Network Standard

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NW000-S0140 **ES4 ACCREDITED SERVICE PROVIDER AUTHORISATION**

ISSUE

For issue to all Accredited Service Providers' staff involved with contestable work in Ausgrid's network area and is for reference by Accredited Service Provider staff.

Where this Standard is issued as a controlled document replacing an earlier edition, remove and destroy the superseded document.

DISCLAIMER

As Ausgrid's Standards are subject to ongoing review, the information contained in this document may be amended by Ausgrid at any time.

It is possible that conflict may exist between Standard documents. In this event, the most recent Standard shall prevail.

This document has been developed using information available from internal network performance data, national and state regulators, and industry best practice and is suitable for most situations encountered in Ausgrid. Particular conditions, projects or localities may require special or different practices. It is the responsibility of the Accredited Service Providers' local manager, supervisor, assured quality contractor and the individuals involved to make sure that a safe system of work is employed and that statutory requirements are met.

Ausgrid disclaims any and all liability to any person or persons for any procedure, process or any other thing done or not done, as a result of this Standard.

INTERPRETATION

In the event that any user of this Standard considers that any of its provisions is uncertain, ambiguous, or otherwise in need of interpretation, the user should request Ausgrid to clarify the provision. Ausgrid's interpretation shall then apply as though it was included in this NW000-S0140 (hereafter, the Standard) and is final and binding. No correspondence will be entered into with any person disputing the meaning of the provision published in the Standard or the accuracy of Ausgrid's interpretation.

KEYPOINTS

This Standard has a summary of content labelled "KEYPOINTS FOR THIS STANDARD". The inclusion or omission of items in this summary does not signify any specific importance or criticality to the items described. It is meant to simply provide the reader with a quick assessment of some of the major issues addressed by the standard. To fully appreciate the content and the requirements of the Standard, the standard shall be read in its entirety.

AMENDMENTS TO THIS STANDARD

Where there are changes to this Standard from the previously approved version, any previous shading (indicating prior changes to the Standard) is removed, and the newly affected paragraphs are shaded with a grey background. Where the document changes exceed 25% of the document content, any grey background in the document is to be removed and the following words should be shown below the title block on the right-hand side of the page in bold and italic, for example, supersedes – document details (for example, "Supersedes Document Type (Category) Document No. Amendment No.").

Purpose

This standard sets out the Ausgrid network authorisation requirements for an Accredited Service Provider (**ASP**) and its workers to perform contestable work on or near Ausgrid's network.

This document also details the specific rules and requirements that ASPs must adhere to when carrying out contestable work in Ausgrid's network area.

Where to for more information?

Section 6 and 7

Accreditation and authorisation Requirements

ASPs must obtain authorisation from Ausgrid prior to undertaking contestable work on or near the Ausgrid network. ASPs must only perform contestable work for which they are authorised.

All individual workers undertaking contestable work on or near Ausgrid's network must be registered under the ASP registration Scheme.

The grading of ASPs is determined by Energy NSW to reflect the general level of competence and expertise.

- Contestable work must be carried out in accordance with Ausgrid's network standards, Electrical Safety Rules and any other relevant regulations, codes, and practices.
- Contestable work must be carried out in accordance with environmental requirements in a manner that will prevent pollution and/or environmental damage.

Where to for more information?

Section 6

Tools and Forms

Annexure D

Inspections and Incidents

Inspections are completed by Ausgrid on contestable works where required and attract inspection fees in line with regulated Ancillary Network Service (ANS) fees determined by the Australian Energy Regulator (AER).

Any incidents associated with contestable works, may be investigated by Ausgrid, and will attract incident investigation fees in line with regulated ANS fees determined by the AER.

Where to for more information?

Section 7

Tools and Forms

Annexure B and C

ASP Contestable Work classifications

This standard sets out the type of work permitted under each class of authorisation for Level 1, 2 and 3 ASPs.

Where to for more information?

Section 8 - 14

Tools and Forms

Annexure A, B, C, D and E

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Contents

1.0 PURPOSE

This document details the Accredited Service Provider (**ASP**) authorisation process and requirements.

2.0 SCOPE

This document sets out the framework for authorisation of ASPs and ASP workers to perform contestable work on or near Ausgrid's network, including:

- the minimum requirements to obtain authorisation to work on or near Ausgrid's network.
- the specific types of contestable work ASPs are permitted to carry out based on their level of accreditation and authorisation; and
- rules and requirements that ASPs must adhere to when carrying out contestable work on or near Ausgrid's network.

3.0 REFERENCES

3.1 General

All work covered in this document must conform to all relevant Legislation, Standards, Codes of Practice and Network Standards. Current Network Standards are available on Ausgrid's website at https://www.ausgrid.com.au.

3.2 Ausgrid documents

- Alternative Control Services Fee Schedule
- Connection Policy
- Contract for Design Related Services
- Customer Installation Safety Plan
- Electrical Safety Rules (ESR)
- Electricity Network Safety Management System Manual
- ES1 – Premises Connection Requirements
- ES3 – Part A Metering Installations
- ES3 – Part B Metering Equipment Technical Description for Type 5 & 6 Metering Installations
- NS100 Field Recording of Network Assets
- NS124 Specification for Overhead Service Connections up to 400 amps
- NS127 Low Voltage Cable Joints and Terminations
- NS130 Specification for Laying of Underground cables up to and including 11kV
- NS141 Site Selection and Site Preparation Standards for Kiosk Type Substations
- NS156 Working Near or Around Underground Cables
- NS174 Environmental Procedures
- NS179 Vegetation Management
- NS181 Approval of Materials & Equipment and Network Standard Variations
- NS183 Installation of Private Attachments on Ausgrid Poles
- NS199 Safe Electrical Work on Low Voltage Underground Assets
- NS211 Working with Asbestos Products
- NS282 Service Testing
- T0005 NEG-NPR05 Field Recording Guide
- Tree Safety Management Plan

3.3 Other standards and documents

- NSW Accredited Service Provider (ASP) Scheme Rules
- AS/NZS 3000 Wiring Rules
- AS/NZS 3017 Electrical Installations - Verification Guidelines
- AS2865 Safe Working in a Confined Space
- AS4741 Testing of connections to low voltage electricity networks
- ENA Doc 001-2008 National Electricity Network Safety Code
- ENA Doc 023-2009 Guideline for Safe Vegetation Management Work Near Live Overhead Lines

- ISSC3 Guideline for Managing Vegetation Near Power Lines
- ISSC14 Guide to Electrical Workers Safety Equipment
- Service and Installation Rules of New South Wales
- WorkCover Code of Practice - Work Near Overhead Power Lines 2006

3.4 Acts and regulations

- Bankruptcy Act 1966 (Cth)
- Electricity Supply Act 1995 (NSW)
- Electricity Supply (General) Regulation 2014 (NSW)
- Electricity Supply (Safety and Network Management) Regulation 2014 (NSW)
- Work Health and Safety Act 2011 (Cth)
- Work Health and Safety Act 2011 (NSW) and
- Work Health and Safety Regulation 2017 (NSW)

4.0 DEFINITIONS

Accreditation	The process of ensuring that a service provider company, wishing to carry out contestable work, has the necessary level of skills, resources and insurance to undertake such work and complete the work in a safe and reliable manner. The Accreditation scheme in NSW (ASP Accreditation Scheme) is managed by NSW Office of Energy and Climate Change.
Accredited Person Zone	As defined in the current version of the SafeWork Code of Practice - Work Near Overhead Power Lines.
Accredited Service Provider (ASP)	An individual or company accredited by the NSW Government, in accordance with the Electricity Supply (Safety and Network Management) Regulation 2014 (NSW).
Accredited Service Provider Level 1 (ASP/1)	An ASP or and ASP worker accredited to undertake Level 1 contestable work. Level 1 contestable work includes the construction of sub-transmission and distribution assets forming part of the network such as the installation of high voltage and low voltage cables, conduits, pillars, poles, and substations. Level 1 contestable work is generally referred to as distribution work.
Accredited Service Provider Level 2 (ASP/2)	An ASP or and ASP worker accredited to undertake Level 2 contestable work. Level 2 contestable works includes the installation of overhead/underground services, the relocation or removal of Type 5 and 6 metering equipment and the disconnection and reconnection of supply to carry out work on an installation and energising installations. Level 2 contestable work is generally referred to as service work.
Accredited Service Provider Level 3 (ASP/3)	An ASP or and ASP worker accredited to provide Level 3 contestable work. Level 3 contestable works includes designing the sub-transmission and distribution electrical reticulation systems, including underground or overhead mains and apparatus and substations. This also includes augmenting the network to increase the existing network's capacity. Level 3 contestable works is generally referred to as contestable design work.
Ancillary Network Services (ANS)	Ancillary network services are non-routine regulated services that distributors provide on an 'as needs' basis. Ausgrid provides a number of regulated services that facilitate the contestable works carried out by ASPs. Fees and charges for ancillary network services are determined by the Australian Energy Regulator (AER) and detailed in Ausgrid's publication Connection Policy. Examples of ANS include design information, design certification, inspection, access permit, substation commissioning (electrification), notice of arrangement and ASP authorisation.

Authorised Field Recorder	A person who is responsible to record and submit accurate field recordings. Authorised Field Recorders must meet and maintain all of the competency requirements specified in section 8.9 *Field recording of network assets* and Annexure E *Field Recording of Network Assets Authorisation Application Form.*
Authorised person	An individual who carries out work for an ASP, and who is registered under the ASP Scheme and authorised by Ausgrid to undertake contestable work on or near the network.
Authorised work	Work requiring specific permission in writing from Ausgrid as specified in Ausgrid's Electrical Safety Rules, Network Standards, and this standard. Note: In accordance with sections 65-70 of the *Electricity Supply Act 1995* (NSW), it is an offence to interfere with electricity works, meters and seals without authorisation. Under sections 68-70 it is an offence to connect an electrical installation, increase the capacity of an existing connection or to make certain alterations to a connected electrical installation without the authorisation of the Electricity Distributor (i.e. Ausgrid).
Connection Point (previously Point of Supply)	Has the same meaning as defined in the current version of the Service and Installation Rules of New South Wales.
Contestable Work	Contestable work includes the design, construction, and installation of electricity works required to connect a customer's installation to, or perform relocation works to an electricity network. Customers are required to fund the cost of contestable work and they have the choice of selecting an accredited service provider (ASP) to carry out the work. The legislation relevant to contestable work is the NSW Electricity Supply (General) Regulation (2001).
Customer	A retail customer, or a real estate developer who requests (or on whose behalf a request is made for) a new connection or connection alteration.
Customer Installation	For the purpose of this standard, a customer installation is the whole or portion of a customer's private electrical installation that requires separate metering and an individual National Metering Identifier (NMI) for the purposes of the Australian Energy Market Operator (AEMO). For example, a block of 20 home units or flats will have at least 20 customer installations and possibly one (1) or more common customer installations such as house lights, lifts, and essential services.
Designated underground asset information provider	A person or body who is prescribed by the regulations for the purposes of carrying out the search function of underground assets and providing the information to persons/organisations. Previously known as Dial Before You Dig (DBYD)
Field Recording Officer (FRO)	An Ausgrid officer responsible for recording project and maintenance works constructed or installed by the Ausgrid's regional distribution and sub-transmission crews as well as recording commissioning joints for ASP and Ausgrid contractor projects.
Source Data Coordinator (SDC)	An Ausgrid officer, responsible for obtaining, receiving, collating, and assessing all source documentation and data for the Geographical Information System (GIS).
Design Certification	As defined in Ausgrid's Contract for Design Related Services.

Designer	An Ausgrid employee, contractor to Ausgrid or Level 3 ASP who is undertaking design (and holds the requisite qualifications).
Authorisations Officer	An Ausgrid officer responsible for administering the authorisation process for ASPs under this standard, including the implementation of ASP corrective/disciplinary actions.
Electricity Distributor	In NSW, an Electricity Distributor is the licensed operator and controller of an electricity network (distribution and sub-transmission) system. Terms such as network operator, Local Network Service Provider (LNSP) and Distribution Network Service Provider (DNSP) are also used to describe the role of an Electricity Distributor.
Electricity Network Safety Management System (ENSMS)	Framework which governs Ausgrid's management of the capacity, reliability, supply quality and safety of the network.
Inspection	Inspections or audits conducted by Ausgrid, which may include testing, of work in progress or completed contestable work to ensure it complies with Ausgrid's network standards and specifications, certified construction plans and the Service Rules.
Mains and Apparatus	Has the same meaning as defined in Ausgrid's Electrical Safety Rules.
Metering Provider	An entity accredited and registered by AEMO under Chapter 7 of the National Electricity Rules to install and maintain metering equipment.
Network	Has the same meaning as defined in Ausgrid's Electrical Safety Rules.
Network Compliance & Authorisations Officer (CO)	An Ausgrid officer who carries out the following specific functions in order to monitor compliance by ASPs with Ausgrid's contestable works specifications, standards, and safety requirement: • inspection and facilitation of Level 1 ASP works and work practices and investigating and recommending ASP corrective/disciplinary processes. • worksite safety compliance auditing of Level 1 ASPs.
Network Standard	A document, including Network Planning Standards, that describes Ausgrid's minimum requirements for planning, design, construction, maintenance, technical specification, environmental, property and metering activities on the distribution and sub-transmission network. These documents are stored in the Network Category of the BMS repository.
No Go Zone	As defined in the current version of the SafeWork Code of Practice - Work Near Overhead Power Lines.
Notification of Service Work (NOSW)	The Notification of Service Work (NOSW) must be completed by Level 2 ASPs to inform Ausgrid whenever contestable service work is carried out.
On or Near	Refers to physically contacting or working within minimum safe working distances (as defined in Ausgrid's Electrical Safety Rules), either directly or through any conducting medium, to Ausgrid's network.
Overhead Service	Has the same meaning as defined in the current version of the Service and Installation Rules of New South Wales for Overhead Service.
Pegasus	Ausgrid's ASP authorisation management system (*System*) is hosted by Pegasus and is accessible via an online portal platform (website).

Point of Attachment	Has the same meaning as defined in the current version of the Service and Installation Rules of New South Wales.
Point of Common Coupling	Has the same meaning as defined in the current version of the Service and Installation Rules of New South Wales.
Standard Vegetation Control – Minimum Safe Working Distance (MSWD)	The minimum safe working distances that must be observed for the relevant voltage by standard vegetation control authorised persons and the equipment they are using as defined in Ausgrid's Electrical Safety Rules.
SWMS	Safe Work Method Statement. See section 6.4.
Scheme Rules	NSW Accredited Service Provider (ASP) Scheme Rules published by NSW Office of Energy and Climate Change.
Service & Installation Compliance Officer	An Ausgrid officer who carries out the following specific functions in order to monitor compliance by ASPs with Ausgrid's contestable works specifications, standards, and safety requirement: • inspection of Level 2 ASP works and work practices and investigating and recommending ASP corrective/disciplinary processes. • worksite safety compliance auditing of Level 2 ASPs
Service Protection Device (Service Fuse)	Has the same meaning as defined in the current version of the Service and Installation Rules of New South Wales for Underground Service.
Service Rules	The term Service Rules is used in this document to describe the Service and Installation Rules of New South Wales.
System	Ausgrid's ASP authorisation management system (*System*) for ASPs to register and maintain their ASP company and individual authorisations for work on or near Ausgrid's network.
Underground Service	Has the same meaning as defined in the current version of the Service and Installation Rules of New South Wales for Underground Service.
Vegetation	Means any living or non-living flora or any part of that flora.
Vegetation Clearance	Means the minimum separation in air that shall be maintained between vegetation and live electrical apparatus when performing standard vegetation management work as defined in the current version of the company's ESR.

5.0 INTRODUCTION

Authorisation is formal approval or permission for an ASP and appropriately qualified authorised person/s to work on or near the Ausgrid network.

ASPs are responsible for ensuring the safety of their workers and the public while carrying out contestable work. ASPs must perform contestable work in a manner which ensures the safe, reliable, and efficient operation of the network both during and after carrying out authorised work.

All Authorised Work must be executed in a safe manner and comply with:

- all relevant Acts, regulations, and codes of practice.
- All NSW state authority requirements and conditions, including, but not limited to:
  - SafeWork NSW.
  - Local Government areas.
  - Roads and Maritime Services (RMS).
  - National Parks and Wildlife Service; and
  - any other NSW state authority whose requirements and conditions may be relevant to the work.
- the requirements and conditions of the NSW Office of Energy and Climate Change Accreditation Scheme.
  - Policies relating to contestable work and safe work practices.
- Service and Installation Rules of New South Wales (Service Rules).
- the specific requirements set out in this document; and
- National Electricity Rules, AEMO Metrology procedure and Market Operation Rule 3.

- The requirements for accreditation under the NSW Office of Energy and Climate Change Accreditation Scheme must be adhered to and can be obtained from the NSW Office of Energy and Climate Change website:

https://energy.nsw.gov.au/government-and-regulation/legislative-and-regulatory-requirements/asp-scheme-and-contestable-works

Note: Any exemption or approval to differ from this document or other Ausgrid policies, standards, or any other relevant publication relevant to ASP work must be in writing.

Verbal discussions will not be taken into account in the event of a breach or a dispute.

6.0 GENERAL REQUIREMENTS

6.1 Authorisation

6.1.1 Who Requires Authorisation

The Scheme Rules require that individuals and companies that perform contestable network service work must be registered under the ASP Scheme and authorised by Ausgrid to carry out the relevant class of contestable network service (making them authorised persons). An authorised person's ASP authorisation must be linked to an authorised ASP company.

6.1.2 Applying for Authorisation

ASP companies

ASP/1 and ASP/2 companies seeking Ausgrid authorisation must apply to Ausgrid to enter into an Authorisation Agreement with Ausgrid, which will be renewed on an annual basis.

ASP/3 companies are not required to enter into an Authorisation Agreement with Ausgrid in order to obtain authorisation. Refer to section 13 for ASP/3 authorisation requirements.

