gathering network);
- a high-pressure $CO_2$ compressor station to receive and compress the captured $CO_2$ from the Electricity Generating Station and gathering network before it is transported offshore; and
- a dense phase $CO_2$ export pipeline for the onward transport of the captured and compressed $CO_2$ to the Endurance saline aquifer under the North Sea.

2.5.3 The Electricity Generating Station, its post-combustion carbon capture plant and the $CO_2$ compressor station will be located on part of the STDC Teesworks area (on part of the former Redcar Steel Works Site). The $CO_2$ export pipeline will also start in this location before heading offshore. The Electricity Generating Station connections and the $CO_2$ gathering network will require corridors of land within both Redcar and Stockton-on-Tees, including crossings beneath the River Tees.

2.5.4 All of the above elements are included in the scope of the DCO Application, with the exception of the $CO_2$ export pipeline, where only the onshore section of pipeline above MLWS is included. The $CO_2$ export pipeline below MLWS and the $CO_2$ storage site under the North Sea (the Endurance saline aquifer) will be the subject of separate consent applications, including under the Petroleum Act 1998 and the

Energy Act 2008. These applications will be supported by an Offshore Environmental Statement.

The ancillary development required in connection with and subsidiary to the above elements of the Proposed Development is detailed in Schedule 1 of the draft DCO (Document Ref. 2.1). A more detailed description of the Proposed Development is provided at Schedule 1 'Authorised Development' of the draft DCO and Chapter 4 'The Proposed Development' in ES Volume I (Document Ref. 6.2) and the areas within which each of the main elements of the Proposed Development are to be built are denoted by the coloured and hatched areas on the Works Plans (Document Ref. 4.4).

2.6 The Purpose and Structure of this Document

2.6.1 The purpose of this document is to meet the requirements of Regulation 6(1)(a)(i) of The Infrastructure Planning (Applications: Prescribed Forms and Procedure) Regulations 2009, which requires the Applicants to provide a statement setting out who will be responsible for designing and building the proposed electrical grid connection (the 'Electrical Connection') for the Low-Carbon Electricity Generating Station (Work No. 1) . The document is structured as follows:

- Section 3 – Sets out the proposed grid connection, including the route and points of connection;
- Section 4 – Outlines contractual agreements for the proposed Electrical Connection;
- Section 5 – Provides details on the design-build responsibilities for the proposed Electrical Connection;
- Section 6 – Outlines land ownership in respect of the land required for proposed Electrical Connection;
- Section 7 – Provides information on the consents required for the proposed Electrical Connection works; and
- Section 8 – Provides the summary and conclusions to the Statement.

## 3.0 PROPOSED GRID CONNECTION

3.1.1 The Applicants have included within this statement the proposed route and connection point for the Electrical Connection to the Low-Carbon Electricity Generating Station located within the PCC Site.

3.1.2 The existing electrical infrastructure in the area comprises 275 kilovolt (kV) overhead lines as well as lower voltage underground cables that serve substations at and around Tod Point, the Wilton International site and Lackenby.

3.1.3 The proposed Electrical Connection (Work No. 3) will be between the local substation forming part of the Low-Carbon Electricity Generating Station (Work No. 1) (referred to as the Low-Carbon Electricity Generating Station substation in the DCO Application) and NGET's Tod Point sub-station and will comprise a 275 kV single circuit cable route and control system cables, and a new NZT Power owned 275kV Tod Point substation.

3.1.4 The layout and elevation of the local substation are shown on Figures 2 and 3. The layout and elevation of NZT Power's Tod Point substation and NGET's Tod Point Substation are shown on Figures 4 and 5.

3.1.5 All electrical and control system cables will be installed below ground or at ground level with no new overhead transmission lines proposed as part of the works.

3.1.6 The proposed Electrical Connection corridor which includes the working areas and space required is shown on the Electrical Connection Plans (Document Ref. 4.8).

3.1.7 Environmental effects associated with the construction of the Electrical Connection are assessed as part of the Environmental Impact Assessment, which is reported in the ES (Document Refs. 6.2 to 6.4).

