

Request for Information

From	Michael Bourke	RFI No.	001
Project Name	Uniting Kingscliff	Project No.	BNE0732
Date	15 May 2025	Pages	1/1
Subject	RFI Response	Revision	00

Distribution to:

To whom it may concern.

Request For Information

Reference # TSC-3b

Council's preference for the subject site is to have the entire sewer load discharge directly into the existing Sewer Pump Station (SPS) which is located internally of the site's property boundaries, which has the depth to accommodate sanitary drainage for this proposal

ADP Response

We have no objections with the above proposed approach. Due to site land constraints, part of the Uniting sewer network will need to run within / cross the existing TSC easement as a result.

Yours sincerely



Michael Bourke
Director

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Reference # TSC-3c

Splitting the site's discharge may aid in the delivery of infrastructure in the proposed stages of development, however, the existing 150mm sewer main within Lorien Way takes a route twice as long to ultimately discharge back into the same location at the SPS located within the Uniting Kingscliff subject site. Discharging the proposed development's sewer load directly in the SPS avoids the need for the proposed site's sewer to travel this significant unnecessary distance at flatter grades and avoids any system capacity constraints that may exist in the Lorien Way route

ADP Response

We have no objections with the above proposed approach. Due to site land constraints, part of the Uniting sewer network will need to run within / cross the existing TSC easement as a result.

Yours sincerely



Michael Bourke
Director

Request for Information

From	Michael Bourke	RFI No.	001
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Date	15 May 2025	Pages	1/9
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Reference # TSC-4

It has been proposed that two new electricity transformers are to be installed toward the western boundary of the site resulting in a new power supply to the sewer pump station (SPS) that exceeds 220m in length. Council's preference is that there is no change to the existing electricity servicing arrange for the SPS, however accept that this is the accepted arrangement from Essential Energy.

ADP Response

We note Council's general acceptance and we reiterate our same position as previous submissions (attached).

Yours sincerely



Michael Bourke
Director

Request for Information

From	Michael Bourke	RFI No.	001
Project Name	Uniting Kingscliff	Project No.	BNE0732
Date	22 October 2024	Pages	1/8
Subject	RFI Response	Revision	00

Distribution to:

To whom it may concern.

Request For Information

Reference # TSC-19.1

The current power supply for Council's existing SPS is from a pole mounted transformer located 25m away and within the site. It is proposed that two new transformers are constructed toward the western boundary of the site resulting in a new power supply to the SPS that would exceed 220m in length. Noting this is a point of review for Essential Energy, Council are not supportive of the proposed change in power supply for the SPS.

ADP Response

The electricity supply upgrade works for the development site requires the removal of the existing pole mount transformer and associated overhead conductors into the site. As this impacted the existing supply to the Council's SPS, an alternate supply arrangement was required.

In the Design Information Pack (DIP) for the development issued by Essential Energy it was a requirement to power the Sewer Pump Station from one of the new padmount substations. DIP Extract below / highlighted on page 3 of the DIP attached:

"A dedicated LV underground circuit from one of the padmounts (easement required) to supply the Tweed Shire pumping station"

A design using a suitable LV conductor size has been carried out to ensure the quality of power supply to Council's SPS is maintained. This design was approved by Essential Energy during the design certification process.

Yours sincerely



Michael Bourke
Director

Design Information Pack



FOR Project: ECN-049788 New Connection for Load – 24A KINGSCLIFF STREET KINGSCLIFF

Design Information Issue Date: **19/10/2023**

Design Information Applicant Details:

**MEENIT SURYADEO CHARAN
ADP CONSULTING PTY LTD
Level 3/8 Spring St
Sydney NSW, 2000**

Introduction

Thank you for your request for design information for the proposed supply to **Lot 1, DP833926**

Project Address: 24A KINGSCLIFF STREET KINGSCLIFF NSW 2487

Customer Name: The Uniting Church in Australia Property Trust (NSW) for Uniting NSW.ACT

General

1. The content of this Design Information Pack has been compiled on the basis of certain conditions and restrictions. The designer shall incorporate these requirements within the electrical reticulation design prepared for certification to Essential Energy.
2. This Design Information Pack is valid for a period of 180 days from the above date. If an updated Design Information Pack is required, please submit a new request for Design Information via the Essential Connections portal under the Essential Connections number (ECN).
3. Essential Energy is providing this information in good faith, to assist you to complete designs for certification. Essential Energy cannot and does not warrant the accuracy or completeness of the information and does not accept any liability for inaccuracies or lack of information. It is the responsibility of the applicant or Accredited Service Provider to independently confirm the accuracy or otherwise, of any information.