Prior to making an application for Ausgrid authorisation to carry out contestable work in Ausgrid's network area, the ASP company must have current ASP accreditation from NSW Office of Energy and Climate Change and have registered relevant individual employees or subcontractors in accordance with the Scheme Rules.

Authorised persons

Individual workers employed by an ASP/1 company or ASP/2 company (this includes subcontracted individuals working for an ASP/1 company or ASP/2 company) must apply to Ausgrid to enter into an individual Authorisation Agreement with Ausgrid. Persons who have not entered into an individual Authorisation Agreement will not be authorised to carry out contestable work in Ausgrid's network area.

ASP/1 and ASP/2 individual Authorisation Agreements remain valid provided the individual is current with all training and competency requirements of their class(es) of ASP authorisation. Where an individual becomes non-current with any of the requirements of their class(es) of ASP authorisation, their ASP authorisation will lapse, and the individual will not be permitted to carry out contestable work in Ausgrid's network area.

Individual workers employed by an ASP/3 company (this includes subcontracted individuals working for an ASP/3 company) are not required to enter into an Authorisation Agreement with Ausgrid in order to obtain authorisation. Refer to section 13 for ASP/3 authorisation requirements.

To become authorised, individual applicants must have satisfied the skills-based training and qualifications relevant to the level and class of authorisation being sought and can only carry out contestable work as Authorised Persons while working for the ASP company connected to their authorisation.

Further information about the authorisation application process is set out in this standard (refer to sections 9, 11 and 13).

6.1.3 Scope and Non-transferability of ASP Authorisations

If an authorised person leaves the employment of an ASP company, the authorisation which is linked to that ASP company will terminate. If an individual commences work with another ASP company, the individual will need to obtain authorisation linked to the new ASP company.

The Ausgrid authorisation that is granted is not all encompassing. When authorisation is granted, it is for a specific class, or classes, of contestable work. The applicant must select the class, or classes, of authorisation sought in the *System* for ASP/1 and ASP/2 applications, or on the Annexure D ASP/3 Authorisation Application or Change of Details Form for all ASP/3 authorisation applications.

ASP Authorisation does not permit ASPs or Authorised Persons to interfere with or carry out work on Ausgrid mains and apparatus in a manner that is outside the scope of their specific ASP authorisation.

If an Authorised Person's or ASP's authorisation is suspended or cancelled for any reason, then they are not permitted to interfere with or work on or near the network.

For detailed requirements of ASP Company and individual authorisation for each level refer to:

- For ASP/1s – Section 9.0
- For ASP/2s – Section 11.0
- For ASP/3s – Section 13.0

6.2 Safety Requirements for Authorisation

ASPs working on or near Ausgrid's network under the NSW Office of Energy and Climate Change Accreditation Scheme are required, under the scheme, to comply with the relevant parts of Ausgrid's ENSMS, ESR and other relevant policies.

All ASPs involved with work on or near the Ausgrid network are required to manage the risks and hazards in accordance with their ASP company's applicable safe system of work and in accordance with the ASP company's WHS risk management principles.

In managing risks to health and safety arising from work on or near the Ausgrid network, risks and hazards are required to be eliminated so far as is reasonably practicable. If it is not reasonably practicable to eliminate risks to health and safety, those risks must be minimised so far as is reasonably practicable through the application of the hierarchy of control measures.

ASPs are responsible for the safety of their employees and the public, whilst carrying out contestable work. It is essential that authorised work is performed in a safe manner and to no less a standard than is specified in Ausgrid's:

- Electrical Safety Rules.
- Network Standards (including this document).
- Electricity Supply Standards; and
- Other Ausgrid policies relating to contestable work.

In order to obtain authorisation, ASPs are required to:

- have a safety management system for undertaking their authorised work on the network.
- obtain relevant components of Ausgrid's ENSMS, such as, the ESR and Network Standards from Ausgrid's website; and
- confirm that their arrangements for managing health and safety (as set out in their safety management system) as consistent with Ausgrid's system.

Ausgrid will rely on information provided by ASPs to facilitate consultation, cooperation, and coordination with other duty holders (including ASPs).

Should an ASP not understand any of the system components relevant to their work, then they must not proceed with the work until the issues have been clarified. ASPs are also obliged to inform Ausgrid of any information that may impact the ability of an Authorised Person to work safely on the network. This includes any hazards or risks associated with their work that may affect the work health and safety of Ausgrid employees or members of the public.

The conditions stated as requirements of accreditation under the NSW Office of Energy and Climate Change Accreditation Scheme must be adhered to, as well as any relevant Act, Regulation and SafeWork NSW requirement applicable at the time. It is the ASP's responsibility to maintain currency of, and familiarity with all relevant work health and safety legislation, regulations, codes of practice and guidelines, as well as ensuring employees are informed and/or competent in those requirements.

If serious breaches of the safety requirements of authorised work are detected, action will be taken that may lead to the suspension or cancellation of an individual's ASP authorisation. The ASP company will also be held accountable for the breach and may also have their ASP authorisation suspended or cancelled. The matter may also be referred to NSW Office of Energy and Climate Change as required under the Accreditation Scheme.

A Safe Work Method Statement (SWMS) is required for each type of contestable work conducted by ASPs in Ausgrid's network area. SWMS specific to the contestable work an individual is undertaking must be available at each worksite in either electronic or hard copy.

As part of each job, a site-specific written risk assessment is also required; these must be completed by all staff on site prior to commencing work to identify the safety and environmental needs and risks at each worksite.

6.3 Ancillary Network Services

Ancillary Network Services (ANS) fees are applicable for ASP authorisations. ANS fees are required for ASP/1 & ASP/2 company authorisations and all individual ASP authorisations. ASP/1 & ASP/2 ANS fees are paid via Ausgrid's ASP Authorisation Management System (Pegasus), ASP/3 ANS fees are invoiced by Ausgrid. All ASP authorisation fees are invoiced to the ASP company.

ANS fees can be found on Ausgrid's Connection Charges webpage:
https://www.ausgrid.com.au/Connections/Charges

ASP/1 and ASP/2 fees are detailed on Pegasus's ASP website:
http://ausgridpartners.com.au/ausgrid-accredited-service-providers-asps/

Where an ASP company fails to pay ANS Authorisation fees or accumulates excessive ANS service fees, Ausgrid may suspend or cancel the ASP company authorisation, or refuse to authorise or re-authorise ASP workers until all required remittance is resolved.

6.4 Requirements for Working on or near Ausgrid's Network

Ausgrid's ESR state that work on or near Ausgrid mains and apparatus can only be undertaken by authorised persons or instructed persons under the direct supervision of an authorised person.

The term 'on' and 'near' have the same meaning as detailed in Ausgrid's ESR glossary.

ASP Authorisations, training and skills must be recorded on one (1) of the following:

- a network passport (personal training records)
- an Australian ESI Skills passport; and/or
- an Ausgrid approved training or ASP authorisation card.
- These documents must be shown upon request of an authorised officer of Ausgrid, SafeWork NSW or NSW Office of Energy and Climate Change.

A national skills passport will be issued when an individual completes their initial ESR training with Ausgrid. To order a replacement national skills passport, refer to Annexure C – Replacement ESI Skills Passport Application Form.

All workers who work on or near electrical mains and apparatus must meet the training and qualification requirements as set out in Ausgrid's ESR and the ASP training matrix.,

The ASP responsible for ensuring that all authorised persons carrying out contestable work in Ausgrid's network area must have, as a minimum, the following documents readily available at each worksite they are at:

- Their ASP authorisation (Pegasus ID) card.
- Access to the current version of Ausgrid's:
    - Electrical Safety Rules.
    - NS174C – Environmental Handbook for Construction and Maintenance; and
    - Network Standards and/or Electrical Standards specific to the contestable work they are undertaking.
- SWMS applicable for the works being undertaken accompanied by a site-specific site risk assessment which must be completed onsite and prior to any works commencing and updated if site conditions change; and
- For ASP/2 contestable service works, an approved connection application job number from Ausgrid for the works being undertaken.

The ASP responsible for ensuring that all ASP/1 authorised persons conducting works as part of a contestable project, shall also have access to all documents relevant for the contestable project they are working on. This includes as a minimum, but is not limited to:

- The certified design; and
- Environment Impact Assessment (EIA)/Summary Environmental Report (SER).

Failure to provide the above when requested, may lead to suspension or cancellation of either or both the ASP individual and the ASP company's authorisation.

6.5 Environmental Requirements

Contestable work must be carried out in accordance with environmental requirements in a manner that will prevent pollution and/or environmental damage. ASPs must comply with all applicable laws, ordinances, rules, regulations, or contract provisions regarding environmental protection.

The ASP company will take reasonable measures to instruct its employees, or sub-contractors and will, at its own expense, rectify any environmental damage and/or any pollution caused by its employees, or sub-contractors in the course of performing authorised work. All contestable work must be in accordance with Ausgrid publications S0102 NS174 – Environmental Procedures and NS174C – Environmental Handbook for Construction and Maintenance.

ASP/1 contestable works must also be in accordance with the specific Environment Impact Assessment (EIA)/Summary Environmental Report (SER) for that project.

If serious breaches of the environmental requirements of authorised work are detected, action will be taken that may lead to the suspension or cancellation of the individual's ASP authorisation. The ASP company will also be held accountable for the breach and may also have their ASP authorisation suspended or cancelled. The matter may also be referred to NSW Office of Energy and Climate Change as required under the Accreditation Scheme.

6.6 Qualifications and Mandatory Safety Training Requirements

The authorisation applicant must have satisfied the skills-based training and qualifications relevant to their class of accreditation. NSW Office of Energy and Climate Change will carry out an initial assessment of training qualifications of individual employees who are seeking accreditation.

Details of the training and qualifications for each class are detailed in the Scheme Rules. Ausgrid will also carry out an assessment of training qualifications for individual employees who are seeking ASP authorisation.

Mandatory safety training or annual safety refresher training is required for all authorised ASP/1, ASP/2, and field recorders, and is determined by Ausgrid in accordance with Ausgrid's ENSMS and Ausgrid's ESRs.

Details of the training and qualifications for each class of ASP/1 and ASP/2 authorisations are detailed in ASP Authorisations Training Matrix.

Training requirements for ASP/3 authorisations are detailed in *Annexure D – ASP/3 Authorisation Application of Change of Details Form.*

Training requirements for authorisation as Authorised Field Recorder are detailed in *Annexure E – Field Recording of Network Assets Authorisation Application Form.*

All ASP/1s, ASP/2s and Authorised Field Recorders are required to hold a SafeWork NSW General Induction for Construction Work card (white card) prior to applying for authorisation.

Evidence of currency for applicable mandatory safety training or annual safety refresher training, must be available to the authorised person at all times whilst performing work relevant to their class of ASP authorisation. Evidence can be in either electronic or hardcopy format.

The evidence of such training must be produced on demand to officers of Ausgrid. Failure to produce the evidence on request may lead to suspension or cancellation of ASP authorisation.

Evidence of training may also be requested by SafeWork NSW or NSW Office of Energy and Climate Change. An individual's Pegasus ID card is not suitable evidence in this case as the information available on the card is only visible to Ausgrid employees.

6.6.1 Ausgrid's ASP Authorisations Training Matrix

Ausgrid's ASP Authorisations Training Matrix details the training and qualifications for each level of ASP/1 and ASP/2 authorisation class. The ASP Authorisations Training Matrix can be found on Ausgrid's Authorisation webpage.

Ausgrid's Training webpage:
https://www.ausgrid.com.au/ASPs-and-Contractors/Training/What-training-do-I-need

ASP/3 training and qualifications are detailed in Annexure D – "*ASP/3 Authorisation Application or Change of Details Form*".

6.7 Ausgrid Training

Ausgrid's training group provides Ausgrid-specific training courses for Authorised Service Providers (ASPs).

Ausgrid provides the following Ausgrid-specific training courses to external applicants:

- UETTDRRF01 - Apply ESI safety rules, codes of practice and procedures for work.
- I0102 - Ausgrid - Environmental Awareness.
- UETTDRRF09 - Apply access procedures to work on or near electrical network infrastructure.
- SC1000A - Substation Entry.
- SC1100A - Working Near or Around Underground Cables.
- APR0068 - Access Permit Recipient (Restricted).
- TTDO1804 - Erection of Earths.
- M2325B - Triple End Cable Sealing.
- TTDO1653 - Application of Overhead Low Voltage Short Circuits.
- AMGS0001 - Field Recording of Network Assets.
- Ausgrid Cyber Safety (online only course); and
- TTDU2170 Pit Entry.

Prior to applying for Ausgrid-specific training external applicants must have completed the following Pre-requisite training with an external Registered Training Organisation (RTO):

- HLTAID009 - Provide cardiopulmonary resuscitation
- UETDRRF004 - Perform rescue from a live LV panel
- UETDRRF007 - First Aid in an ESI Environment

All national units of competency (non-Ausgrid specific training) must be undertaken with a Registered Training Organisation (RTO) that has the specific unit of competency in their scope of registration.

All ASP/2s must complete their initial Ausgrid ESR training with Ausgrid's Training Group. After the initial training, the annual refresher training required is "*UETTDRRF01 - Apply ESI safety rules, codes of practice and procedures for work on or near electrical apparatus*", which can be completed with Ausgrid's Training Group, or a Registered Training Organisation (RTO) approved to deliver the Ausgrid aligned ESR training.

When ASP/2s attend their initial Ausgrid ESR training they will also complete Ausgrid's I0102 - Ausgrid - Environmental Awareness training. ASP/2s are not required to complete an annual refresher in Ausgrid's I0102 - Ausgrid - Environmental Awareness training.

Ausgrid training bookings can be made through the ASP authorisation management system (*System*).

Ausgrid ASP training webpage:
https://www.ausgrid.com.au/ASPs-and-Contractors/Training/ASP-Training

6.8 ASP Authorisation Management System

ASP/1 and ASP/2 company and individual authorisations are managed in the *System*.

The *System* is separated into two portals:

- ASP company portal
  - Used for registering initial ASP company authorisation; and
  - Maintaining ASP company authorisation.
- ASP worker portal
  - Used for registering initial ASP individual's authorisation; and
  - Maintaining ASP individual authorisations.

The *System* provides automated email reminders for company and individual competency, training or other artefacts required for authorisation when they are due to expire. This provides ASP companies with a management *system* to assist them in ensuring their company and staff maintain the requirements of their ASP authorisation with Ausgrid.

However, it is the responsibility of the ASP company / individual ASP to ensure that they keep up to date with all requirements of authorisation. Ausgrid is not responsible for any *System* failure, including failure to generate automated email reminders.

For assistance in registering or general use of the *System* please contact Pegasus on:

Phone: 1300 208 498
Email: Ausgrid@pegasus.net.au

To register in the ASP Authorisation Management System, follow the link below:
http://ausgridpartners.com.au/ausgrid-accredited-service-providers-asps/

ASP Authorisation Management System - Help and Resources:
http://ausgridpartners.com.au/help-and-resources/

Training and resources:
http://ausgridpartners.com.au/training-information/

For specific details on the ASP authorisation process in the *System* refer to:

- Section 9.0 for ASP/1s; and
- Section 11.0 for ASP/2s.

6.8.1 ASP Individual Authorisation Compliance

An individual's ASP authorisation(s) will remain current provided all required training and competencies are compliant in the *System*.

When any training or competency required for an individual's ASP authorisation expires, their ASP authorisation will lapse, and they will not be permitted to carry out contestable work in Ausgrid's network area.

Any ASPs who fail to maintain the requirements (Compliance) of their ASP authorisation and are identified as working while unauthorised will be investigated for unauthorised work and will not be reauthorised until the completion of the investigation, disciplinary actions, and payment of any associated fees (as applicable).

6.8.2 Pegasus ID Card

On approval of an individual ASP/1 or ASP/2 authorisation in the *System,* a Pegasus ID card will be issued containing the individual's name, photo and unique QR code. The Pegasus ID card does not have any ASP authorisation class(s) or training and competency expiry dates printed on it. An individual's training and competency is managed by the ASP company in the *System* via the ASP Worker Portal.

The ASP must ensure that their Pegasus ID card is available for inspection onsite at all times whilst performing contestable work. The card must be produced on demand to officers of Ausgrid. Failure to produce the card on request may lead to suspension or cancellation of ASP authorisation.

The Pegasus ID card is for use as an ASP authorisation compliance and auditing tool. It does not replace any regulatory or other governing bodies' requirements to have suitable training and competency documentation/evidence available on site.

An individual's Pegasus ID card will be blocked by Ausgrid if the individual or company's ASP authorisation has expired, been suspended, or cancelled.

To order a replacement Pegasus ID card, ASPs need to contact Pegasus on 1300 208 498 or via email at ausgrid@pegasus.net.au.

6.8.3 Change of Details

ASPs must update the *System* with any change in details such as accreditation or license status, postal address, email address or phone number, which may affect Ausgrid's ASP authorisation records.

ASPs must update the *System* for any change in employment with authorised individual's that were within their employment.

6.9 Warranty and Insurance

The ASP company must guarantee completed contestable construction work to be free of defects due to faulty materials, design, or workmanship for a period of three (3) years.

6.9.1 ASP/1 Requirements

ASP/1s are required meet the following in accordance with the ASP/1 Authorisation Agreement:

- hold Product/Public Liability Insurance, as required for accreditation with NSW Office of Energy and Climate Change.
- lodge security in the form of a Bank Guarantee[1] (Not required for Class 1X ASPs.); and
- hold, or cause their Authorised Field Recorder(s) to hold, Professional Indemnity Insurance (not required for Class 1A or 1X companies).

6.9.2 ASP/2 Requirements

- ASP/2s are required to have Public/Product Liability Insurance for accreditation with NSW Office of Energy and Climate Change. This is considered acceptable as the warranty bond for Level 2 ASP work.