# 4.0 CONTRACTUAL AGREEMENTS

4.1.1 Engagement with NGET has been ongoing throughout 2020, concluding in NZT Power receiving a formal connection offer from NGET in December 2020. At the time of DCO application submission, Net Zero Teesside Power Limited and NGET are in the process of finalising the connection agreement(s) and it is anticipated that such connection agreement(s) will soon be executed, thus confirming sufficient capacity at the Tod Point sub-station to accommodate the export of electricity from the Low-Carbon Electricity Generating Station located within the PCC Site.

# 5.0 RESPONSIBILITIES FOR DESIGNING AND BUILDING THE ELECTRICAL CONNECTION

## 5.1 Design

5.1.1 The chosen Engineering, Procurement and Construction ('EPC') contractor will undertake detailed design of the Electrical Connection and the local and remote 275kV NZT connection substation (adjacent to existing NGET Tod Point substation).

5.1.2 NGET will be responsible for adding ~~a~~ two new circuit breaker bays to the existing Tod Point sub-station and for extending the busbars, busducts and/or cables at NGET's existing Tod Point substation. NGET has confirmed that no other new equipment is required to be constructed or installed locally with respect to Tod Point and a need for moderate remote equipment upgrades to the wider NGET network to connect to the Low-Carbon Electricity Generating Station located within the PCC Site.

5.1.3 The detailed design of the Electrical Connection will be secured by DCO Requirement No. 4 in Schedule 2 of the DCO (Document Ref. 2.1).

## 5.2 Build

5.2.1 As underground cables are the selected design for the Electrical Connection, it is envisaged that installation will be through the use of an 'open-cut' method, whereby a trench will be excavated, and the cables laid below ground. This method will be applied where there is sufficient space and the work area is relatively flat. These works will generally include the following:

- fence off works area and fit safety signage;
- strip and stockpile topsoil (if required);
- a working area approximately 35 m wide to allow for temporary trackway, and soils stockpiling;
- excavation of a trench (the EPC contractor will be responsible for providing all necessary trench supports and for maintaining the trenches in a safe condition and free of water); and
- cables laid at a depth of at least 1.1 m on a bed of cement bound sand overlain by protective tiles and backfilled to reinstate to original state (appropriate safety measures including warning tape will be used).

5.2.2 Access arrangements during construction of the Electrical Connection are presented in Chapter 5: Construction and Programme Management of ES Volume I (Document Ref. 6.2). No significant impacts on local roads have been identified given the route of the electrical connection corridor and the location of Tod Point sub-stations relative to the proposed Generating Station.

5.2.3 Overall construction of the Electrical Connection is likely to take approximately 12 months.

5.2.4 These Electrical Connection works would be undertaken in accordance with the measures outlined in a Construction Environmental Management Plan ('CEMP') to be prepared by the contractor in accordance with the Framework CEMP ( Document Ref. 6.4) submitted with the DCO.

5.2.5 The Electrical Connection route (either Route 1A or Route 1B) will also require a number of special crossings which are outlined in Table 5.1 below and shown on the Electrical Connection Plans (Document Ref. 4.8).

Table 5.1: Special Crossings on the Electrical Connection Corridor

| Crossing Name | Grid Reference | Description | Type | Existing/ Upgraded /New |
|---|---|---|---|---|
| Route Options 1A and 1B | | | | |
| EC1 | 457090, 542610 | Blue Main (Teesworks) | Open Cut | New |
| EC2 | 457130, 524460 | Fleet (Watercourse) | HDD | New |
| EC5 | 456950, 523810 | Minor Road (Tod Point) | HDD or Open Cut | New |
| Route Option 1A Only | | | | |
| EC3 | 457120, 524070 | Operational Rail | Road bridge | Existing |
| EC4 | 456930, 523870 | Access road (Teesworks) | HDD or Open Cut | New |
| Route Option 1B Only | | | | |
| EC6 | 457160, 524200 | Minor Road (Teesworks) | York-Potash Conveyor | New |
| EC7 | 457230, 524120 | Operational Rail | York-Potash Conveyor | New |
| EC8 | 457100, 523960 | Minor roundabout (Tod Point) | HDD | New |

## 5.3 Operation and Maintenance

5.3.1 The Applicants will be responsible for the operation and maintenance of all on-site plant and apparatus over the life of the Proposed Development.

5.3.2 NGET would be responsible for the operation and maintenance of existing Tod Point 275kV sub-station and their associated equipment where outside of the Order Limits.

# 6.0 LAND REQUIREMENTS

6.1.1 The Applicants have agreed the necessary land rights within parts of the Site, as described in the Statement of Reasons (Document Ref. 3.2).

