



**Energy Supply Statement** 

Proposed Residential/Commercial Development Land at Former MoD Training Centre, Caerwent, Caldicot, NP26 5NN.



# **Contents**

1.	Executive Summary	3
2.	Electricity New Connections	4
Арр	endix - Pre-Planning Enquiries	6

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## 1. Executive Summary

This Energy Supply Statement has been commissioned by the Asbri Planning Ltd to appraise the availability of electricity services with regards to the proposed development.

The proposed site is a brown field development located to the north of the A48. The development will potentially consist of 40 domestic properties, a nursing home and 5 mixed use commercial blocks.

The development is shown on the following drawings:

Drawing Owner	Title	Document no	Rev	Date
n/a	Proposed Site Masterpan Mixed Use Scheme	SK0100/103	-	Sept 2023

The estimated time for the delivery of these major utilities to the new development will need to be provided by NGED due to the reinforcement identified, upon acceptance of firm quotations, the clearance of all necessary wayleave consents and dependent upon the overall construction programme.



### 2. Electricity New Connections

#### **Load Assessment**

The estimated After Diversity Maximum Demand (ADMD) 40 domestic properties, a nursing home and 5 mixed use commercial blocks is approximately 1,495 kVA. This capacity includes a capacity for future electric vehicle charging to all domestic plots in addition to 40% of all allocated commercial car parking spaces.

Location	Electrical Load (kVA)
40 Domestic properties	320
Nursing Home (80 bed)	150
Block 1*	130
Block 2*	130
Block 3*	130
Block A*	200
Block B*	200
Domestic EV chargers	95
Commercial EV chargers	140
Total	1,495

<sup>\*</sup>Due to there being limited information at the time of the application, SMS has made assumptions on load requirements based on information available to date in line with experience and indications of floor areas on proposed commercial premises.

#### **Infrastructure Requirements**

A firm point of connection (POC) quotation has been received from NGED (Appendix 4). Within the POC NGED will provide an 11kV HV 1,500 kVA POC to the South of the proposed development area adjacent to the existing 11kV overhead line within the fields to the South of the A48.

The POC includes for the supply and installation of two number support poles adjacent to the existing overhead line in order for a new air break link (ABL) in order to provide normal open point (NOP) which will provide a point of isolation in the event of an unplanned outage on the network. From this point, NGED will further supply and install two underground 11kV HV cables and associated 'stop ends' to provide the POC from which a new substation can be installed via a looped connection.

The offer includes for NGED to provide all excavation/reinstatement works for the apparatus outlined in pink within their scheme plan provided. NGED have included a cost to carry out the final closing joints onto the network at the point of connection once the above works are completed.

It should also be noted that in order to provide the desired capacity NGED have outlined a section of reinforcement works that will be required. As outlined within the scheme plan, there is a requirement for NGED to upgrade a section of overheaPLand line directly to the East of the POC location provided. These



works will be completed at zero cost to the customer, but NGED have provided an estimated reinforcement end date of 28<sup>th</sup> August 2024 for these works to be completed.

The POC cost is £27,673.31 ex VAT and the offer is valid until 19<sup>th</sup> August 2024.

From the NGED POC, NGED or an ICP would provide two underground HV cables laid within the fields to the South of the development and further across the A48. These two HV underground cables would then continue to the proposed development entrance, continuing within proposed new footways and service strip provided to both phases via two distribution sub-stations to suit the requirements of the development.

NGED have outlined within the POC offer that these underground HV cables would need to be 3x1c185mm XLPE 11kV underground cables. In addition, NGED or an ICP would need to obtain all legal agreements (wayleaves/easements) from the relevant landowners prior to any of these works being completed.

Please note, there is no cost included within the NGED offer for any works following on from the POC provided by NGED. These will need to be procured at a later date.

NGED Firm POC Cost: £27,673.31 ex VAT



### **Appendix - Pre-Planning Enquiries**

**Electricity** – National Grid Electricity Distribution (NGED)

Document: Demand\_Letter\_5104225\_1908336\_1

**Drawing**: 5104225 - Scheme Plan



For more information, please contact

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