During the warranty period, ASP/2s will be required to pay for or carry out repairs of defective or non-compliant work which has been attributed to or caused by them.

Where the Level 2 ASPs defective work:

- cannot be repaired by the ASP/2 due to emergency conditions such as loss of supply to a customer; or
- the ASP/2 does not carry out repairs on defective contestable work within the stated time limit.

Ausgrid will either disconnect the defective portion or rectify the defective work and recover the costs from the ASP responsible.

[1] During the warranty period for ASP/1 contestable works, Ausgrid may draw upon the Bank Guarantee for, the rectification of defects, completion of unfinished work, or any other condition specified in the ASP/1 Authorisation Agreement.

6.9.3 ASP/3 Requirements

ASP/3s are required to have Professional Indemnity Insurance for accreditation with NSW Office of Energy and Climate Change.

ASP/3s are required to execute a Design Deed Poll with the design submitted for certification.

6.10 Approved Materials List

Only approved materials and equipment may be used in the construction of infrastructure which ultimately forms part of Ausgrid's electrical network. These approved materials and equipment are detailed in Ausgrid's Approved Materials List.

Ausgrid may consider adding alternative materials and equipment to the Approved Materials List in accordance with Ausgrid's Network Standard 181 *Approval of Materials & Equipment and Network Standard Variations* from time to time.

For further information contact:

Email: approvals@ausgrid.com.au.

6.11 Traffic Control

The ASP company must comply with Transport for NSW Roads and Maritime Services (RMS) rules for traffic control when working on RMS controlled roads and local council requirements for other roads. The ASP must ensure individuals undertaking traffic control on behalf of their ASP company are suitably trained in traffic control and/or implementing traffic control plans to suit the task being undertaken.

Documented safe systems of work are required for all work on roads and pedestrian thoroughfares.

Failure to meet these requirements could lead to disciplinary action being taken by Ausgrid and/or by RMS, police, or local council.

6.12 Excavation - General Requirements

When planning or conducting excavation work on or near Ausgrid's network ASPs must take into consideration the relevant requirements of:

- SafeWork NSW 'Code of Practice Excavation Work';
- Ausgrid's Network standards:
  - NS100 Field Recording of Network Assets
  - NS130 Specification for Laying Underground Cables up to and Including 11kV
  - NS143 Easements, Leases and Rights of Way
  - NS156 Working Near or Around Underground Cables
  - NS159 Installation of Cables and Conduits using Trenchless Techniques
  - NS168 Specification for the Design and Construction of 33kV, 66kV and 132kV Underground Cables
  - NS174 Environmental Procedures
  - NS199 Safe Electrical Work on Low Voltage Underground Assets
  - NS211 Working with Asbestos Products

6.13 Recording of Assets

ASPs must ensure that the locations of all overhead and underground cables, joints and conduit installations are accurately recorded, and that relevant equipment is correctly labelled in accordance with Ausgrid's requirements. ASPs must also ensure that all mandatory forms required to be submitted to Ausgrid are accurately completed and submitted within the required time specified.

For ASP/1 contestable works refer to Clause 8.10 for further details.

For ASP/2s this is via the NOSW diagram[2] submitted in Ausgrid's online NOSW portal.

[2] NOSW diagram template provided in the FAQ section on the Ausgrid Portal, see section 10.4.

6.14 Confined Spaces Requirements

Confined spaces are defined in the NSW Work Health and Safety Regulation 2017. Authorised work carried out in confined spaces must be performed in accordance with AS2865 - Safe Working in a Confined Space and SafeWork NSW requirements.

Additional specific training and qualifications for working in confined spaces is required. Work on Ausgrid's pit and duct system is considered as working in confined spaces.

Ausgrid has installed confined space signage across its network. ASPs will see signage at the point of entry, including bespoke confined space webbing signage inside pit lids. The webbing detaches at two corners to allow safe entry. ASPs are required to ensure the webbing is reattached at all points prior to closing the lid.

At many sites, confined spaces have been identified by signage. However, ASPs should not solely rely on the presence of signage and therefore ASPs should conduct a site risk assessment to ascertain the presence of confined spaces and to treat them accordingly.

ASP companies and their workers are obligated to comply with the NSW Work Health and Safety Regulation 2017, AS2865 - Safe Working in a Confined Space and any other work health and safety laws at both state and federal levels when accessing Ausgrid's confined spaces.

Additionally, consistent with their primary function, Ausgrid's confined spaces typically contain electrical assets with inherent electrical safety and network reliability and security impacts that require consideration and appropriate controls, in addition to any confined space-specific risk assessment and controls.

In addition to the permanent signage, Ausgrid has a detailed confined space register available from Ausgrid's website:
https://www.ausgrid.com.au/-/media/Documents/ASP/CSpace/Confined-Space-Register.xlsx

Should ASPs require any additional information regarding Ausgrid's confined spaces, contact Ausgrid via email at confinedspaces@ausgrid.com.au.

Further information can be found on Ausgrid's website:
https://www.ausgrid.com.au/ASPs-and-Contractors/News-and-alerts/confined-space

6.15 Accessing Ausgrid Pits and/or Ducts

All Ausgrid's pits are classified as a confined space, therefore, all individuals entering an Ausgrid pit must hold the appropriate qualifications for working in confined spaces. All work carried out in confined spaces must be performed in accordance with section 6.14 above.

Pits can have a duct network associated with them where workers may be required to gain access. This not to be confused with conduits/conduit banks that are accessible via open trench excavations as these can also be referred to as ducts.

Where it is proposed to work within an Ausgrid pit/s and/or ducts within Ausgrid's network area, the Network Compliance Officer associated with the project must give prior written approval for each particular job before proceeding.

Individuals entering an Ausgrid pit/s and/or ducts within Ausgrid's network area must be currently ASP authorised and have also completed the following Ausgrid specific training[3]:

- SC1100A Safe work near underground assets
- TTDU 2170 Pit Entry

[3] Refer to section 6.7 for more information on Ausgrid Training

6.16 Installation of Temporary Covers on Overhead Mains and Services

Whilst carrying out contestable work, temporary line covers (pipes) and/or insulating mats (drapes) may be installed by appropriately authorised ASPs on overhead distribution mains or overhead services for their own live work controls, as required by their safe work procedures and Ausgrid's ESR. Temporary line covers (pipes) and/or insulating mats (drapes) installed by ASPs must be removed at the completion of the contestable works or at the end of the workday.

The installation of temporary line covers and/or insulating mats on overhead distribution mains or overhead services for any reason other than performing contestable works is not permitted.

ASPs are not permitted to perform works involving the covering of Ausgrid's overhead distribution mains or overhead services for the construction and maintenance of buildings, erection of signs or other structures, or any other reason other than performing contestable works within their level and class of Ausgrid ASP authorisation.

Works requiring temporary line covers and/or insulating mats other than for contestable works can only be performed by Ausgrid. Refer to SafeWork NSWs Code of Practice *Work Near Overhead Power Lines*.

A quote covering the associated recoverable costs of the installation of temporary line covers and/or insulating mats in these situations, can be obtained from Ausgrid by completing Ausgrid's Safety Advice Request Form and contacting Ausgrid's Operational Support team at construction.works@ausgrid.com.au.

Further information and the Safety Advice Request Form can be found on Ausgrid's website:
https://www.ausgrid.com.au/Your-safety/Working-Safe/Working-near-powerlines

Ausgrid publication updates

The ASP is responsible for keeping up to date with information on safety hazards, changes to relevant policies and the requirements of accreditation and ASP authorisation.

Ausgrid also notifies ASPs of recent incidents, accidents or general updates that may be relevant to ASPs through ASP Safety Alerts and General Information Notices (GI). The latest safety alerts, GIs, CIAs and NSAs can be downloaded from the Ausgrid website.

Further information can be found on Ausgrid's website:
https://www.ausgrid.com.au/ASPs-and-Contractors

6.17 ASP Authorisation Reciprocity

ASP Authorisation given by Ausgrid is not valid for work performed in any other electricity distributor's network area. An ASP with authorisation from another electricity distributor, must apply for ASP authorisation with Ausgrid before carrying out contestable work in Ausgrid's network area. Ausgrid may impose conditions or restrictions that differ from other electricity distributors; however, consideration will be given to reciprocal arrangements where appropriate.

6.18 ASP Advertising

ASPs with Ausgrid authorisation, that advertise to work in Ausgrid's network area, must accurately state their accreditation and ASP authorisation status and the work or limitation of work they are authorised to perform.

False or misleading advertising may lead to suspension or cancellation of ASP authorisation. The matter may also be referred to NSW Office of Energy and Climate Change recommending suspension or cancellation of accreditation.

In addition, ASPs must not use Ausgrid's trademark (Logo) or designs for the purpose of promoting their business. The name Ausgrid and its various forms of signage are registered trademarks and designs.

Ausgrid will take action to protect its trademarks and designs from unauthorised use.

6.19 Bankruptcy Act

In accordance with the Bankruptcy Act, Section 86 – Mutual credit and set-off, Ausgrid may debit monies held by Ausgrid as security deposits if an ASP is declared bankrupt or ceases trading. This action will be taken to recover Ausgrid's costs associated with unpaid ancillary network service fees, lost or missing metering equipment, rectification of outstanding defective work still under warranty and for other costs attributable to the ASP's contestable work.

6.20 Ausgrid's Code of Conduct

Ausgrid's Code of Conduct is part of our commitment to foster a workplace culture that delivers the highest standards of safety, respect, performance and integrity for our employees and the customers, contractors, service providers and communities we serve.

The Code of Conduct is based around Ausgrid's values of: Safety excellence; Respect for people; Customer and community focus; Continuous improvement; and Act with integrity.

Ausgrid's Code of Conduct applies to all Ausgrid employees (and any other individual undertaking work for Ausgrid including contractors, their agents, and their employees).

Ausgrid expects ASPs to be familiar with Ausgrid's Code of Conduct and act in a manner consistent with Ausgrid's Code of Conduct when dealing with Ausgrid Officers. Behaviour that is not consistent with Ausgrid's Code of Conduct may be considered a breach of ASP authorisation and lead to disciplinary action.

The Code of Conduct is available on Ausgrid's website:
https://www.ausgrid.com.au/-/media/Documents/Corporate-Reports/Ausgrid_Code_of_Conduct

If an ASP become aware of any breaches of our Code by Ausgrid employees, this information should be reported by calling the Corruption Hotline on (02) 9283 4244, calling the Disclosure Officer on (02) 9269 2930 an email may be sent to reportcorruption@ausgrid.com.au.

6.21 Apprentice Requirements

As noted in the *Scheme Rules*, apprentices and trainees may work under the direct and constant supervision of an appropriately authorised person for training purposes. All apprentices required to conduct contestable work in Ausgrid's network area must be accredited with the NSW Office of Energy and Climate Change as either Class 1X or Class 2X prior to applying for ASP authorisation.

The following Ausgrid requirements must be adhered to at all times whilst apprentices are conducting contestable works in Ausgrid's network area.

- Apprentices must be under direct supervision at all times by an appropriately qualified authorised person for the task being carried out[4].
- Where possible, the apprentices must have successfully completed the appropriate national unit of competency for the task being carried out, e.g. polymeric cable jointing, paper lead cable jointing, or overhead mains installation.
- Supervision must be provided by an authorised person with the appropriate class of ASP authorisation for the work being conducted; and
- Apprentices may work under Access Permit conditions provided the above conditions are maintained but cannot be the Access Permit Recipient.

The training requirements for ASP Apprentice authorisation can be found Ausgrid's ASP Authorisations Training Matrix[5].

[4] For overhead work, this would only be possible working from an elevated work platform or adjacent pole platform. Apprentices cannot work off a single person pole platform unless they are closely supervised i.e. from an EWP or another adjacent pole platform

[5] Refer to section 6.6 for more information on Ausgrid's ASP Authorisations Training Matrix.

6.21.1 Live Low Voltage Work by Apprentices

The requirements for apprentices to conduct live Low Voltage work are detailed in Ausgrid's Electrical Safety Rules.

6.22 Payment of Fees

ASP Authorisation fees will be invoiced by Ausgrid to ASP companies / ASP (as application).

Failure to pay Ancillary Network Service fees by the due date may lead to the suspension, cancellation, or refusal of ASP authorisation(s).

7.0 ASP INSPECTIONS AND INCIDENT INVESTIGATIONS

7.1 Inspection

Inspection of contestable work is carried out on an audit basis. The frequency of inspections will be determined on the basis of the history of the ASP's work performance and their grade of accreditation.

The grading of ASPs is determined by NSW Office of Energy and Climate Change as part of the accreditation process based on the ASP company's management system and the performance of their contestable work.

The inspection of contestable work performed by ASPs is deemed to be an Ancillary Network Service, Ausgrid will recover the costs associated with inspections as per the AER approved quoted ancillary network service fees.

- Level 1 ASP work that is found not to comply must be rectified within the specified time as indicated on the non-conformance notice. All major defects must be rectified by the ASP and before the work is connected to the existing network and subsequently energised.
- Level 2 ASP work that is found not to comply with the relevant standards during an audit inspection must be rectified within 21 days unless otherwise stated on the defect notice sheet.
- Level 3 ASP work that is found not to comply with the relevant standards during the certification process will follow the Contestable Connections design certification and rechecking framework as specified in the Contract for Design Related Services.

Note: Additional inspection fees will be charged for the reinspection and additional access permit fees were required to rectify work that was previously found non-compliant.

7.2 Inspection Fees and Site Establishment Fee

Inspection fees for Level 1 contestable work, for most projects, will be estimated prior to the work commencing however, additional fees may be incurred as the work progresses.

The inspection fee for Level 2 contestable work is payable at the time of lodging the Notification of Service Work (NOSW) forms for completed work.

An additional ancillary network service fee called a "Site Establishment Fee" may also be applied. This fee applies when a new National Metering Identifier (NMI) is created for the National Electricity Market. Where applicable, this fee will be levied against the customer's retailer and will be applied at the time the NMI is allocated. In some cases where a NOSW is not required but work by an electrical contractor initiates the creation of a new NMI, the Site Establishment Fee will be charged to the installing electrical contractor.

7.3 Rectification of Defects after Electrification

Ausgrid may direct the customer to arrange and fund the prompt rectification of any defective or unfinished works identified by Ausgrid during the warranty period (particularly any defects discovered at or shortly after final testing/commissioning), which are attributable to or caused by the ASPs work.

Ausgrid may need to carry out rectification of any defects discovered subsequently due to the network constraints and will invoice the rectification costs to the ASP. This will apply when the electricity supply to other customers or the safety of the public may be compromised or where the ASP does not carry out the repairs within the specified time limit, as directed by Ausgrid.

For Level 1 ASP/1s, if payment for the repair works carried out by Ausgrid is not received in the required time, Ausgrid may pursue recovery of the balance from the Bank Guarantee in accordance with the ASP/1 Authorisation Agreement.

Where doubt exists as to the exact cause of the defective or damaged assets, Ausgrid will carry out the repairs. Where it is subsequently determined that the defects were attributable to or caused by the ASP's work, then the cost of those repairs will be invoiced to the ASP.

All of Ausgrid's repair costs (outlined above), including any associated fault location testing and investigation, must be charged in accordance with Ausgrid's Connection Policy and Alternative Control Services Fee Schedule publications.

These costs must include ancillary network service work such as fault location detection and circuit breaker fault overhauls. Cost recovery will only be charged where Ausgrid carries out the work.

After electrification, Ausgrid will carry out repairs to damaged assets caused by third parties. Ausgrid will seek to recover the cost of these repairs from the responsible third party.

7.4 ASP Performance

The performance of ASPs is monitored by Ausgrid to ensure and quality of works and compliance with network requirements are met.

This includes but is not limited to:

- Safety breaches
- Non-conformances/ defects
- NOSW submissions
- Customer feedback and complaints

Where it is identified that an ASPs performance is unsatisfactory, corrective, or disciplinary action may be taken against the ASP company, any of the employees or individual subcontractors of an ASP.

7.4.1 Suspension, Cancellation, or Refusal of Authorisation

Ausgrid may suspend or cancel the ASP authorisation of any of the employees or individual subcontractors of an ASP on the grounds of safety or non-compliance with the conditions of ASP authorisation. This may also include referral to NSW Office of Energy and Climate Change for action under the conditions for accreditation.

Suspension, cancellation, or refusal of ASP authorisation may also occur for any of the following and may take immediate effect:

- Failure of the individual or individuals to comply with Ausgrid Electrical Safety Rules (*ESRs)*;
- Failure of the individual or individuals to comply with the conditions as set out:
  - In this standard; or
  - In the individual's agreement for ASP authorisation.
- Failure of the ASP company (employer) to comply with the conditions set out:
  - In this standard; or
  - In the ASP/1 Authorisation Agreement for Level 1 ASPs; or
  - In the ASP/2 Company Authorisation Agreement for Level 2 ASPs.
- Failure to maintain ASP authorisation in the *System* (this occurs automatically).

- Carrying out contestable work without current ASP accreditation or ASP authorisation or during suspension of accreditation or authorisation.
- Carrying out contestable work without the appropriate class of ASP accreditation or ASP authorisation.
- Carrying out authorised work whilst not current with mandatory safety training or annual safety refresher training.
- The authorised person is no longer competent as shown by audit inspection, performance review or other identified reasons.
- Not submitting notification forms after completing authorised work within the required time frame or repeatedly failing to submit notification forms with the required information.
- Not rectifying defects in authorised work revealed by inspection or fault within the required time frame.
- Prosecution for an offence under the Electricity Supply Act, other relevant Act or any regulation under those Acts (e.g. unauthorised connections or disconnection of supply, unauthorised interference with metering and service equipment seals etc).
- Giving false or misleading information to obtain ASP authorisation.
- On safety grounds, including risks to public safety.
- Failure to pay Ancillary Network Service fees by the due date.
- Failure to provide access to ASP company staff for interviewing in relation to an incident investigation.
- Failure to provide access to ASP company documentation and procedures in relation to an incident investigation.
- Failure to complete an action or follow direction that has been requested in an incident letter or email issued by an Ausgrid Network Compliance Officer, Service & Installation Compliance Officer or Authorisations Officer.
- Failure to comply with Ausgrid's Cyber Security and Network Information Security conditions; or
- False or misleading advertising.