6.1.1 In respect of the land not yet within the Applicant's control, the Applicant continues to negotiate with the respective landowners to seek to agree the necessary land rights. In the event that such agreements cannot be reached with any party, the draft DCO (Document Ref. 2.1) includes powers for the Applicant to enter on to the land within the Proposed Grid Connection corridor shown on the Works Plans (Work No. 3, Document Ref. No. 4.4) for all purposes connected with the laying, installation and operation of the grid connection and associated apparatus.

6.1.2 Temporary rights are also sought for the purposes of construction, where the Applicant does not require the freehold interest or permanent rights in land. The Applicant is currently in discussions with the relevant landowners to secure the necessary land agreements (further information is included in the Statement of Reasons (Document Ref. 3.2)).

6.1.3 Work No.3 in Schedule 1 of the DCO covers the construction and operation of the Electrical Connection.

## 7.0 CONSENTS REQUIRED

7.1.1 All of the works associated with the Electrical Connection where they are within the Order Limits are included within the DCO Application and therefore no separate planning permission is required. This includes the Electrical Connection works (Work No. 3) between the Low-Carbon Electricity Generating Station located within the PCC Site (Work No. 1) and NEGT's Tod Point sub-station, which are specified in Schedule 1 of the DCO (Document Ref. 2.1) and which cover the construction and operation of the Electrical Connection. These are assessed in the ES topic chapters.

7.1.2 The draft DCO includes a provision (Article 8(1), Consent to Transfer the Benefit of the Order) allowing the Applicant to transfer the benefit of the DCO to National Grid, for it to be able to construct etc any relevant aspects of Work No. 3.

7.1.3 Any Electrical Connection works not forming part of the Proposed Development, namely NGET's Tod Point sub-station works and associated extensions and upgrades will be subject the relevant undertaker to utilise their statutory powers associated with such connection.

# 8.0 CONCLUSIONS

8.1.1 This Electricity Grid Connection Statement has been prepared to satisfy the requirements of The Infrastructure Planning (Applications: Prescribed Forms and Procedures Regulations 2009 Regulation 6(1)(a)(i) and to demonstrate that there is no reason why an electrical grid connection will not be possible for the Proposed Development, in accordance with National Policy Statement (NPS) EN-1.

8.1.2 The Statement has demonstrated that the Electrical Connection and associated underground cables included within the DCO Application Order Limits (and assessed as part of the associated Environmental Impact Assessment reported in the ES (Document Refs. 6.2 to 6.4)) is feasible, that the necessary agreements are being/have been secured, and appropriate powers are included in the draft DCO to facilitate the delivery of the Electrical Connection.

# FIGURES

Project Management Initials: RL Designer: LC Checked: AR Approved: IC

EC1
EC2
EC3
EC4
EC5
EC6
EC7
EC8

Factory
Track
ESS
FB
Conveyors
Conveyor
Marsh Hills
Drain
11m
23m
Sewage Works
FBs
9m
5m
Mill Lade
El Dist Sta
Subway
13m
17m
Path
A1085
WEST COATHAM LANE

Scale @ A3 1:5,000

0 250 500 m





AECOM

PROJECT
NET ZERO TEESSIDE PROJECT

Net Zero Teesside

APPLICANTS
NZT POWER LTD. AND NZNS STORAGE LTD.