What you told us on your Design Information Application

Your Project Reference name:

You have proposed the following description of works for this project. Two 1500kVA transformers

Essential Energy's Specific Design Information

Essential Energy have reviewed the information submitted in the Connection Application and the Design Information Application to compile this Design Information Pack. Our officer has also extracted data from our asset management systems to provide you with relevant information to create a design.

The regulatory category determined by Essential Energy for this project is:

Commercial and Industrial Developments

Project Funding Arrangements

Essential Energy's policy CEOP2513.06 Connection Policy – Connection Charges sets out the circumstances in which Essential Energy requires a retail customer or real estate developer to pay the cost of connecting their premises or development to Essential Energy's network.

A copy of CEOP2513.06 can be downloaded from Essential Energy's website: www.essentialenergy.com.au.

In accordance with CEOP2513.06 the following funding arrangements will apply to this project:

Customer funded:

- All

Essential Energy funded:

Connection Point

The connection point on the network will be at Asset No: 11kV and LV mains Lorient Way

Connection Point Voltage: 11,000 Volts 3Ø

Existing Asset Details

The existing High Voltage Conductor is: 11kV 240mm 3 Core AL XLPE

The existing Low Voltage Conductor is: LV 240mm 4 Core AL XLPE

New Asset Details

New High Voltage conductor / cable required: 11kV 240mm 3 Core AL XLPE

New Low Voltage conductor / cable required: LV 240mm 4 Core AL XLPE

The New Substation size required is: 2 x 1500 kVA 3Ø

- New Substation High Voltage Fuses are: Custom HV Circuit breaker
- New Substation Low Voltage Fuses are: Circuit Breaker, 400A Fuses to street
-

Refer to CEOS5099 – Distribution: Transformer Fusing

Primary Tap setting

Primary Tap setting for the transformer is to be included on the drawing for certification.

The primary tap setting for the transformer: 11000/433/250

Earth Fault Protection Settings for Neutron Earthing Analysis

Site Asset Number: new proposed substation site

Phase to Earth fault level at site (Amps): 1230

X/R ratio at site: 3.61

Number of interconnected Substations: 20

Estimated number of connections per substation: 30

SEF Active: Yes

Upstream protective device: Details

Device No	Device Type	Iset (A)	TMS	Curve Type	DMT	Instantaneous (A)	Minimum Time (s)	SEF Current (A)	SEF Time (s)	Additional Time (s)
CUD3B6	Relay	60	0.25	IEC SI				8	10	

Project Specific Comments:

Permission to install 2 x 1500kVA onsite substations is granted. 11kV cable between substations 6190 and 6688 in Lorien Way to be cut (2 joints permitted) and loop in and out of the new substations.

The network can support the proposed load with the movement of a normally open point between CUD3B6 and CUD3B4 from substation 981353 to the new proposed substations. Connecting the new substations to the CUD3B6 feeder.

LV tie back to a pillar in Lorien Way from one of the substations is required (open point at this pillar).

LV tie between padmounts required (open point in either padmount).

No provision for paralleling LV under load at consumers switchboards allowed (separate boards or Castell Key arrangement required).

Redundant 11kV and LV overhead (including substation 5876) to be recovered. A dedicated LV underground circuit from one of the padmounts (easement required) to supply the Tweed Shire pumping station.

The 2 pumps can run together during flood conditions. Each pump requires 176A per phase (information supplied by Tweed Shire). 300mm Cu LV circuit required?

Ancillary Network Service (ANS) Fees

Ancillary Network Service fees for this project are calculated in accordance with the Australian Energy Regulator (AER), Charges for Monopoly Services.

Your client is to be advised of any Ancillary Network Service fees applicable to this project.

Total fees for this Design Information Pack are **\$938.40**

Note the invoice will detail the fee type and hours charged for completing this Design Information Pack.

Other fees that may be applied to this project are listed in the document titled 'Price Schedule for Ancillary Network Services' that can be found at Essential Energy's website: (<http://www.essentialenergy.com.au/content/electricity-network-pricing-and-information>).

*** Note - ANS fees exclude GST and are subject to annual price increases in accordance with the National Regulatory Framework. Care should be taken to select the fee appropriate to this project type. Design certification fees will be based on the date of receipt of a complete and correct submission for certification. All other fees will be based on the work completion date. (eg. date of outage, commissioning, inspection).**

Asset Labels

Reuse existing labels for assets that are replaced or substations that are upgraded in the same location. Additional asset labels may be obtained by submitting an asset label request via the Essential Connections portal.

Pioneer Scheme - Reimbursement

General

AER requires that Essential Energy administer a Pioneer Scheme from 1 July 2014 in accordance with the requirements of the AER Connection Charge Guidelines for Electricity Retail Customers – Under Chapter 5A of the National Electricity Rules, and Essential Energy's Connection Policy as approved by the AER.