If an ASP is in breach of any of the conditions or rules of their ASP authorisation, corrective action will be taken. This may be in the form of:

- Recommended additional re-training; or
- Suspension or cancellation of ASP authorisation.

Under certain circumstances the ASP authorisation of all, or any number of the employees and subcontractors may be suspended for breaches of the ASP authorisation conditions.

The offending ASP will be given notice in writing of the suspension, cancellation or refusal of ASP authorisation outlining Ausgrid's reasons and the date that it takes effect.

Any suspension may be for a period of up to 12 months and cancellation will apply for periods over 12 months.

Reinstatement of ASP authorisation after suspension or cancellation will be arranged by the suspended ASP through the relevant Authorisations Officer as nominated in the suspension notification.

Where an ASP or any other individual carries out work requiring authorisation without first obtaining that authorisation or whilst authorisation has been suspended or cancelled, Ausgrid may prosecute under the provisions of the Electricity Supply Act.

7.5 Reporting of Incidents

Ausgrid requires that any incident or accident, occurring when carrying out contestable work, is reported to the local Network Compliance Officer or Service & Installation Compliance Officer as soon as practicable.

A written report is required to be provided following any verbal notification. ASPs are also responsible for complying with any incident notification requirements to government authorities (i.e. SafeWork NSW, NSW Office of Energy and Climate Change, NSW Fair Trading, etc) in accordance with the authority's requirements.

When an incident involving a major safety breach (see Annexure B) occurs, Ausgrid may suspend all contestable work at the site until an initial report has been provided to the satisfaction of Ausgrid. Authorised ASP employees or individual subcontractors may also be suspended pending the outcome of coordinated investigations by the ASP and Ausgrid. Further corrective or disciplinary action may result following the investigation.

Notification of major safety breaches and other continued non-conformances may be reported to NSW Office of Energy and Climate Change, which will include any disciplinary and corrective action relating to ASP authorisation.

7.6 ASP Incident Investigations

Where there is a major safety breach (see Annexure B), incident or accident related to ASPs carrying out contestable work on Ausgrid's network, the ASP company will provide an initial incident report within 24-48hrs. Ausgrid may also conduct an investigation and the ASP is required to cooperate with any such investigation, including to facilitate witness interviews of ASP workers.

Following an incident, Ausgrid may also require the ASP take steps to enable reinstatement of ASP authorisation, such as:

- An interview with an Ausgrid Officer.
- Review and updating of ASP company safety systems.
- Training or re-training.
- Reauthorisation interviews; and
- Field safety audits.

7.6.1 Cable Joint Failure

Where there is a joint failure on Ausgrid's network and the jointing work was performed by an ASP, Ausgrid may request the ASP jointer to be present when Ausgrid conducts an autopsy of the joint. If evidence is found that the joint failed due to poor workmanship or incorrect equipment, disciplinary action may be taken against the ASP.

ASP incident investigation and rectification works charges may be applicable to cable joint failures.

7.6.2 ASP Incident Investigation Charges

Where an ASP incident requires an investigation or implementation of disciplinary or corrective action, Ausgrid may recover the costs associated with these works as per the AER approved quoted ancillary network service charges.

Ausgrid will notify the ASP prior to incurring charges for any investigation.

7.7 ASP Incident Sharing

In the event that Ausgrid takes action to suspend or cancel an ASP company or individual(s) ASP authorisation, Ausgrid will share the facts of the incident and information regarding the suspension with the other NSW electricity distributors and NSW Office of Energy and Climate Change. This information will only contain the verified facts that supported Ausgrid's decision to suspend the ASP authorisation, and the ASP authorisation re-instatement criteria if known.

On receiving this information, each NSW electricity distributor will also suspend the ASP company or individual(s) authorisation until advice has been provided that the individual(s) authorisation has been re-instated by the distributor where the incident occurred.

The above process also applies where Ausgrid is the recipient of information from any other NSW electricity distributor. Ausgrid will suspend the ASP company or individual(s) authorisation until advice has been provided that the ASP authorisation has been re-instated by that distributor.

7.8 Authorisation Dispute Resolution Mechanism

Ausgrid reserves the right to suspend cancel or refuse ASP authorisation as part of the agreements for authorisation.

Ausgrid encourages ASPs to instigate their own investigation, corrective or disciplinary actions and communicate these with Ausgrid to enable fair and reasonable actions to be determined.

The mechanism for resolving disputes involving accreditation are detailed in the regulation and the Scheme Rules.

The ASP/1 Authorisation Agreement details dispute resolution procedures for ASP/1s.

ASP/2s and ASP/3s should follow the procedure in clause 7.8.1 & 7.8.2 below.

7.8.1 Internal Review

If the ASP wishes to dispute a decision or action imposed by Ausgrid, the ASP may request in writing for a review of the decision outlining their reasons for seeking a review in writing within five (5) business days (or via agreement) of receiving the initial notification to the Authorisations Officer.

The Authorisations Officer will consider the review application and forward to the Head of the relevant Business Unit who will then conduct an internal review of the matter. The Head of will notify the applicant of his or her decision in writing within ten (10) business days or as agreed with the applicant.

The Head of will also decide whether the original action taken by Ausgrid continues to apply during the internal review process.

7.8.2 Alternative Dispute Resolution – Mediation and/or Arbitration

If all reasonable steps have been exhausted to resolve the dispute, then the dispute or difference arising out of or in connection with the decision will be submitted to mediation and/or arbitration in accordance with, and subject to, The Institute of Arbitrators and Mediators Australia (IAMA) Arbitration Rules.

Please visit https://www.resolution.institute/ for further information.

8.0 LEVEL 1 CONTESTABLE WORK

8.1 General

Level 1 contestable work includes the construction of sub-transmission and distribution assets forming part of the network such as the installation of high voltage and low voltage cables, conduits, pillars, poles, and substations. Level 1 contestable work is generally referred to as distribution work.

8.2 Work Permitted under each Authorisation Class

8.2.1 Class 1A - Line Worker

Carry out work on the sub-transmission or distribution overhead network, this includes:

- Overhead Line Work related to the construction of new mains and associated hardware.
- Terminate and or Connect UGOHs to OH mains.

8.2.2 Class 1B - Cable Jointer (paper lead and polymeric cables)

Carry out work on the sub-transmission or distribution underground network, this includes:

- Jointing of polymeric and paper lead cables in cable pits and LV pillars.
- Termination of LV and HV polymeric and paper lead cables in substations.
- Preparation of polymeric and paper lead cables for UGOH terminations.

8.2.3 Class 1C - Cable Jointer (polymeric cables only)

Carry out work on the sub-transmission or distribution underground network, this includes:

- Jointing of polymeric cables in cable pits and LV pillars.
- Termination of LV and HV polymeric cables in substations.
- Preparation of polymeric cables for UGOH terminations.

Note: Class 1C excludes work on paper lead or CONSAC cables.

8.2.4 Class 1Xd - Electrician

Carry out substation work at sub-transmission or distribution substations, this includes:

- Construct and test kiosk type substations. This does not include the termination of underground HV and LV cables.
- Construct and test chamber type substation. This does not include the termination of underground HV and LV cables. Note, proof of previous experience is required for works in Chamber type substations.

8.2.5 Class 1Xe - Contestable Works Assistant

Carry out general works, this includes:

- Cable, conduit, earth rod or pole installation.
- Truck driver, machine or plant operator.
- Trades assistant.

8.2.6 Class 1Xf - Telecommunications Worker

Carry out telecommunications work on Ausgrid's poles or overhead infrastructure, this includes:

- Installation and maintenance of telecommunications cabling, equipment and hardware.
- Installation and maintenance of telecommunications services to residential commercial or industrial premises.

Note: Telecommunications workers are not required to complete *SC1100 Safe work near underground assets,* however, telecommunications workers who are undertaking excavation works in proximity to underground electrical assets should be aware of the requirements of the Ausgrid publication NS156 'Working near of around underground cables', and if required, via a risk assessment or similar, consider completing Ausgrid's *SC1100A Working near or around underground cables* training to provide their workers with additional information on safely working near or around underground cables.

8.2.7 Class 1Xg - ESI Apprentice

Carry out general works, this includes:

- Limited works related to the class of authorisation that the individual is being trained in.
- Cable, conduit, earth rod or pole installation.
- Truck driver, machine, or plant operator.
- Trades assistant.

8.2.8 Class 1Xh – Vegetation Management Worker

Carry out contestable vegetation management work near Ausgrid's overhead low voltage infrastructure, this includes:

- The trimming of vegetation near live low voltage overhead distribution mains including bare mains, LV ABC, and service mains, in accordance with the requirements of Standard Vegetation Control as defined in Ausgrid's ESR.

8.3 Live Low Voltage Work Performed by ASP/1

8.3.1 Live Low Voltage Planning Assessment

Prior to carrying out live work on or near exposed low voltage (LV) mains and apparatus, an assessment must be carried out regarding whether the work can or should be performed de-energised or live. This assessment is set out in section 9.5.1 of Ausgrid's ESR. This includes a consideration of whether the relevant controls can be put in place to perform the work safely.

Where a Level 1 project requires live LV work, an '*ASP/1 Live LV Work Planning Assessment form*' must be completed prior to the works commencing. The ASP/1 must notify the Ausgrid Planning Officer / Compliance Officer assigned to the Level 1 project, who will prepare the *'ASP/1 Live LV Work Planning Assessment form'*.

The '*ASP/1 Live LV Work Planning Assessment form*' has two parts:

- Part A: This part is to be completed by Ausgrid's Planning Officer / Compliance Officer and must be reviewed by the ASP/1 prior to commencing the work.
  - This part addresses questions 1 to 3 of the assessment process set out in section 9.5.1 of the ESR.
- Part B: This part is to be completed by ASP/1.
  - This part addresses question 4 of the assessment process set out in section 9.5.1 of the ESR.

Once the ASP/1 has reviewed Part A of the '*ASP/1 Live LV Work Planning Assessment form*' and completed Part B (i.e. confirmed whether the live work controls can be achieved for the specific task and site), the form needs to be signed and returned to Ausgrid's Planning Officer / Compliance Officer a minimum of 10 days prior to the outage date.

Question 5 of the assessment in section 9.5.1 of the ESR is not addressed in the '*ASP/1 Live LV Work Planning Assessment form*'. ASP/1s must ensure that question 5 of the assessment process is completed by the authorised live LV workers prior to undertaking the work.

Any comments regarding the planning of the outage are to be directed to Ausgrid's Planning Officer / Compliance Officer.

8.3.2 Live Low Voltage Work Completed by ASP/1 Not Associated with a Permit

Where it has been assessed that an ASP/1 may complete live LV work as part of a contestable project, the ASP/1 may only perform live work once they have been issued a "Notification of Work to Proceed" form by a Network Compliance and Authorisations Officer on site prior to the commencement of work on the day the live work is to be completed.

Note: Similar clearance was previously provided via a "Clearance to Work" in accordance with the ESR, however, the use of this form for these works was removed from its scope in the 2020 version of the ESR.

A Notification of Work to Proceed form is not required where live work is completed as part of disconnection or connection of mains associated with a permit.

A Notification of Work to Proceed form must be issued to a person within the workgroup who is trained and authorised to be an access permit recipient on Ausgrid's network.

8.3.3 Live Underground Cable Jointing

No live underground cable jointing is permitted on the Ausgrid network. For further information, please contact Ausgrid's Network Compliance function.

Note: The termination of cables into live pillars does not require additional qualifications. This work must be conducted by Class 1B or Class 1C authorised person in accordance with Ausgrid's ESRs (including ESR Appendix A), SafeWork NSW requirements and Ausgrid Network Standards. More information on specific Ausgrid assets can be found in NS199 Safe Electrical Work on Low Voltage Underground Assets.

8.4 Sub-Transmission

Ausgrid considers "mains" and apparatus up to and including 22kV to be the distribution network while mains and apparatus that include 33kV, 66kV and 132kV are considered the Sub-transmission network.

The design and construction requirements associated with the sub-transmission network can vary significantly with that of Ausgrid's Distribution Network and there may be additional requirements or qualifications required for ASPs to design or work on Ausgrid's sub-transmission network.

8.4.1 Cable Accessories (joints and terminations)

Cable Accessories in NS168 are defined as any cable joint or termination on a sub-transmission cable. NS168 provides details on the requirements for cable accessories that are to be used on sub-transmission cables in Ausgrid's network area.

Cable Accessories must:

- be compatible with the cables being used (note that the specific cable details must be checked by the accessory supplier to ensure all dimensions are suitable).
- meet the requirements of Ausgrid's specifications, and.
- be approved via the process defined in NS181.

8.4.2 Cable Accessory Training Requirements

Cable accessories must be installed by competent personnel who are trained, assessed, and deemed competent in the installation of each product family being installed.

The training must be product specific, conducted by a training provider who has been approved by the accessory manufacturer, and evidenced by a valid training certificate.

Evidence of the completion of this training must be supplied to Ausgrid via ASPAuthorisations@ausgrid.com.au prior to commencement of any contestable sub-transmission project.

8.5 Ausgrid Construction Keys

Ausgrid construction keys for construction locks on substations may be issued to approved ASP/1 authorised persons. Construction keys are issued to an ASP authorised person and are only permitted for use while they are authorised with the ASP company requesting the key.

Should the authorised persons employment situation change, the key must be returned to the ASP company who will notify Ausgrid and either return the key or arrange to have it reissued to a suitably authorised person.

Individuals requiring an Ausgrid substation construction key must:

- be authorised as either a Class 1B, 1C or 1Xd; and
- have completed substation entry (SC1000A) training with Ausgrid.

If an authorised ASP employee requires a construction key, then their Manager or Supervisor will submit a completed copy of Annexure A – Substation Construction Key Request Form, to ASPAuthorisations@ausgrid.com.au with all the additional evidence as listed on the form attached with the submission.

If the key is lost or stolen, then the ASP must report the incident to the NSW Police (on 131 444) and then provide details of what occurred along with the NSW police reference number to Ausgrid. Ausgrid may invoice the ASP for the lost or stolen key.

If the ASP is found to have unlawfully used their key, then their authorisation will immediately be cancelled, and the key reclaimed by Ausgrid.

8.6 Requirements for Site Supervision

All Level 1 ASPs must provide adequate supervision for their employees on site in accordance with the requirements of their ASP/1 Authorisation Agreement. The individual deemed the supervisor must ensure that work is performed in a safe and timely manner.

The supervisor will be responsible for:

- ensuring the correct documentation and equipment is on site.
- interface between Ausgrid's Network Compliance Officer associated with the project; and
- they must be present during kiosk substation landings and commissioning.

A nominated supervisor with the designated authority to resolve issues must be on site for all Access Permit and/or commissioning days associated with Level 1 projects.

8.7 Sub-contracting of Level 1 Contestable Work

It is permissible for an ASP to sub-contract Level 1 contestable works to another ASP. In this situation, the principal ASP will sub-contract out a portion of the contestable works to another ASP. However, the principal ASP company is responsible for ensuring the sub-contracted ASP holds the appropriate authorisation for the contestable work it is proposing to undertake and is responsible for all works associated with the project, including the investigation into any safety breaches or non-conformances.

Prior to Ausgrid allowing this to occur the following is required:

- The sub-contracted ASP must:
  - Be an ASP authorised with Ausgrid in its own right to conduct Level 1 contestable works as detailed in this document: or

- be an ASP authorised directly with the principal ASP company.

- All individual employees or subcontractors of the sub-contracted ASP must also be authorised with Ausgrid as detailed in this document; and
- A completed "Use of Sub-Contractors Information Form" (PF03) must be forwarded to the Ausgrid Network Compliance Officer associated with the project. This form is part of the suite of "Level 1 Project Forms" that can be accessed from the Ausgrid website at www.ausgrid.com.au.

Note: If the sub-contractor is not an ASP, then employees of the sub-contractor required to conduct contestable work in Ausgrid's network area must be authorised under the principal ASP.

8.8 Use of Equipping Permits

Level 1 ASP projects generally need to be covered by an Equipping Permit (EP). An EP is issued by the person co-ordinating the works to allow work on mains and apparatus intended to be connected to the network.

Ausgrid's ESRs state that "an equipping permit may only be prepared by an appropriately authorised person". Ausgrid does allow and requires the ASP to draft the EP, however, it must be issued by an individual who holds the appropriate System Alteration Order (SAO) authorisation. For Level 1 contestable projects, this individual will generally be the Ausgrid Network Compliance Officer associated with the project.

Refer to Ausgrid's ESR section 5.8 for the requirements for use of EPs.

Only Ausgrid's standard EP form (A.342) can be used; customised forms are not permitted. EP books are available online through Winc. To order an EP book, ASPs will be required to log into the Ausgrid ASP account as detailed below. This account allows purchase by credit card only, for other payment options ASP's will need to contact Winc directly to create their own account with access to these items. The EP books can be found via item code A342.

Login details:

Visit: http://www.winc.com.au/	Winc Customer Service Team Contact Details
Username: **ausgrid_asp**	Phone: 132 644
Password: **123456**	Email: CustomerService@winc.com.au

For questions or issues with ordering EP books, please contact the Winc Customer Service Team.

8.9 Cable Identification

On all sites that are covered by an EP, the ASP must fix a warning tag to the end of all cables installed by the ASP that are in the vicinity of other new[6] or existing cables, which may or may not be energised.

This precaution must be taken to prevent inadvertent connection and energisation of the project. This also applies to underground to overhead connections where the installed cable is attached to a pole ready for termination.

The tag must have, but not be limited to the following information:

- ASP/1 company name.
- contact name and phone number; and
- location of the Equipping Permit.