KEY
- Site Boundary
- Power, Capture and Compressor Site

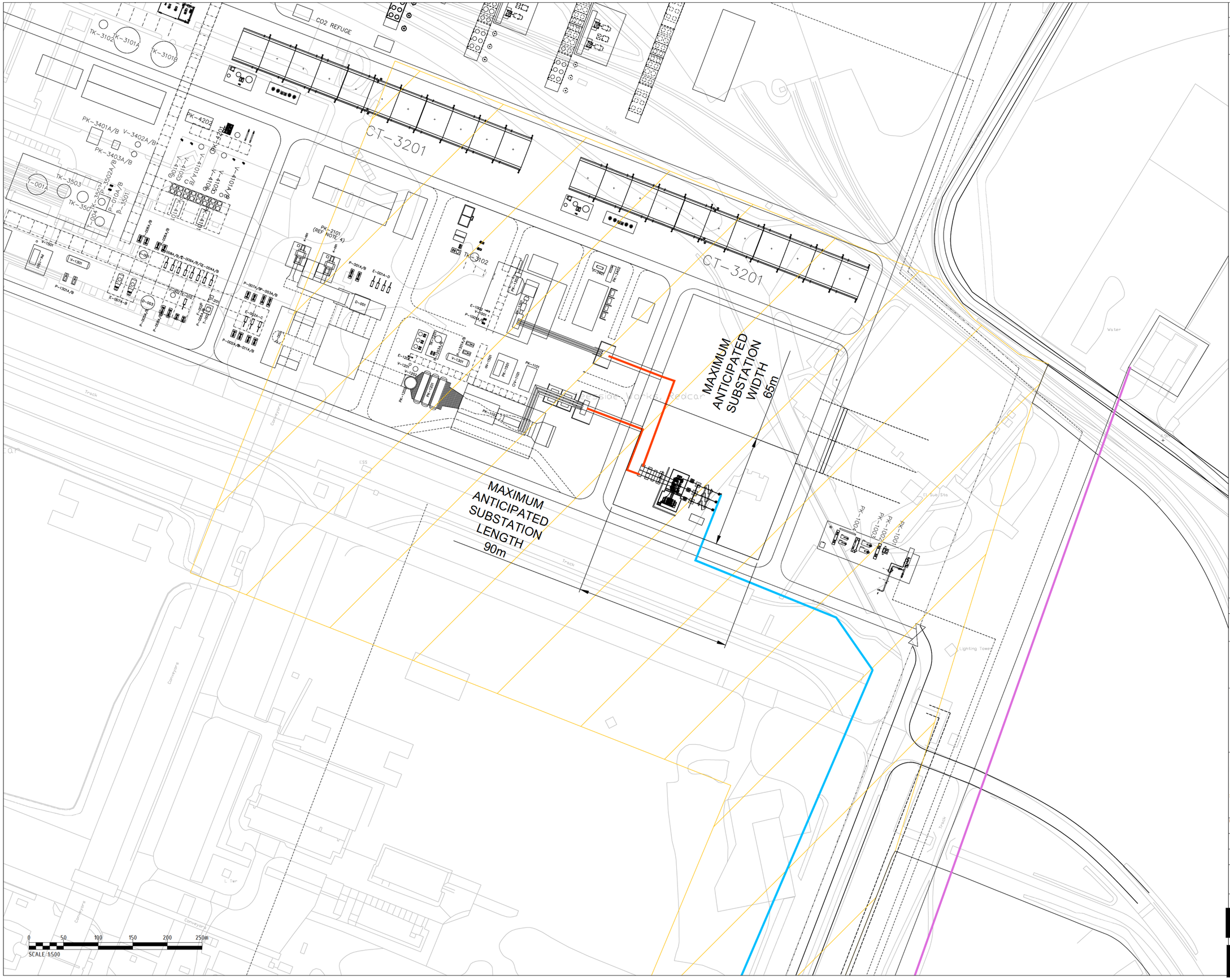
Indicative Electrical Connection Route
- Crossing Point
- Option 1A
- Option 1B

TITLE
FIGURE 1
ELECTRICITY CONNECTION ROUTES

REFERENCE
NZT_210510_ECS_1_v1

SHEET NUMBER
1 of 1

DATE
10/05/2021




SAFETY, HEALTH AND ENVIRONMENTAL INFORMATION BOX

IT IS ASSUMED THAT ALL WORKS ON THIS DRAWING WILL BE CARRIED OUT BY A COMPETENT CONTRACTOR WORKING, WHEREAPPROPRIATE, TO AN APPROPRIATE METHOD STATEMENT

THIS DRAWING TO BE USED ONLY FOR THE PURPOSE OF ISSUE THAT IT WAS ISSUED FOR AND IS SUBJECT TO AMENDMENT

NOTES

KEY

- SITE BOUNDARY
- WORK NUMBER 3A ELECTRICAL CONNECTION WORKS
- INDICATIVE ELECTRICAL CONNECTION ROUTE - OPTION 1A & 1B
- CATS PIPELINE
- GT & ST ELECTRICAL CONNECTIONS

| Revision Details | By / Check | Date | Suffix |
|---|---|---|---|

Purpose of issue

FOR INFORMATION

Applicant

NZT POWER LTD AND NZN STORAGE LTD

Project Title

Net Zero Teesside

Drawing Title

Figure 2

Low Carbon Electricity Generating Station Sub-station - Layout View

| Designed | Drawn | Checked | Approved | Date |
|---|---|---|---|---|
| | SF | | | |