Requirements of the Pioneer Scheme are outlined in Essential Energy's document *CEO2513.06 Connection Policy – Connection Charges*.

Project specific

The customer is required to complete and sign a *CEOF6283 Pioneer Scheme Application Form* regardless of whether a pioneer scheme is being implemented or not. The Level 3 ASP must submit the form with the design package for certification.

Essential Energy's records indicate that there **is not** a pre-existing pioneer scheme attached to the infrastructure where you request a connection.

GENERAL DESIGN INFORMATION

Easements

The Level 3 ASP should consider easement requirements during the design route analysis.

The customer is responsible for all costs associated with the easement creation including solicitor fees, surveying costs and compensation payable to affected landowners.

Where easements are to be created outside of land to be subdivided, satisfactory arrangements must be in place prior to the level 1 ASP applying to commence construction. Where all easements are contained within land to be subdivided, construction can commence prior to the execution of easement documents however, easements will need to be executed prior to applying for a Notice of Arrangement. For further information, please refer to *CEOP8046 - Easement Requirements*.

Where satisfactory arrangements have not been made at time of certification for easements outside of land to be subdivided, a *CEOF9082 – Customer Funded Project: Consent Form* shall be provided.

Easements over Crown land, Crown roads or waterways must be obtained by Essential Energy through the compulsory acquisition process, in accordance with the procedures set out in the Land Acquisition (Just Terms Compensation) Act 1991 (NSW). Please contact Essential Energy's Conveyancing team for further advice or go to the Easements area of the Essential Energy website which contains an information sheet for crown land easements.

Materials

All materials specified in the design must comply with *CEOM7004 – Materials Inventory: Contestability (Approved)*

Non-standard materials may only be used with written permission from Essential Energy. Where a non-standard material is required, please submit a non-standard approval request via the Essential Connections portal under the Essential Connections number (ECN). Your request should include full details for justification and engineering certification where required.

All assets to be removed from Essential Energy's network within this project are to be nominated on the operational form *CEOF2098 – Returned Materials Checklist* and returned to the closest Essential Energy depot, nominated by the Network Assurance Facilitator.

Network Optimisation

The Level 3 ASP must ensure that the design is carried out in such a way as to optimise future network operating and maintenance costs rather than solely minimising initial connection costs. Consideration should be given to utilising or upgrading existing assets (eg. poles and transformers) where possible.

When assessing connection proposals, Essential Energy will use network optimisation considerations to determine which connection proposals are acceptable.

Other Services

The Level 3 ASP must carry out a Before You Dig search and is responsible for ensuring that the design does not impact on other services, e.g. telecommunication, gas, water etc. BYDA information should be clearly shown on the design.

In the event the works or design needs to be varied, amended or rectified due to a conflict with other services, the Level 3 ASP is responsible for any subsequent re-design required.

The Level 3 ASP must also ensure that the design will not conflict with proposed services to be installed in conjunction with the development.

Third Party Attachments

Essential Energy has existing joint use arrangements and operates Facilities Access Agreements (FAA's) within its network that allows third party attachments to use Essential Energy assets, for example - optical fibre or telecommunications equipment. It is the Level 3 ASP's responsibility to identify and verify third party attachments and communicate with the third party as part of the design process. Where third party attachments are within the project scope this should be identified on the construction plan.

The Essential Energy form *CEOF6586 – Advice of Pole Maintenance* is available on the Essential Energy's document library and contains contact information for the level 3 ASP, this form should also be used by the level 1 ASP as part of notification for construction. Connection applicants should be aware that they will be responsible for any fees associated with relocation works required by the attachment owner.

Approvals

The Level 3 ASP must seek approvals from the local council, all road controlling authorities and any land occupier affected by the proposed electrical works. The Electricity Supply Act 1995 (NSW), State Environmental Planning Policy (Transport & Infrastructure) 2021 (NSW) and the Roads Act 1993 (NSW) have specific requirements in this regard.

In accordance with Section 45 of the Electricity Supply Act, notification of the proposed works must be given to the local council. The council is allowed up to 40 days to comment and the ASP must duly consider all responses received.

In accordance with Division 5, Section 2.45 of the State Environmental Planning Policy (Transport & Infrastructure) 2021, notification of proposed substations, or works on an existing substation, must be given to both the local council and to occupiers of all adjacent land. The council and adjacent landowners are allowed up to 21 days to comment. The Level 3 ASP must duly consider all responses received.

For works in, on or over a classified road, Section 138 of the Roads Act requires the proponent to obtain consent from the appropriate road controlling authority, and either consent, or concurrence from TfNSW.

Copies of notices to the local council and occupiers of adjacent land, any comments received or a letter stating that no response was received, and any required consent letters are to be provided to Essential Energy within the certification package.