The warning tag must be permanently attached to the cable end in an approved manner, eg laminated, glued and fixed with nylon ties.

[6] i.e. Other ASP project or Ausgrid capital works

All cable ends which are not intended to be worked on immediately must be electrically shorted and sealed as per Ausgrid's Network Standard 130 Specification for Laying of Underground cables up to and including 11kV.

8.10 Field Recording of Network Assets (FRNA)

The ASP/1 is responsible for the field recording of network assets for contestable projects and any associated Ausgrid funded work.

All individuals who are required to perform the field recording of network assets must be authorised in accordance with the requirements set out below and in Annexure E – Field Recording of Network Assets Authorisation Application Form. Prior to being authorised to perform the field recording of network assets, individuals will be required to provide evidence of their competency and to submit field recordings in accordance with Network Standard 100 "Field Recording of Network Assets".

Individuals wishing to be authorised to conduct the field recording of network assets are not required to be authorised as an ASP/1. They are also not authorised to work on or near the network; if they are required to access the network to undertake field recording of network assets, the individual must either:

- be separately authorised as an ASP/1; or
- be under the direct supervision of an authorised ASP/1 in accordance with the ASP/1 Authorisation Agreement, and work within the limits of the individual's ASP/1s authority.

8.10.1 How to Apply for Authorisation

To be assessed as eligible to field record network assets, applicants shall submit Annexure E – Field Recording of Network Assets Authorisation Application Form, to gis@ausgrid.com.au with all the additional evidence as listed on the form attached with the submission.

In parallel applicants can arrange the Field Recording of Network Assets training (AMGS0001). See 8.10.3 for further information regarding this training course.

Upon satisfactory completion of this training, Ausgrid will:

- Issue the applicant an email confirming acceptance.
- Issue the applicant a Field Recording of Network Assets Authorisation card in the mail; and
- Add the applicant's company details to the list of Authorised Field Recorders available on the Ausgrid website. If a person does not wish to have their company's details published on the website, please indicate when completing Annexure E – Field Recording of Network Assets Authorisation Application Form.

Field Recording of Network Assets authorisation is valid for 12 months.

8.10.2 Pre-requisite Training and/or Qualifications

To be eligible to apply for the FRNA authorisation, the individual must have the following pre-requisites:

- hold either a:
  - Diploma (or higher qualification) in Electrical Engineering.
  - Diploma (or higher qualification) in Civil Engineering.
  - Diploma (or higher qualification) in Geographic Information Systems (GIS).
  - Diploma (or equivalent qualification) in Mapping.
  - Diploma (or equivalent qualification) in Drafting.
  - Diploma (or higher qualification) in Surveying; or
  - a letter from their employer confirming the individual's employment and detailing any experience the applicant has in field recording of assets.
- hold a SafeWork NSW General Construction Induction card – "White Card"; and
- be current in the mandatory safety training outlined in Annexure E – Field Recording of Network Assets Authorisation Application Form.

8.10.3 Specific Training for Authorisation

In addition to the pre-requisite training and/or qualifications listed in Annexure E – Field Recording of Network Assets Authorisation Application Form, an applicant must also provide evidence of the successful completion of the following Ausgrid delivered[7] training course:

- Field Recording of Network Assets (AMGS0001).

Ex-Ausgrid employees who have completed the previous Ausgrid Field Recording of Network Assets training (BET00199) after 2014 will have that training recognised and meet the requirements of this clause.

8.10.4 Professional Indemnity Insurance Requirements

All ASP/1 companies that are required to conduct the field recording of network assets and must hold Professional Indemnity Insurance (PII) covering this activity.

This may be satisfied by either holding a policy in the name of the ASP/1 company, or by being listed as an interested party on the policy for all of the Authorised Field Recorder whose services they will be using.

A certificate of currency of the PII must state the following:

- name of insured.
- name of insurer.
- policy number.
- limit of liability (minimum $2 million); and
- period of insurance.

8.10.5 Annual Re-authorisation

To maintain authorisation, an authorised individual must:

- maintain their mandatory safety training[7] as outlined in Annexure E - Required Initial and Refresher Mandatory Safety Training.
- submit the Form (Network) – Field Recording of Network Assets Authorisation (Annexure E) with evidence of currency of the mandatory safety training to Ausgrid at ElectricalAuthorisations@ausgrid.com.au;
- Have submitted a minimum of:
  - five (5) compliant field book pages (refer NW000-T0005 NEG-NPR05 Field Recording Guide) across a rolling 12-month period; and
  - have no more than two (2) Not-Accepted - Certification of As-builts (COA) issued (The not accepted COA will be issued when there are four or more critical errors identified in the field books associated to the COA.

An Ausgrid Officer will contact the authorised individual at the time of re-authorisation once the above criteria have been assessed.

Where the authorised individual has not submitted the required number of satisfactory field recordings, then the individual will be required to successfully complete re-training in Field Recording of Network Assets in accordance with clause 8.10.3 to maintain their authorisation. Consideration will be given if the person has not been authorised for an entire 12-month period.

Note: If an Authorised Field Recorder fails to complete a satisfactory audit, they may have their authorisation to field record network assets suspended or cancelled.

[7] Refer to section 6.7 for more information on Ausgrid Training

8.10.6 Desktop Auditing of Submitted Field Recordings Procedure

Desktop audits of an Authorised Field Recorder's work will be conducted by Ausgrid's Source Data Coordinators following the submission of all completed field recordings to verify compliance with Quality Level B or higher as defined in Network Standard NS100 - Field Recording of Network Assets.

Following an unsuccessful desktop audit, the Source Data Coordinator will notify the Network Compliance Officer associated with the project, who will issue the ASP/1 Company with a Non-Conformance for the incorrect field recording of network assets.

8.10.7 In-field Auditing of Asset Recording Procedure

In addition to the desktop audits as defined in Clause 8.10.6, in-field audits will be conducted by or under the supervision of a Data Input Liaison Officer. An in-field audit will consist of an on-site review of all collected data to assess the data gathering process and to verify quality in accordance with Quality Level B or higher (as defined in accordance with S0044 NS100 Field Recording of Network Assets).

Once authorised, individuals will require one (1) satisfactory in-field audit with a Source Data Coordinator every 12 months to maintain their authorisation.

Following an unsuccessful in-field audit, the Source Data Coordinator must:

- make arrangements with the authorised individual for a follow up in-field audit; and
- notify the Network Compliance Officer associated with the project, who will issue the ASP/1 Company with a Non-Conformance for the incorrect field recording of network assets.

Note: If an authorisation is suspended or cancelled at any time, then any re-authorisation requested at a later stage is to be regarded as an initial request and the auditing must recommence in accordance with section 8.10.1 above.

8.10.8 Commissioning Validation of ASP/1 Projects

At the electrification of a Level 1 project, the Ausgrid Field Recording Officer will record the commissioning joints and perform a field inspection to validate the submitted as-built against visible constructed assets on-site.

The ASP must submit a certified Certification of As-built - Final form to the Network Compliance Officer associated with the project during the Pre-Electrification inspection to confirm the date of this recording.

In the event the Field Recording Officer determines or suspects the ASP/1 submitted field recordings do not accurately represent the assets as constructed, the discrepancy will be referred to a Source Data Coordinator for verification. Depending on the outcome of the verification, corrective action may be initiated. This may include, but is not limited to, the authorised person re-submitting corrected field recordings and the re-auditing of the assets by Data Maintenance employees (which could involve the assets being re-exposed by the ASP/1 for validation by Data Maintenance employees).

8.11 Planned Interruptions for Level 1 Projects

As part of Level 1 projects, ASP/1s are responsible for proactive engagement, negotiation and notification of all parties affected by planned interruptions, and for ensuring customer impacts are minimised.

Where a planned interruption to a customer's power is required for a Level 1 project, a minimum of four (4) clear business days' notice is required, prior to the date of the planned interruption.

Customers can be notified of an interruption through an automatic mail out or by SMS. If all customers are notified by Ausgrid, a completed Planned Interruption Customer Notification Report (carding pack) shall be sent to the ASP/1 for their records of customers notified.

If impacted customers can't be notified through the automated system, a carding pack shall be provided to the ASP/1, who must complete the notification for the remaining customers.

For ASP/1s, a carding pack shall be sent for all planned outages:

- Each customer notified shall be indicated including the notification method
- The completed and signed carding pack must be returned to Ausgrid at least five (5) business days prior to the outage to prevent cancellation.
- The completed carding pack must include all relevant documents including a copy of letters provided or written evidence of consent.

Proposed outage timeframes must align with project specific environmental assessment (SER/REF) requirements, which may reference Ausgrid's Environmental Handbook or a Construction Environmental Management Plan (CEMP). Where complex coordination is required, Ausgrid require a full project implementation plan to be submitted prior to the commencement of construction.

8.12 Safety Breaches and Non-conformances for Level 1 ASP Work

Safety audits will be carried out on Level 1 ASP works as part of the progressive inspection process for each project. In addition, Ausgrid and the NSW Office of Energy and Climate Change may carry out unannounced safety audits of ASPs carrying out contestable work at any time.

Non-compliance with Ausgrid's ESRs, Network Standards or specifications and any relevant certified design plan or Environment Impact Assessment/Summary Environmental Report will be regarded as either a Safety Breach or a Non-Conformance and will then be further classified as being either major or minor.

In the event of Ausgrid becoming aware of the Safety Breach or Non-Conformance, it will issue a notice to the customer and/or to the ASP specifying the Safety Breach or Non-Conformance and what is required to rectify the situation.

The clauses and examples below are a guide only and do not contain an exhaustive list of all Safety Breaches and Non-Conformances.

8.12.1 Major Safety Breach

Major safety breaches are breaches which are immediately dangerous to life and/or property or potentially disruptive to the electricity network. Ausgrid may immediately disconnect supply to work containing major safety breaches or stop all further works until the breach has been rectified.

Typical major safety breaches applicable to Level 1 ASP work are listed below. This is a non-exhaustive list.

- Have the potential to be a threat to the safety of any person.
- Have the potential to damage any property or disrupt or have the potential to disrupt the network.
- Working outside an ASP's level of authorisation, including no current proof of required training.
- Failing to comply with the requirements of Ausgrid's ESR.
- Not using appropriate personal protective equipment (PPE) such as insulating gloves, protective clothing; and
- Not carrying out a site-specific written risk assessment.

8.12.2 Minor Safety Breach

Minor safety breaches are breaches that fall outside the definition of a major safety breach and are not considered to be immediately dangerous to life or property.

A typical minor safety breach applicable to Level 1 ASP work is items in the first aid kit not adequately stocked or out of date.

8.12.3 Major Non-conformance

A major non-conformance is a non-compliance with Ausgrid's Network Standards or specifications and any relevant certified design plan will be regarded as a major non-conformance.

Typical major non-conformances applicable to Level 1 ASP work are listed below. This is a non-exhaustive list.

- Substations: site encumbered by other services.
- Trenching: incorrect boundary and easement peg alignment.
- Failure to complete temporary reinstatement of footways and roadways as per network standards.
- Underground cables: incorrect bedding material or depth of cover, incorrect cable position or mains recording, insufficient depth.
- Jointing: incorrect die sizes for lugs and links, poor crimping of cable lugs, inappropriate use of jointing compounds and other materials, insufficient heat shrink tubing or other insulation material coverage, incorrect tension on bolted connections, incorrect phasing of connections, incorrect termination of neutral conductors.

- General: failure to implement or adhere to environmental precautions such as those documented in the project Environment Impact Assessment/Summary Environmental Report, failure to use warning signs where required; and
- Incorrect labelling of assets (e.g. Switch numbers and names).

8.12.4 Minor Non-conformance

Minor non-conformances are those not covered under the definition of major non-conformances. Minor non-conformances generally are those circumstances that are considered not serious enough to prevent the electrification of the reticulation work.

Some examples of minor non-conformances applicable to Level 1 ASP work are listed below:

- Failure to notify Ausgrid of milestones.

8.13 Sealing of Cables

The triple end sealing of polymeric multi core and single core cables as defined in Cause 15.4 of Ausgrid's Network Standard S0088 NS130 Specification for laying underground cables up to and including 11kV, is only permitted by the following individuals:

- Class 1B and 1C Cable Jointers; or
- Other individuals who have completed the following Ausgrid triple end cable sealing course: M2325B: Triple End Cable Sealing.

Information on how to book the required training can be found Section 6.7.

8.14 Erecting and Removing Access Permit Earths

Class 1A Line workers can install and remove overhead Access Permit Earths for contestable work outages under the supervision of an Ausgrid Class 1 Operator.

8.14.1 Erecting and Removing Access Permit Earth training

To be able to install and remove overhead Access Permit Earths for contestable work a Class 1A Line workers must be appropriately trained in the following:

- Application of Overhead Access Permit and Working Earths – Combined - TTDO1804C
  - A person with this training is able to apply and/or remove overhead access permit and/or working earths, whilst working from a ladder. Note this category also includes conducting the task whilst working from a pole platform; and
  - A person with this training is able to apply and/or remove overhead access permit and/or working earths, whilst working from an EWP

This course includes, but is not limited to, equipment inspection, maintenance programs and document processes for the installation and removal of Access Permit and Working Earths.

8.14.2 ASP/1 Installation and Removal of Access Permit Earths

Refer to Ausgrid's ESR section 9.8.3 for information and requirements for installing access permit earths on overhead lines and apparatus.

ASPs who wish to arrange their authorised employees to install and remove the Access Permit Earths as part of their contestable project outage/s must elect that it is their intention to do so on the 'Operator Request Form' (PF14).

This form is part of the suite of "Level 1 Project Forms" that can be accessed from the Ausgrid website at www.ausgrid.com.au. In these instances, the Ausgrid Network Compliance Officer associated with the project will supply the Class 1A Line workers with the required Access Permit Earths, insulated operating stick and earth stakes on the day of the outage.

Along with all their required PPE, plant and equipment, the Class 1A Line worker is required to provide sufficient insulating mats and/or line covers to prevent the earths from making contact with earthed equipment or the Ausgrid Low Voltage network. If an earth stake is required to be used to earth the High Voltage mains, then the ASP will be required to source the designated underground asset information provider plans prior to the outage day and have them on site on the day of the outage.

Information on how to book training can be found in section 6.7.

8.15 Apply and/or Remove Low Voltage Shorting Equipment

ASP/1s are permitted to apply and/or remove overhead low voltage shorts under the supervision of an Ausgrid Operator, for outages associated with contestable projects.

8.15.1 Apply and/or Remove Low Voltage Shorting Equipment Training

To be able to apply and/or remove overhead low voltage shorts for contestable work, an Electrically Qualified worker must be appropriately trained in the following:

- Application of LV Shorts – Overhead (TTDO1653)

Information on how to book training can be found in section 6.7.

8.15.2 ASP/1 Applying and/or Removing Low Voltage Shorting Equipment

Refer to Ausgrid's ESRs for information and requirements for installing/removing overhead low voltage shorts.

ASPs who wish to arrange their authorised employees to install and remove the overhead low voltage shorts as part of their contestable project outage/s must elect that it is their intention to do so on the 'Operator Request Form' (PF14).

This form is part of the suite of "Level 1 Project Forms" that can be accessed from the Ausgrid website at www.ausgrid.com.au.

Along with all their required PPE, plant and equipment, ASPs are required to provide their own low voltage shorts and ensure they are in satisfactory condition for use. To ensure LV shorts are in satisfactory condition for use, they require ongoing inspection, testing, and maintenance as outline in Ausgrid Network Standard NS223 Low Voltage Short Circuiting for De-energised work.

8.16 Contestable Vegetation Management

This section sets out the requirements for contestable vegetation management ASP/1 companies, employees, or sub-contractors, to carry out Standard Vegetation Control (SVC), in accordance with Ausgrid's ESR, near LV overhead mains in Ausgrid's network area.

8.16.1 General Requirements

Prior to conducting contestable SVC near LV mains in Ausgrid's network area, the contestable vegetation management ASP/1 company must ensure that all individual employees or subcontractors that will be conducting the work meet the SVC requirements in the ESR.

Authorisation to carry out SVC does not permit contestable vegetation management ASP/1s to interfere with or carry out work on Ausgrid mains and apparatus that is outside the scope of their authorisation as defined in this document.

8.16.2 Vegetation Clearances and Minimum Safe Work Distances (MSWD)

Any work in accordance with this document may only be conducted near overhead LV mains and service wires in accordance with the clearances of Standard Vegetation Control (SVC) as defined in Ausgrid's ESR. This includes work near LV ABC, bare conductors, and insulated service wires.

Note: Contestable Vegetation workers are considered authorised persons for LV insulated and LV bare conductors only. For voltages of 11kV or above Contestable Vegetation workers are considered an Ordinary Person for MSWD. Refer to Ausgrid's ESR for MSWD and vegetation clearances.

Authorisation to carry out SVC does not amount to authorisation to carry out:

- Close Approach Vegetation Control works as defined in the ESR; or
- work near or above High Voltage (HV) mains.

Work within the clearances of SVC or near or above HV mains must only be carried out:

- with the mains isolated, earthed and under an access permit; or
- by Ausgrid in accordance with specific procedures.

8.16.3 Vegetation Management Training and Qualifications

In order to conduct contestable SVC, a person must be authorised as a Class1Xh – Vegetation management worker.

To be eligible for authorisation, the individual must:

- hold the following qualification, in the pathway of vegetation controller relevant to the work that they are conducting (i.e. Ground, EWP or Tree climber):
    - UET20312 Certificate II in ESI – Powerline Vegetation Control
- hold and maintain:
    - (i) training in Ausgrid's Electrical Safety Rules conducted by Ausgrid; and
    - (ii) all mandatory additional training and annual or other refresher training stipulated by Ausgrid from time to time, including but not limited to the training detailed in Ausgrid's ASP Authorisations Training Matrix.