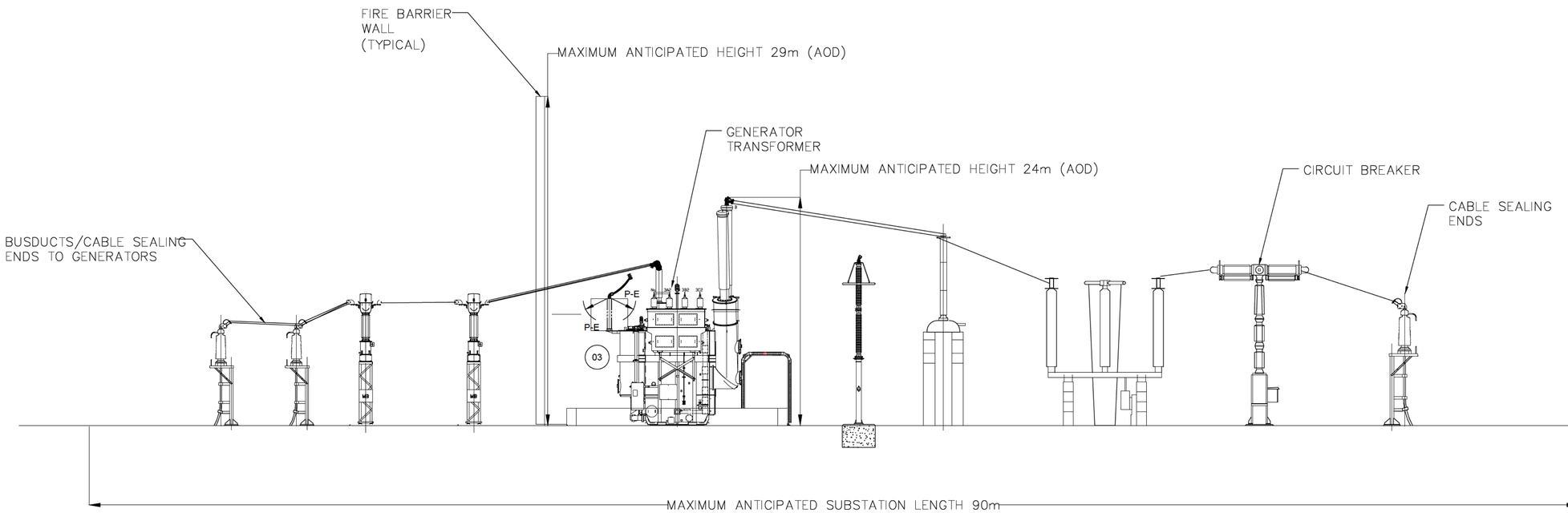
| AECOM Internal Project No. | Suitability | Project Manager |
|---|---|---|
| 60559231 | N/A | |
| Scale @ A1: AS SHOWN | Zone / Mileage: N/A | |



AECOM Infrastructure & Environment UK Limited

AECOM

| Drawing Number | Rev |
|---|---|
| 60559231-PE-DRG-055 | 0 |

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NOTES

1. ASSUMED FINISHED GROUND LEVEL IS 13m (AOD).

| Revision Details | By / Check | Date | Suffix |
|---|---|---|---|

Purpose of issue

FOR INFORMATION

Applicant

NZT POWER LTD AND NZNS STORAGE LTD

Project Title

Net Zero Teesside

Drawing Title

Figure 3

Low Carbon Electricity Generating Station Sub-station - Elevation View

| Designed | Drawn | Checked | Approved | Date |
|---|---|---|---|---|
| | SF | | | |

| AECOM Internal Project No. | Suitability | Project Manager |
|---|---|---|
| 60559231 | N/A | |
| Scale @ A1: AS SHOWN | Zone / Mileage: N/A | |



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| Drawing Number | Rev |
|---|---|
| 60559231-PE-DRG-056 | 0 |