Copies of notices to TfNSW (and other road controlling authorities where applicable) and the written consent received must be provided to Essential Energy with the certification package for any works on classified roads.

Environmental Impact Assessment

An environmental impact assessment of the project will be required. The assessment is to be completed in accordance with *CECM1000.70.- Environmental Impact Assessment – NSW*.

A completed *CEOF1070.01 Environmental Impact Assessment: Screening Worksheet* or *CEOF1070.02 Review of Environmental Factors Worksheet*, must be submitted with the design construction plans for certification by Essential Energy. An information sheet *CEOH1070.02a REF Worksheet: Information Sheet for use by Accredited Service Providers* is available in Essential Energy's online document library to assist ASPs with the completion of the environmental impact assessment.

Please ensure all supporting documentation such as threatened species searches, evidence of community consultation, and notifications to council are included in the submission package.

Earthing

- All earthing shall comply with the Essential Energy's policy CEOM5113.02 High Voltage A.C. Distribution Earthing Procedure.
- All earthing designs shall be based on Essential Energy's distribution earthing design software package (Neutron). A copy of the Neutron software package is available on request through neutron@essentialenergy.com.au.

- Level 3 ASPs are required to print an Earthing Report from Neutron and submit it with the design construction drawings for certification.
- Full details of the earthing design must be included on the design drawing.
- Should the customer be upgrading an existing substation, then the suitability of the existing earthing should be assessed for compliance with the current standards. If the existing earthing does not comply, it must be upgraded accordingly.

Voltage Drop Calculations

Where the design requires an alteration to the load on a Low Voltage circuit, the Voltage Drop shall be determined using 'LVDROP' software (Version 5.48 or later) or Neara. Essential Energy's *CEOM7097 – Overhead Design Manual* and *CEOM7098 – Underground Design and Construction Manual* provide detailed information on LVDROP's parameter settings, appropriate load allowances for different development types, and the maximum allowable voltage drop in an LV circuit.

An LVDROP report should be submitted with the design for certification where applicable.

Design Certification

Please note the following information regarding design package submissions:

1. In addition to specific requirements outlined in the aforementioned clauses, the design package shall be prepared in accordance with the technical design requirements as specified in Essential Energy's design and construction standards.
2. All relevant documents shall be submitted with the design for certification. (See Required Documents Schedule)
3. Essential Energy will carry out an initial review of the design package and issue certification of the design drawing to indicate that the package is compliant.
4. If it is found that the design package is not compliant with Essential Energy's technical or drawing standards, or specific design requirements, the design submission will be returned to the applicant for amendments. Design rechecking charges will be applied.
5. Certification will remain valid for a period of 6 months. If construction of the proposed works has not commenced before this period expires, the design package must be updated and re-submitted for certification prior to submission of the Notice to Commence Construction.

In certifying any design, Essential Energy makes no warranty, express or implied, that the design is:

1. Fit for its intended purpose
2. Suitable for the site conditions
3. Free of design defects (i.e. errors and omissions)

The Level 3 ASP (and Level 1 ASP at commencement of construction) acknowledges that Essential Energy has not inspected the site, and therefore, is unfamiliar with the site conditions.

Design certification is granted exclusively based on the submitted design with respect to the construction standards in force at the time. It has no reference to any underlying assumptions or conditions.

Responsibility for the correctness and suitability of the design remains with the Level 3 ASP after certification. Essential Energy will request the Level 3 ASP to correct any design defects discovered after certification is granted and resubmit the design package for certification. Design rechecking charges will be applied.

Schedule of Documents to be submitted with the Certification Package:

- Electrical Plan For Certification (in pdf and dwg format)
- Neutron Earthing Report
- Designer Safety Report
- CEOF9082 - Customer Funded Project - Consent Form
- CEOF9093 - Consent Form - Schedule of Works Required
- CEOF1070-01 - Environmental Impact Assessment - Screening Worksheet
- CEOF1070.02 - Review of Environmental Factors Worksheet
- CEOF2098 - Company Form (Network) Returned Redundant Materials Check List
- CEOF6283 - Contestable Works - Pioneer Scheme Application
- AHIMS Report
- Flora/Fauna Search Results
- Dial Before You Dig (DBYD) Report/Reference Number
- Enhancement Letters
- Section 45 Notifications
- Section 45 Responses

Essential Energy forms are available at: <https://www.essentialenergy.com.au/partners/contestable-work>

Incomplete or incorrect certification packages will be returned to the nominated Level 3 ASP to action (Design rechecking charges will apply to subsequent submissions).

Design information issued by **Name:** Graham Foxwell
Contact Number: 0755063812

List of attachments:

- Smallworld
- Webview
- LV Geo