8.16.4 Referral to Ausgrid for Work Outside of the Conditions of Authorisation

Any work that cannot be conducted safely and in accordance with this document, the SVC requirements of Ausgrid's ESR and the conditions of authorisation, must be referred to Ausgrid for assessment and determination if an outage is required to complete the works.

8.16.5 Vegetation Performance and Reporting of Incidents

Ausgrid requires that any network incident or accident occurring when carrying out vegetation work near the Ausgrid network, must be reported to Ausgrid's Emergency Call Centre (13 13 88), as well as to Network Compliance (02 4399 8131) as soon as practical.

When an incident involving a major safety breach occurs, Ausgrid may suspend all vegetation work at the site until an initial report has been provided to the satisfaction of Ausgrid. Vegetation controller employees or individual subcontractors may also be prevented from conducting further work near the network pending the outcome of coordinated investigations by the contractor and Ausgrid. Further corrective or disciplinary action may result following the investigation.

8.16.6 Auditing of Contestable Vegetation Workers

Once authorised, individuals will require a minimum of one (1) satisfactory in-field audit with an Ausgrid Officer every 12 months to maintain their authorisation. This may be while conducting contestable vegetation management works or works conducted on behalf of Ausgrid.

Evidence of the successful audit must be supplied at the time of re-authorisation.

Requests for an audit can be emailed to ASPAuthorisations@ausgrid.com.au.

Following an unsuccessful in-field audit, the Ausgrid Officer must make arrangements with the authorised individual for a follow up in-field audit.

In addition, Ausgrid and NSW Office of Energy and Climate Change may carry out unannounced safety audits of ASPs carrying out contestable work at any time.

Costs associated with all audits will be charged directly to the ASP company on completion as per the AER approved quoted ancillary network service charges.

9.0 AUTHORISATION PROCESS FOR ASP/1S

9.1 General

All ASP/1 contestable work in Ausgrid's network area requires ASP companies and their employees or subcontractors conducting the work to be accredited with NSW Office of Energy and Climate Change and authorised with Ausgrid. This includes telecommunications work in or on network assets.

9.2 Level 1 Company Authorisation Requirements

ASP level 1 companies must enter into an ASP/1 Authorisation Agreement. This document (ES4) should be read in conjunction with the Ausgrid ASP/1 Authorisation Agreement. Details of this agreement are published separately by Ausgrid and available from the Ausgrid's Authorisation webpage.

Ausgrid Authorisation webpage:
https://www.ausgrid.com.au/ASPs-and-Contractors/Ausgrid-Authorisation

The ASP/1 Authorisation Agreement must be in place and current prior to making an application for ASP authorisation of an individual employee or subcontractor.

ASP companies will need to obtain accreditation from NSW Office of Energy and Climate Change prior to entering into an authorisation agreement with Ausgrid.

When applying for authorisation, Ausgrid will only recognise the trading name and ABN/ACN that is registered with the NSW Office of Energy and Climate Change on the letter issued to them granting the ASP company their accreditation.

9.2.1 ASP/1 Company – Initial Authorisation

Company authorisation requires the ASP/1 company to register in the *System* and provide all documentation required for ASP/1 company authorisation.

Details on how to register are provided at the point of registration in the *System*[8].

Pre-start

To complete authorisation, the ASP/1 company will need to provide the following documentation in the *System*:

- a scanned copy of the bank guarantee to warrant Level 1 contestable work (Not required for Class 1X ASPs.)
- a scanned copy of the ASP/1 company professional indemnity insurance (not required for Class 1A or 1X companies); and
- NSW Office of Energy and Climate Change Accreditation letter showing current accreditation for the ASP/1 company.

To ensure that companies understand their requirements and responsibilities when working on or near Ausgrid's network as an authorised ASP/1, Ausgrid will require new ASP/1 companies to attend an initial meeting with Ausgrid as part of the initial authorisation process.

This meeting is aimed at providing the company with information for working safely on or near Ausgrid's network, Ausgrid procedures and processes relevant to their work, and allow them to ask any questions they may have regarding ASP authorisation and compliance.

The ASP/1 company will be required to bring the following to the meeting:

- One (1) complete signed original copy of the ASP/1 Authorisation Agreement; and
- The original Bank Guarantee to warrant Level 1 contestable work[9].

[8] See section 6.7 for more details.
[9] Further information regarding the bank guarantee can be found in the ASP/1 Authorisation Agreement.

Following a successful meeting, the ASP/1 Authorisation Agreement will be executed by Ausgrid, and the ASP/1 company will be authorised to conduct contestable work in Ausgrid's network area for the construction of Level 1 contestable projects.

ASP/1 company authorisation is valid for 12 months.

9.2.2 ASP/1 Company – Authorisation Renewal

ASP/1 companies must ensure currency of their documentation in the *System* to renew ASP/1 company authorisation. ASP/1 company authorisation is issued for a period of 12 months only, therefore requires an annual renewal.

Prior to the authorisation expiry date an ASP/1 company will need to submit to Ausgrid:

- the original signed ASP/1 Authorisation Agreement. This agreement is executed by Ausgrid, returned to the ASP/1 company, and updated in the *System*.

In addition, an ASP/1 company will need to maintain currency of the following in the *System*:

- ASP/1 company professional indemnity insurance evidence (if required); and
- NSW Office of Energy and Climate Change Accreditation letter showing current accreditation for the ASP/1 company

All documentation required to maintain ASP/1 company authorisation must be renewed in the *System* prior to its expiry date.

Where any required documentation expires, the ASP/1 company authorisation will automatically be made non-current, and the ASP must cease work on all contestable services covered by the ASP/1 Authorisation Agreement until the required documentation submitted in the *System* and verified.

9.3 Level 1 Individual Authorisation Requirements

Level 1 ASP employees or subcontractors must be authorised if they wish to conduct contestable works in Ausgrid's network area.

An exemption to the above is when an ASP is required to utilise the services of individuals to conduct non-routine tasks such as specialist crane operators, drilling and under-boring contractors or builders. In these situations, the individual is not required to be authorised but must be directly supervised by an ASP authorised person.

All Level 1 ASPs and their employees must ensure that they only perform work for which they are authorised to do. If they are found to be in breach of this requirement, the individual and company's authorisation may be suspended or cancelled.

9.3.1 ASP/1 Individual Authorisation Agreement

All individuals are required to read, understand, and sign an ASP/1 Individual Authorisation Agreement as part of the ASP authorisation process. The ASP/1 Individual Authorisation Agreement is required for each company an individual is authorised under.

The ASP/1 Individual Authorisation Agreement is perpetual and has no expiry date and remains in effect unless notified by Ausgrid of changes that require an ASP individual to resign the agreement or the individual's authorisation is suspended or cancelled.

Failure to maintain the requirements of authorisation i.e. ESR and other required training, will make the ASP/1 individual authorisation non-compliant until the training or competency has been refreshed and evidence has been uploaded and verified in the *System*.

9.4 Level 1 Individual Authorisation Classes

Authorisation for Level 1 contestable work falls into the following classes:

Table 1 Level 1 individual authorisation classes

Authorisation Class	Description
Class 1A Line worker (previously known as ASP/1 Category 4 Overhead)	An electrically qualified individual who is authorised to conduct work in accordance with clause 8.2.1 on or near the overhead network.
Class 1B Cable Jointer (Paper Lead & Polymeric Cables) (previously known as ASP/1 Category 3 Underground)	An electrically qualified individual who is authorised to conduct work in accordance with clause 8.2.2 on or near the underground network.
Class 1C Cable Jointer (Polymeric Cables Only) (previously known as ASP/1 Category 2 Underground)	An electrically qualified individual who is authorised to conduct work in accordance with clause 8.2.3 on or near the underground network.
Class 1Xd Electrician (previously known as ASP/1 Category 1 Electrician)	An electrically qualified individual who is authorised to conduct work in accordance with clause 8.2.4 on or near the network.
Class 1Xe Contestable Work Assistant (previously known as ASP/1 Categories 5 & 6)	A non-electrically qualified individual who is authorised to conduct work in accordance with clause 8.2.5 on or near the network.
Class 1Xf Telecommunications Worker	A non-electrically qualified individual who is authorised to conduct work in accordance with clause 8.2.6 near the network.
Class 1Xg Electrical Supply Industry (ESI) Apprentices (previously known as ASP/1 Categories 7-9)	A non-electrically qualified individual who is authorised to conduct work in accordance with clause 8.2.7 on or near the network as an ESI apprentice.
Class 1Xh Vegetation management worker	A non-electrically qualified individual who is authorised to conduct work in accordance with clause 8.2.8 near the network.

Details of the specific qualifications, units of competency, mandatory safety training or annual safety refresher training for each Level 1 ASP class are detailed in.

9.5 ASP/1 Individual – Initial Authorisation

ASP/1 company authorisation must be approved and current before individual staff can be authorised under that company.

To comply with Ausgrid's electrical safety requirements for conducting contestable work in Ausgrid's network area, Level 1 ASPs must employ a minimum of two (2) authorised persons. One (1) of those authorised persons will be required to act as an observer as detailed in Ausgrid's ESRs.

Applications for individuals can be made by an authorised ASP company in the *System*[10]. ASP companies must register an individual in the *System.* Once the individual is registered against the ASP company the individual can be assigned the relevant role(s). The roles in the *System* represent the class/es of ASP authorisation and list all relevant training and competency requirements for that authorisation.

All ASP/1 individual authorisations require the following as a minimum:

- an Individual ASP/1 authorisation agreement; and

[10] See section 6.7 for more details on the *System*

In addition to the above requirements, each role in the *System* has specific competencies which must be met in order to be eligible for that authorisation. These competencies are detailed in Ausgrid's ASP Authorisations Training Matrix[11]. ASP companies will need to provide evidence for each competency for the relevant ASP/1 individual in the System for verification.

Once all competencies for a role are verified the individual's ASP/1 authorisation will become compliant, and they will be able to perform contestable works in Ausgrid's network area for the class of authorisation they have gained.

9.5.1 ASP/1 individual – Online ASP Authorisation Induction

Individuals for whom an initial ASP authorisation application has been made will need to complete an online ASP authorisation induction.

The online ASP authorisation induction provides information on the requirements for an individual to work on or near Ausgrid's network. Including ESR, Network Standards, authorisation requirements, PPE, documentation, and other relevant information.

The online ASP authorisation induction is valid for three (3) years at which time it needs to be refreshed. Ausgrid may require, at any time, that current ASP individuals refresh the online ASP authorisation induction within the three (3) year validity period, where Ausgrid are required to inform ASP/1s of changes to Ausgrid's policy, procedures, or standards.

The ASP authorisation induction eLearn module is made available when a role has been submitted in the *System* for a worker. A link to the eLearn module is emailed to the worker via the email address entered in the workers profile in the *System*.

9.6 ASP/1 Individual – Maintain Authorisation

To maintain an ASP/1 individual authorisation, all mandatory training and competencies required for that authorisation must remain current. Where any training or competency requires refresher, suitable evidence of the refresher having been completed must be provided prior to it expiring.

Failure to maintain the requirements of authorisation will make the ASP/1 individual authorisation non-current, and the ASP/1 will not be able to perform contestable work on Ausgrid's network until the training or competency has been refreshed and evidence verified in the *System*.

[11] Refer to section 6.6 for more information on Ausgrid's ASP Authorisations Training Matrix.

10.0 LEVEL 2 CONTESTABLE WORK

10.1 General

Level 2 contestable works includes the installation of overhead/underground services, the relocation or removal of Type 5 and 6 metering equipment and the disconnection and reconnection of supply to carry out work on an installation and energising installations. Level 2 contestable work is generally referred to as service work.

The ASP must obtain prior approval from Ausgrid and be issued with an 'Installation Job Number' by submitting or ensuring the customer has submitted a connection application form before:

- Installing, altering, or disconnecting/reconnecting overhead/underground services.
- Relocating and removing all Type 5 and 6 metering equipment.
- Installing Special Small Services; and
- Permanently disconnecting and removing overhead/underground services to an installation.

Clarification should be obtained in advance from the local Service & Installation Compliance office before carrying out any Level 2 contestable service work if the ASP is unsure of the service and installation requirements.

If the contestable work requires the temporary disconnection of other customers via Ausgrid's network, then the ASP must make suitable arrangements with Ausgrid's Operational Support team via resservicesupport@ausgrid.com.au. These arrangements may include application for disconnection/reconnection, the issue of a LV Clearance to Work or Access Permit and formal notification of the affected customers. The NECF requirements must be followed at all times.

NOTE: ALL services and consumers mains rated above 100amps must be inspected prior to energising. Where individual circumstances preclude this from occurring, prior written approval must be obtained from the Service & Installation Compliance Team for each occasion.

The request for inspection is managed by the Connection PORTAL :
https://services.ausgrid.com.au/SignIn

Installation Inspector Technical queries: serviceandinstallationcompliance@Ausgrid.com.au

Urgent Only Queries can be phone contacted: 02 8569 6498

Note: From 1 July 2016, Metering Providers who have AEMO accreditation under the National Electricity Rules (NER) to install metering Type 1 to 4 for the contestable energy market do not require Class 2D accreditation or Ausgrid authorisation as long as they work in accordance with the provisions for installation of advanced meters by retailers and metering providers provided in the Electricity Supply Act.

10.1.1 Service Connections – Safety Checks and Testing

All necessary safety checks and tests must be carried out in accordance with the approved training procedures before a service cable is energised.

Tests must be in accordance with AS4741, Ausgrid's NS282 and Ausgrid's ESRs.

Failure to test or performing incorrect tests can lead to hazardous situations with the potential for property damage, personal injury and even death. Where there is any doubt about test results, do not reconnect the installation, contact Ausgrid's Emergency Service Office on 13 13 88.

10.2 Work Permitted under each Authorisation Class

10.2.1 Class 2A - Disconnection and Reconnection

This class of authorisation permits ASPs to disconnect and reconnect existing overhead services, up to and including 400 amps, at the Point of Attachment only.

This class of authorisation does not permit work that involves accessing network assets, disconnection and reconnection of underground services or the connection of new installations or new additions to installations.

On Ausgrid's network, disconnection, and reconnection under Class 2A is normally required, for example, where replacement consumer's mains are being installed or to enable repairs to service connection brackets or barge boards etc. This class of Authorisation does not permit the replacement of customers private poles.

Note: This class does not permit disconnection at 'Bakelite wall/pole mounted service boxes' – refer to Ausgrid's publication S0095 NS199 Safe Electrical Work on Low Voltage Underground Assets.

Note: Additional safety requirements exist for work on Overhead Mains Connection Boxes (MCBs). No live work is permitted on these devices.

Reconnection of the premises where work has been carried out on the customer's installation must not be made until the ASP has a copy of an entirely and correctly completed Certificate of Compliance Electrical Work (CCEW) form from the electrical contractor responsible for the work on the installation. The CCEW must indicate that the installation has been tested and it is safe to reconnect.

For the reconnection of existing services greater than 100 amps, Ausgrid must be notified to determine if the installation requires a mandatory pre-energisation inspection.

Note: Disconnected overhead service cables must not be coiled on Ausgrid's poles or laid on the ground

10.2.1.1 Movement of the Overhead Point of Attachment

This class permits the alteration or relocation of an existing overhead Point of Attachment provided the:

- Relocation is on the same structure (i.e. not from a house to a private pole, one (1) building to another building or replacing private poles).
- Relocation is no more than 0.8 metres from the original Point of Attachment.
- Tension on the overhead service can be safely maintained during the relocation.
- Correct clearances can be maintained during and after the relocation.
- Overhead service cable is XLPE insulated, and the insulation shows no sign of deterioration in any way which would cause an unsafe relocation procedure.
- Existing service cable is of sufficient length. Jointing (piecing in) is not permitted.
- New Point of Attachment is ready to allow the relocation to be completed straight away.
- Overhead service does not cross a roadway; and

Relocated overhead service installation must comply with the current Service Rules. If any of the above conditions cannot be met or the above conditions cannot be carried out in a safe manner as determined by a written risk assessment, arrangements should be made with a Class 2C ASP to disconnect the service from Ausgrid's distribution mains.

10.2.2 Class 2B - Underground Services

This authorisation permits the following work:

- Installation, disconnection, and reconnection of an underground service up to a rating of 200 amps at the Point of Common Coupling and/or the Connection Point.

Note: The Point of Common Coupling may be at a network pillar or pillar standard (streetlight standard) suitable for connecting services for this class of authorisation - refer to Ausgrid's publication S0095 NS199 Safe Electrical Work on Low Voltage Underground Assets.

This authorisation does not permit connections at a network substation.

- Pot ending of a de-energised underground service up to a rating of 200 amps.
- Straight-through jointing of a de-energised underground service up to a rating of 200 amps. Prior written approval must be obtained from the local Service & Installation Compliance office before proceeding with the installation of any straight-through joints in service cables.
- The removal and replacement of an Ausgrid security seal at the service protection device (service fuse or circuit breaker) in accordance with section 10.5; and
- The installation of an underground service up to a rating of 200 amps to an Ausgrid street pole up to three metres from ground level.

Additional training competencies are required to conduct the following work:

- Installation and connection of underground services above 200 amps and up to and including 400 amps. Refer to section 10.2.2.1 for more information.

Note: The connection of underground services to Ausgrid's overhead distribution mains (UG/OH) is NOT permitted under this class of authorisation. Class 2C authorisation is required for this work.

Note: This class does not permit disconnection at an energised 'Bakelite wall/pole mounted service boxes' – refer to Ausgrid's publication S0095 NS199 Safe Electrical Work on Low Voltage Underground Assets.

Note: This class does not permit work on paper lead or CONSAC cables. Refer to Clause 10.2.2.3 for more information.

The ASP must be in possession of a copy of the CCEW, covering the electrical installation work by the electrical contractor, prior to carrying out the underground service work to ensure the installation work is ready for connection. The connections at the service protection device (service fuse or circuit breaker) on the customer's switchboard must also be ready and terminated prior to pulling the new service cable into Ausgrid's distribution pillar or pillar standard.