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NOTES

1. DIMENSIONS ARE IN mm UNLESS STATED OTHERWISE.
2. DO NOT SCALE FROM THIS DRAWING.

KEY

- NEW EQUIPMENT
- EQUIPMENT TO BE REMOVED
- EXISTING EQUIPMENT
- NEW FENCE LINE
- OVERHEAD LINE


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| Revision Details | By / Check | Date | Suffix |
|---|---|---|---|
| | | | |

Purpose of issue

FOR INFORMATION

Applicant

NZT POWER LTD AND
NZNS STORAGE LTD

Project Title

Net Zero Teesside

Drawing Title

Figure 4 Tod Point Connection Layout View

| Designed | Drawn | Checked | Approved | Date |
|---|---|---|---|---|
| | SF | | | |

| AECOM Internal Project No. | Suitability | Project Manager |
|---|---|---|
| 60559231 | N/A | |
| Scale @ A1 | Zone / Mileage | |
| AS SHOWN | N/A | |




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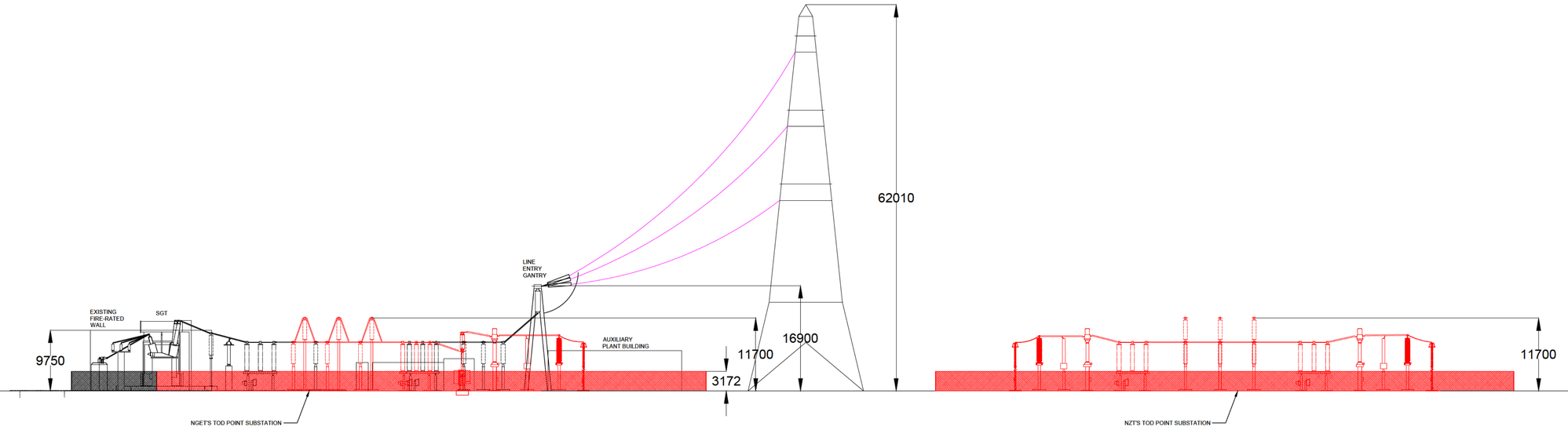
|---|---|
| 60559231-PE-DRG-057 | 0 |




A

LAYOUT DRAWING SCALE
1:200 0 10m 20m

SAFETY, HEALTH AND ENVIRONMENTAL INFORMATION BOX

IT IS ASSUMED THAT ALL WORKS ON THIS DRAWING WILL BE CARRIED OUT BY A COMPETENT CONTRACTOR WORKING, WHEREAPPROPRIATE, TO AN APPROPRIATE METHOD STATEMENT

THIS DRAWING TO BE USED ONLY FOR THE PURPOSE OF ISSUE THAT IT WAS ISSUED FOR AND IS SUBJECT TO AMENDMENT

NOTES

1. DIMENSIONS ARE IN mm UNLESS STATED OTHERWISE
2. DO NOT SCALE FROM THIS DRAWING.

KEY

NEW EQUIPMENT

EXISTING EQUIPMENT

OVERHEAD LINE

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Purpose of issue

FOR INFORMATION

Applicant

NZT POWER LTD AND NZNS STORAGE LTD

Project Title

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Drawing Title

Figure 5

Tod Point Connection Elevation View

| Designed | Drawn | Checked | Approved | Date |
|---|---|---|---|---|
| | SF | | | |

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| 60559231 | N/A | |
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