Only authorised ASPs are permitted to access Ausgrid's network pillars. When the underground service is installed prior to the day of energisation, the cable(s) must be short circuited, sealed, identified, and danger tagged at both ends. The cables are not to be entered into the Network pillar until the day the cable is to be energised.

Upon completion of the installation of an underground service cable, an accurately completed NOSW form and sketch must be submitted, as follows:

- to Ausgrid within two (2) working days of energising the contestable works, refer to section 10.4 for details on submitting notification forms.

All ASPs are required to ensure that their systems of work align with Ausgrid's publication S0095 NS199 Safe Electrical Work on Low Voltage Underground Assets and Ausgrid's ESRs. This applies in particular for ASPs connecting services into a variety of low voltage pillars that can be found in Ausgrid's area.

ASPs who are unsure of the requirements for a low voltage pillar configuration should contact Ausgrid for further information.

Class 2B authorisation permits the energisation of an underground service cable up to the service protection device (service fuse or circuit breaker) only.

Class 2B authorisation does not permit energising past the line side of the service protection device (service fuse or circuit breaker).

The following procedure must be followed:

- The service protective device cartridges must be removed, and the empty fuse carriers inserted to ensure the installation is left safe. The fuse cartridges must be left at the rear of the meter panel. Where a service circuit breaker is used in lieu of service fuses, the switch must be secured in the "OFF" position.
- A tag or warning tape must be fixed to the service protection device (service fuse carrier or circuit breaker) warning other ASPs and electrical contractors that the service has been connected and energised on the line side; and
- The tag should display a notice to indicate that "only persons with suitable authorisation are permitted to remove the tag (or warning tape) and energise to the main switch/s or isolation points after installing metering equipment".

10.2.2.1 Installation and Connection of Underground Services above 200 amps and up to and Including 400 amps

In addition to the standard Class 2B authorisation, appropriately trained individuals are permitted to install, disconnect, and reconnect an underground service rated above 200 amps and up to and including 400 amps at the Point of Common Coupling and/or the Connection Point.

This includes the following:

- The installation of an underground service rated above 200 amps and up to and including 400 amps to an Ausgrid street pole up to 3 metres from ground level.
- Pot ending of a de energised underground service rated above 200 amps and up to and including 400 amps.
- Straight-through jointing of a de energised underground service rated above 200 amps and up to and including 400 amps. Prior written approval must be obtained from the local Service & Installation Compliance office before proceeding with the installation of any straight-through joints in service cables; and
- The installation of underground tee joints on de energised underground cables rated up to and including 400 amps. Ausgrid will only permit the installation of new service tee joints in extreme circumstances. In these cases, prior written approval must be obtained from the local Service & Installation Compliance office before proceeding with the installation of any tee-joint service connection.

Refer to Ausgrid's ASP Authorisations Training Matrix[12] for training competencies required to perform this work.

[12] Refer to section 6.6 for more information on Ausgrid's ASP Authorisations Training Matrix.

ASPs should take additional care when disconnecting 400-amp underground services from a network pillar, to ensure they do not disconnect the network cable.

Note: All services and consumers mains rated above 100 amps must be inspected prior to energising. Where individual circumstances preclude this from occurring, prior written approval must be obtained from the local Service & Installation Compliance office for each occasion.

10.2.2.2 Live Jointing (including pot ending) of Underground Service Cables

ASP/2s are **not permitted** to conduct live jointing (including pot ending) of any underground service cables.

10.2.2.3 Connections to Paper Lead Distribution Cables

Class 2B ASPs are not permitted to make service connections to paper lead distribution or service cables. If a service is required to be connected to this type of cable the following methods (in order of preference) apply:

- A new network pillar must be installed by Ausgrid or an authorised Class 1B Cable Jointer as a contestable project. The Class 2B ASP may then connect to the new pillar.
- A new private pillar located on the customer's property must be installed by an authorised Class 1B Cable Jointer, via a tee joint to the paper lead cable. The Class 2B ASP may then connect to the new private pillar.
- A tee connected service must be installed as an absolute last resort by an authorised Class 1B Cable Jointer as a contestable project.

Any cable jointing work conducted on the paper lead distribution cable must be carried out by Ausgrid, or in the case of a contestable project an authorised Class 1B Cable Jointer.

Advice should be sought prior to commencing work Paper Lead Service Cables via: serviceandinstallationcompliance@Ausgrid.com.au

10.2.3 Class 2C - Overhead Services

This authorisation permits the following work:

- Installation, disconnection, and reconnection of an overhead service up to a rating of 400 amps at the Point of Common Coupling and/or the Connection Point or Point of Attachment; and
- The removal and replacement of an Ausgrid security seal at the service protection device (Service fuse or circuit breaker).

Note: All services and consumers mains rated above 100 amps must be inspected prior to energising. Where individual circumstances preclude this from occurring, prior written approval must be obtained from the local Service & Installation Compliance office for each occasion

Note: This class does not permit disconnection at an energised 'Bakelite wall/pole mounted service boxes' – refer to Ausgrid's publication S0095 NS199 Safe Electrical Work on Low Voltage Underground Assets.

The ASP must be in possession of a copy of the CCEW form, covering the electrical installation work by the electrical contractor, prior to carrying out the overhead service work to ensure the installation work is ready for connection.

When overhead services have been installed prior to energisation, and will not be energised on the day, the cables must be sealed, identified, and danger tagged.

This class of authorisation permits the energisation of the overhead service cable and consumer mains up to the line side of the service protection device (service fuse or circuit breaker) only and does not permit energising past the line side of the service protection device (service fuse or circuit breaker).

Class 2C authorisation does not permit the connection of overhead services at Ausgrid's pole substations due to the numerous variations in construction and proximity to the high voltage network. Refer to clause 10.2.3.1 for further information.

Note: Disconnected overhead service cables must not be coiled on Ausgrid's street poles or laid on the ground

10.2.3.1 Installation and Connection of Services at Pole Substations

Overhead and underground service connections (new or upgraded) at pole substations are only approved on an exception basis and must be carried out by Ausgrid. A new private Pole A or mid-span connected service (where LV ABC distribution mains exist) must be installed, where this would avoid a service connection at a pole substation.

The Connection Application form must indicate whether an overhead service connection at a pole substation is being proposed. Ausgrid must assess these particular applications and the project may only proceed where Ausgrid grants approval. Refer to Ausgrid's publication Connection Policy for further details. The ASP must allow a minimum of 10 working days after submitting a request to Ausgrid for the assessment/approval of the proposed service connection.

Where Ausgrid approves a service connection at a pole substation, the overhead service and connections must be provided by the ASP. The final connection of the overhead service will be carried out by Ausgrid.

If the pole substation is located on a customer's premises, a maximum of one (1) set of consumers mains (either underground or overhead) to the customer and one (1) overhead service (either underground or overhead) to an adjoining property will be permitted. A suitable easement as required by the Service Rules must be obtained for the cross-property overhead service.

10.2.3.2 Installation of Mid-span or Suspended Overhead Services

Class 2C authorisation permits mid-span or suspended overhead service connections to be erected in limited situations as described in S0033 NS124 Specification for Overhead Service Connections up to 400 amps. There is no specific authorisation subcategory required, however the ASP must use an appropriately maintained and tested EWP and have the required licence and training to use it.

The ASP must get written approval from the local Service & Installation Compliance office prior to erecting this type of service. Ausgrid may need to carry out a site inspection prior to approving their use.

10.2.4 Class 2D - Energising Network Operator Service Equipment

This authorisation permits the following work:

- Relocate or reuse and energise certain types of Type 5 and 6 whole current metering and load control equipment for existing installations within the Ausgrid network area as defined in Chapter 7 of the National Electricity Rules. This includes grid connected metering and energising alterations and additions to existing installations and the replacement of controlled load (off-peak) relays or time clocks associated with a change of tariff or due to defective customer equipment. Additional requirements may be set out by Ausgrid's metering provider Plus ES.
- Remove and replace an Ausgrid security seal in accordance with Ausgrid procedures.
- Disconnection and reconnection of the installation at the service protection device (by operating service fuse or circuit breaker) located at either the switchboard or on the barge board only.
- Replace the service protection device (service fuse base or circuit breaker); and

- Energising new installations under 100amps or downstream of the SPD not requiring a pre-energisation inspection.

Note: Class 2D ASPs are not permitted to disconnect and/or reconnect the installation from an overhead connection point or point of attachment or an underground pillar or pillar standard.

Before carrying out work involving the relocation or reuse and energising of Type 5 and 6 metering and load control equipment at existing installations:

a) The ASP must have been issued an Ausgrid job number for each separately metered portion of the installation. Job numbers are created upon receipt of a connection application form for each installation; and

b) The ASP must confirm that only Type 5 and 6 metering identified in ES3 Part A and current associated CIA is permitted to be relocated or reused: and

c) As the contestable Type 5 and 6 metering work is the final segment of the electrical work at an installation prior to energising, the ASP must ensure NOSW submission covering the overhead/underground service installation has been submitted to ensure the overhead/underground service has been completed ready for metering. The Class 2D ASP must submit their form together with a CCEW form covering their own work (metering/energisation) and/or the electrical contractors work within two (2) days of completing the work.

Note: AEMO Accredited Metering Providers, who are accredited to install contestable Type 1-4 rule compliant metering, do not require Class 2D authorisation when replacing existing Ausgrid or other metering providers metering equipment with their metering equipment.

The AEMO Accredited Metering Provider must work in accordance with the provisions for installation of advanced meters by retailers and metering providers provided in the Electricity Supply Act.

Note: ASP/2s who are not an accredited AEMO metering provider or engaged by an AEMO metering provider are NOT permitted to relocate, remove, or alter any part of a Type 1 – 4 rule compliant metering installation.

These metering installations consist of electronic meters, being WC, CT or HV, and are commonly associated with communications devices. See Ausgrid's publication ES 3 Part A – Metering Installations for definitions.

Current transformer metering and the bridging out of defective or damaged load control devices or Type 5 or 6 metering equipment is not permitted under this authorisation.

There are two (2) options for energising installations with a total load less than 100 amps:

(a) Energise to the main switch/s or point of isolation only. ("Caution - Occupier tag" option - detailed in section 10.2.4.3); or

(b) Energise the complete installation.

Where the rating of a service exceeds 100 amps, Ausgrid must inspect the overhead/underground services installation, consumer's mains, main switchboard exceeding 100 amps before energisation. If compliant, Ausgrid will then allow for the inspected portions of the installation to be energised.

Where the unmetered sections of the installation being energised are not terminated at permanently installed metering, Ausgrid may leave a 'green tag' indicating that the unmetered portions have been energised at that point.

Note: High voltage installations and installations in hazardous areas must be inspected by Ausgrid prior to energising.

When removing Ausgrid Type 5 or 6 metering equipment, the Class 2D ASP must firstly read and record ALL the meter register consumption data prior to de-energising and removing the equipment.

Prior to removing any Ausgrid Type 5 metering equipment the Class 2D ASP must determine if the existing metering arrangement is configured for bi-directional or 'Energy Buy Back' metering. This configuration can be determined by the labelling attached to the metering equipment stating, "Energy Buy Back", "Import/Export", or appropriate structure (refer to ES3 Part B Metering Equipment Technical Description for Type 5 & 6 Metering Installations).

If the metering at these sites needs to be relocated or reused, the Class 2D ASP must contact the local Field Operations office, via resservicesupport@ausgrid.com.au for further instruction prior to carrying out any work.

Type 1 – 4 metering installations can be identified via the following methods:

- That the meter is not an asset owned by EnergyAustralia, Ausgrid or Testing and Certification Australia, eg Meter Dynamics, Endeavour Energy, etc which can be identified by company names and logos on the front of the meter.
- If the asset is owned by EnergyAustralia, Ausgrid, or TCA it will have a program structure of structure eleven (STR 11), which consist of the following register displays:

Table 2 Meter register numbers

Register Number	Description
1	Date
2	Time
3	Total export kWh
14	Total lag kVar
15	Total lead kVar

10.2.4.1 Asbestos in Electrical Meters and Relays

It has been identified that a number of electromechanical meter and Zellweger – ZEQ (Ripple Control Receiver) meter relay types used in Ausgrid's network area potentially contain asbestos material. The asbestos is contained in the mastic sealant to the front window of the meters and the external black bituminous casing and internal black bituminous fuse casing of the relays.

All electromechanical meters with black mastic sealant and black covers are suspected of containing asbestos and are to be treated as asbestos waste.

When removing or handling affected meters and relays where there is Asbestos Containing Material, work must comply with:

- Ausgrid's Network Standard 211 Working with Asbestos Products (NS 211);
- The NSW Work Health and Safety Act 2011 and the Work Health and Safety Regulation 2017
- Safe Work Australia Code of Practices.
  - How to Manage and Control Asbestos in the Workplace; and
  - How to Safely Remove Asbestos.

10.2.4.2 Pre-energising Checks

Prior to commencing any metering installation work, the ASP must check the overhead/ underground services and meter panel wiring, up to the main switch/s or first isolation point/s on the load side of the metering, to ensure the work is satisfactory.

Note: Any further reference to a main switch or main switches must also be taken to mean the first isolation point or points on the load side of metering.

The check must be made for compliance with the current Service Rules and in particular, the installation work must be tested and checked to ensure compliance with AS/NZS 3000 Wiring Rules. The testing requirements detailed in section 10.1.1 and AS/NZS 3017 Electrical Installations - Verification Guidelines must also be conducted where required.

The following must be checked:

(a) All new or altered overhead/underground service to an installation must not cross an adjoining private property, unless covered by a suitable easement.

(b) The overhead/underground service is installed correctly in accordance with the Service Rules.

  (i) For example, it has the correct clearance height, method of attachment, service protection device/s/meter protection device/s (fuse or circuit breaker) is installed correctly and energised on the line side, the polarity is correct, metallic poles and structures are bonded (if required) and the earthing has been correctly installed, etc.

(c) The meter box and any other exposed metal fixtures (downpipes, balustrades, etc), that may be in contact with metallic guttering or aluminium foil sarking are not above earth potential.

  (i) All accessible external metal fixtures at ground level must be checked for potential rise above earth. This can be achieved for example by bringing a proximity voltage tester (volt stick) close to the metal under test.

(d) That the consumer's mains, switchboard, earthing and wiring for the metering equipment have been installed correctly and in accordance with the information contained on the CCEW.

(e) That the CCEW has been completed correctly to show the type of work performed, and that the work does not include a hazardous location or high voltage work.

Note: The ASP must not carry out any work unless they are completely satisfied that the overhead/underground service and panel wiring has been installed correctly, tested and is safe. Disciplinary action will be taken against an ASP for energising unsafe installations or for not taking adequate precautions.

If it is found during an inspection that the energising work was carried out at an installation containing service defects or major installation safety breaches that the Class 2D ASP was responsible for checking, Ausgrid will defect both the installing electrical contractor, the Class 2B or 2C ASP (service installer) and the Class 2D ASP.

Although the installation or removal of metering involving current transformers is not permitted under this authorisation, ASPs should be aware that secondary winding of CTs must be bridged out for safety until connected to the metering circuit by an AEMO Accredited Metering Provider.

10.2.4.3 Option 1- Energising to the Main Switch/s Only

For installations rated at or below 100 amps, after carrying out the pre-energising checks the ASP can:

(a) relocate or reuse the existing Type 5 or 6 metering and load control equipment in accordance with clause 10.2.4.

(b) test the installation up to the main switch/s in accordance with AS/NZS 3000 Wiring Rules. Tests must include earth resistance, insulation resistance, etc.

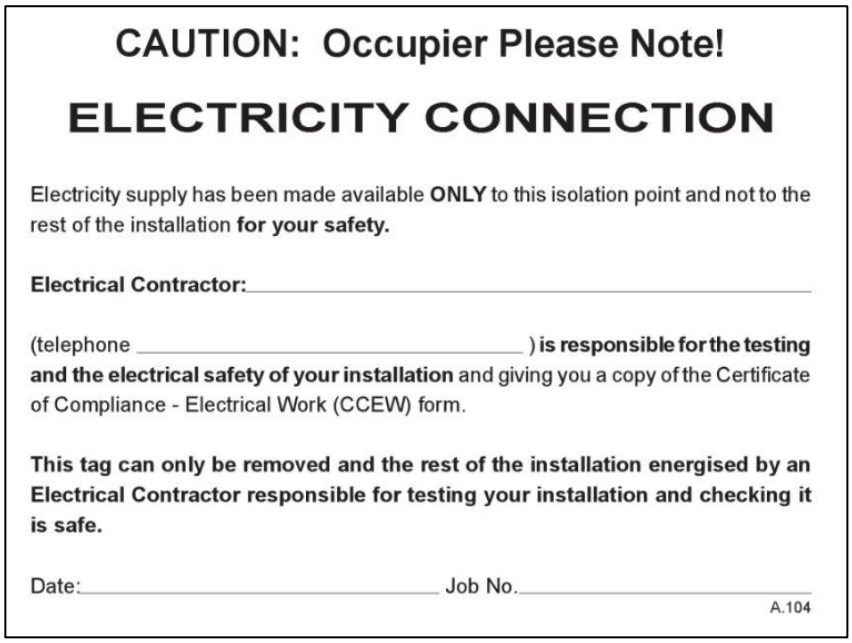
(c) test the neutral integrity[13] in accordance with NS282 and AS/NZS 3017 Electrical Installations - Verifications Guidelines.

(d) verify that the switchboard labelling indicates that the meters are metering the correct segments of the installation and the load control equipment is controlling the correct loads.

(e) place the main switch/s in the off position and insert the loaded fuse holder. Where a service circuit breaker is used in lieu of service fuses, switch to the “ON” position.

(f) seal all Type 5 or 6 (if applicable) metering and service equipment including the service protection device (fuse or circuit breaker), meter protection device, service neutral links and unmetered equipment using the approved seals and sealing pliers.

(g) seal the main switch/s in the OFF position and attach a ‘Caution - Occupier Tag’ (A104 Ausgrid Caution - Occupier Tags)[14]. The Caution - Occupier tag must indicate that the installation is energised up to the main switch/s only and can only be energised by a licensed electrical contractor after testing the installation (as per the CCEW) and checking it is safe to energise.



CAUTION: Occupier Please Note!

ELECTRICITY CONNECTION

Electricity supply has been made available **ONLY** to this isolation point and not to the rest of the installation **for your safety.**

Electrical Contractor:_____

(telephone _____) **is responsible for the testing and the electrical safety of your installation** and giving you a copy of the Certificate of Compliance - Electrical Work (CCEW) form.

This tag can only be removed and the rest of the installation energised by an Electrical Contractor responsible for testing your installation and checking it is safe.

Date:_____ Job No._____

A.104

Figure 1 The ‘Caution - Occupier Tag’

10.2.4.4 Option 2 - Energising the Complete Installation

After obtaining a copy of the CCEW from the electrical contractor responsible for the works being energised and carrying out the pre-energising checks the ASP can:

(a) relocate or reuse the existing Type 5 or 6 metering and load control equipment in accordance with clause 10.2.4.

(b) test the Type 5 or 6 (if applicable) metering installation up to the main switch/s in accordance with AS/NZS 3000 Wiring Rules. Tests must include earth resistance, insulation resistance, etc.

(c) verify that the switchboard labelling indicates that the Type 5 or 6 (if applicable) meters are metering the correct segments of the installation and the load control equipment is controlling the correct loads.

[13] Refer to section 10.1.1 for more detail.

[14] Caution - Occupier tags can be Purchased through WINC and found via item code A104, see section 8.8 for log on details.

(d) place the main switch/s in the off position and insert the loaded fuse holder. Where a service circuit breaker is used in lieu of fuses, switch to the "ON" position.

(e) test the Type 5 or 6 (if applicable) metering installation up to the main switch/s for correct polarity and phase rotation.

(f) perform a visual examination of the readily accessible portions of the complete installation to assure compliance with the AS/NZS 3000 Wiring Rules.

(g) test the installation as required by the AS/NZS 3000 Wiring Rules at each switchboard (main and sub board) being energised, using AS/NZS 3017 Electrical Installations - Verifications Guidelines as a guideline. The tests must include:

(i) earth resistance,

(ii) insulation resistance of the installation,

(iii) the polarity of consumers mains, sub mains and final sub circuits,

(iv) intermixture between sub circuits,

(v) verification of the operation of RCDs,

(vi) neutral integrity test[15].

(h) Any breaches detected must be addressed as described in section 10.2.4.6.

(i) seal all Type 5 or 6 (if applicable) metering and service equipment, including the service protection device (service fuse or circuit breaker), meter protection device, unmetered active links and service/meter neutral link, using the approved seals and sealing pliers.

(j) when the ASP is satisfied that it is safe to do so, the complete installation can then be energised (In this option the "Caution - Occupier Tag" is not used).

(k) ensure fixed appliances, such as ranges and hotplates, are off (i.e. check timers etc) and leave main switches on. If the premises are vacant, consider leaving the hot water main switch off to reduce unnecessary energy consumption. Light fittings should also be checked that they have not been left turned on.

(l) The isolation switches of three (3) phase equipment, such as motors and air conditioning equipment, should be left in the off position and sealed with a suitable tag, stating "Caution - Do not operate this equipment. The installing electrical contractor must check this equipment before it is energised".

10.2.4.5 Hinged Switchboard Panels and Service Boxes

This class permits the replacement of service fuses and bases at hinged switchboard panels (including wooden panels). The following special precautions must be observed whilst carrying out this work:

(a) If the original service fuse base with exposed stud connectors on a hinged wooden panel has been replaced with a modern enclosed type fuse, the switchboard panel must be indelibly labelled 'NEW SERVICE FUSES.' If the board does not have this labelling, the ASP is only permitted to open the board to work on the service fuses after arrangements have been made to isolate the supply remotely from the board (e.g. disconnection at the Point of Attachment).

(b) Regardless if the board is labelled 'NEW SERVICE FUSES' or not, precaution should always be taken when removing the retaining screw on wooden panels to ensure the speed nut does not drop and make contact with any potential exposed live parts that may be present behind the panel.

[15] Refer to section 10.1.1 for more detail.

Note: It is the customer's responsibility to fund the cost of supplying and installing new and replacement service fuses.

The replacement of existing 70-amp assemblies (base and element) with 80 amps is only necessary in the following situations:

- If additional load is to be connected and the electrical demand of the installation, as calculated by AS/NZS 3000 Wiring Rules, exceeds 70 amps per phase: OR
- If the consumers mains are being replaced or additional phases of supply are required, OR
- If additional metering equipment is being installed.

10.2.4.6 Encountering Installation Safety Breaches

If a major safety breach (See Annexure B) or other breaches of the Service Rules are encountered, the ASP must contact the contractor responsible and arrange rectification before energising.

Rectification can be achieved by either repairing or isolating the defective/unsafe equipment. Where the defective portion has been isolated and tagged the ASP must (with the agreement of the installing contractor) endorse the CCEW accordingly and complete the energisation of the remainder of the installation.

If the overhead/underground service is immediately dangerous, the ASP must ensure the situation is made safe. If appropriately authorised (Class 2B or 2C where relevant), this can be achieved by disconnecting the overhead/underground service from the network or, if not appropriately authorised, by arranging for a suitably accredited and authorised person to do so. Also, where necessary, the ASP must arrange for a suitably qualified individual to stand by until the unsafe situation is removed.

The full range of pre-energising checks and tests must be performed by the ASP before energising an installation following the rectification of any overhead/underground service defect or installation major defect.

If a minor non-conformance with AS/NZS 3000 Wiring Rules is encountered within the installation, which can be rectified without disconnecting the overhead/underground service or meters, the ASP can proceed with the energising work and submit the required NOSW and CCEW forms to Ausgrid. The ASP must notify the installing contractor that was responsible for the non-conformance to arrange for its rectification.

Also refer to Annexure B – ASP/2 Major Safety Breaches and SafeWork NSW for more information.

SafeWork NSW
https://www.safework.nsw.gov.au/

10.2.4.7 Returning of Type 5 and 6 Metering Equipment

ASPs must ensure that when returning metering equipment and associated devices to an Ausgrid depot, that they follow the procedure outlined in Ausgrid's publication ES3 Part A – Metering Installations - Section 10.

Note: Also refer to the Ausgrid's publication S0047 NS211 Working with Asbestos Products for further information for dealing with asbestos on the network.

When completing a service upgrade, connection, or consolidation of tariff metering of Ausgrid Type 5 or 6 metering equipment, the Class 2D ASP is responsible for the return of all redundant Type 5 and 6 metering equipment associated with the installation. Where Type 5 or 6 metering is still required for a changeover period, the ASP must ensure that when the Type 5 or 6 metering is no longer required and becomes redundant, that the ASP returns the redundant Type 5 and 6 metering

equipment to Ausgrid. The Class 2D ASP must firstly read and record ALL of the meter register consumption data and then return the equipment, together with the required notification (NOSW) form, to Ausgrid within two (2) working days, refer to section 10.4 for details on lodging notification forms.

10.2.4.8 Level 2 ASP Type 5 and 6 Meter Security Deposits

This deposit is no longer required due to the implementation of Power of Choice metering.

If an authorisation is cancelled, Ausgrid reserves the right to use the security deposit to recover any outstanding charges associated with carrying out authorised work. These charges include but are not limited to and without limitation to outstanding, sealing pliers, warranty repairs or outstanding inspection fees.

The following Security Deposits previously applied:

Table 3 Metering security deposits

Metering Limit	Security Deposit
maximum of 5 meters (NOTE: This is the minimum amount)	$250
maximum of 10 meters:	$500
maximum of 20 meters:	$1,000
maximum of 50 meters:	$2,500
maximum of 100 meters:	$5,000

10.2.4.9 Request for Return of Meter Security Deposit

ASPs that would like to request the return of their meter security deposit are required to return all outstanding meters prior to emailing a letter of request to the Ausgrid Authorisations Officer (ASPAuthorisations@ausgrid.com.au).

The letter must be on a company letterhead and include:

- the company's AUC (accreditation) number.
- amount of security; and
- security account details.

10.2.5 Class 2X

Class 2X authorisations are broken down to the following sub-classes of authorisation:

- Class 2Xd Electrically Qualified Observer.
- Class 2Xe Non-Electrically Qualified.
- Class 2Xe(A) Non-electrically Qualified Apprentice Electrician; and
- Class 2Xf Telecommunications Worker.

Class 2X authorisations do not permit the authorised person to access network assets or in-service private pillars or link panels.

10.2.5.1 Class 2Xd Electrically Qualified Observer

This class of authorisation allows a worker to be an electrically qualified safety observer for an ASP when performing live low voltage works.

10.2.5.2 Class 2Xe Non-Electrically Qualified

This class of authorisation allows a worker to perform non-electrical work, such as trades assistant or plant operator, on or near Ausgrid's network.

10.2.5.3 Class 2Xe(A) Non-electrically Qualified Apprentice Electrician

This class of authorisation allows electrical trades apprentices to perform electrical trade related works.

Electrical trades apprentices must be covered by a training contract and under direct and constant supervision of an appropriately authorised person.

10.2.5.4 Class 2Xf Telecommunications Worker

This class of authorisation allows a worker to perform telecommunication installation and maintenance works. Workers must be engaged by a telecommunications network operator for work on telecommunications assets attached to Ausgrid's network assets.

Class 2Xf telecommunications worker authorisation does not permit the authorised person to perform any contestable service work.

10.3 Safety Breaches and Defects for ASP/2 work

Non-compliance with the Service and Installation Rules of NSW or other relevant standards must be regarded as a defect and may also be regarded as a Safety Breach depending to the nature of the defect.

Non-compliance with Ausgrid's ESRs will be regarded as a Safety Breach.

In the event of Ausgrid becoming aware of the non-compliance, it will issue a notice to the customer and/or to the ASP/2 specifying the breach and requiring rectification within 21 days or a period otherwise stated.

All ASP/2 Safety Breaches will be investigated under the conditions of authorisation and may involve an interview and be reported to the NSW Office of Energy and Climate Change as required under the Accreditation scheme.

Further information can be found in Annexure B – ASP/2 Major Safety Breaches.

The clauses and examples below are a guide only and do not contain an exhaustive list of all Safety Breaches and Defects.

10.3.1 Major Safety Breach

Typical defects that are considered Major Safety Breaches applicable to ASP/2 work are listed below. This is a non-exhaustive list.

- Failing to correctly test service connections.
- Failing to comply with the requirements of Ausgrid's ESRs.
- Leaving live conductors or terminals exposed.
- Safe Systems of work not available onsite.
- Safe work procedures not followed on site.
- Risk assessment not carried out prior to starting work onsite or when conditions change.
- Authorisation not kept up to date.
- Height of overhead service too low.
- Underground service not installed at correct depth.
- Overhead Connection Point height too low.
- Wrong polarity (i.e. reverse polarity).
- Unsafe insulation resistance.

- Service pillar or column left unsecured.
- High resistance service connections.
- Not earthing metallic supports where required by the Service and Installation Rules of NSW.
- Incorrect handling or disposal of asbestos materials; and/or
- Incorrect disposal of metering equipment.

10.3.2 Minor Safety Breach

Typical minor Safety Breaches applicable to ASP/2 work are listed below. This is a non-exhaustive list.

- Items in the first aid kit not adequately stocked or out of date.
- Out of date PPE/C but still in working order.

10.3.3 Major Defect

Typical defects that are not immediately or potentially dangerous to life, health or property however are considered major due to their non-conformance to the Service and Installation Rules of NSW.

Typical defects applicable to ASP/2 work are listed below. This is a non-exhaustive list.

- Meter connection error i.e. line/load transposition.
- Incorrect meter relocated or reused; and/or
- Use of non-specified or unapproved materials and fittings.

10.4 Notification of Service Work (NOSW)

To ensure Ausgrid can safely operate the network and effectively communicate with customers on planned and unplanned outages on the network, our Notification of Service Work (NOSW) records need to be as up to date as possible. A condition of authorisation is that all ASP/2s must notify Ausgrid within the below specified time upon completing authorised work (including repairs). Notification to Ausgrid is via a NOSW.

A NOSW is required where any contestable service work has been carried out within a Level 1 project. A job number is not required; however, the Level 2 ASP must note down the Level 1 ASP project number on the NOSW and then submit via Ausgrid's online NOSW portal using "Emergency NOSW" option to be used for these.

Level 2 ASPs are to use the '*Ausgrid NOSW portal*' to submit NOSW's. No paper based NOSW's will be accepted.

Ausgrid NOSW portal:
https://services.ausgrid.com.au/SignIn?ReturnUrl=%2FNOSW%2F

Failure to submit the NOSW within the required time is in breach of the ASP's authorisation.

ASPs should also be aware that, prior to carrying out any contestable service work, a Connection Application[16] form must be submitted to Ausgrid to obtain an installation job number (excluding emergency works).

If any emergency works are required, prior to commencing and work the ASP is responsible for contacting Ausgrid's emergency line on 13 13 88 to report the emergency- the ASP can request an OMS number to use as the job number for this emergency job. An "Emergency NOSW" can be submitted for the work.

Should the site require additional assistance, or you the ASP are not completing any works, inform the Contact Centre on 131388 and an Ausgrid Emergency Service Officer will be despatched to assess the site.

[16] Ausgrid's publication ES 1 – Premises Connection Requirements details the requirements for notification using a Connection Application form.

On completion of planned or emergency service installation work, a completed NOSW form must be submitted to Ausgrid within two (2) working days.

If applicable, the NOSW form must include an "As Constructed" diagram of the overhead/underground service route and details from the Point of Common Coupling through to the Connection Point.

Class 2 ASPs, are responsible for submitting completed copies of an applicable CCEW for the electrical works carried out being energised to Ausgrid within two (2) working days of completing their metering installation and/or energising work:

The NOSW form must include:

- The customer's details, including the substation number and the pole or pillar number.
- The location of the terminated service (electrically) where the service is to be connected to a link pillar or pole, i.e. supply side of the links.
- The job number or reference number provided as part of the emergency works.
- Structure of the installed/relocated meter indicated in tariff section, and structure box.
- The scope of the work performed.
- The test results.
- The installing and testing authorised person details.
- The ASP's details.
- A plan (if applicable) showing the route of the new or replacement overhead/underground service from the Point of Common Coupling through to the Connection Point[17]; and
- All details of relocated, reused, removed AND existing Type 5 or 6 metering equipment, including ALL register readings where contestable metering work is carried out. If bi-directional 'buy-back' Type 5 or 6 metering is relocated or reused, the meter that is programmed as bi-directional must be clearly identified by inserting the meter structure in the "tariff" box.

Failure to provide all the required information on the NOSW will attract a defect against the ASP/2 company and the ASP/2 company may incur an associated reinspection and/or investigation fee.

10.4.1 NOSW Diagram

All NOSWs that require the overhead or underground service line to be altered must have a diagram submitted with the NOSW.

The diagram must contain as a minimum the following information:

- Street alignments.
- Lot boundaries.
- Lot/house No's.
- Name of street and suburb in which the work is being done.
- North point.
- For overhead work:
  - Route of overhead service.
  - Location of service connection at Ausgrid pole (Noting any Open point/ LV links and what side the service is connected to)
- For underground work:
  - Route of underground service.
  - Location of service connection at Ausgrid pole/Pillar (Noting any Open point/ LV links and what side the service is connected to)
  - Start and finish points of any conduits.
  - Reference the position of the service in the ground at all deviation points.
  - Depth of cover over the service.

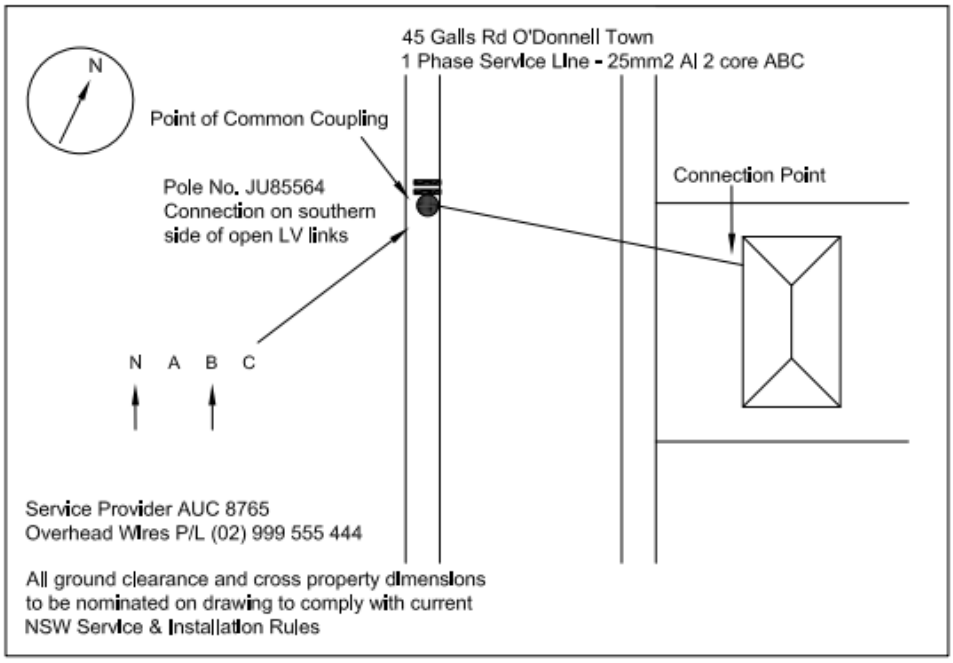
[17] Refer to S0044 NS100 Field Recording of Network Assets for further information on requirements for recording site specific details of the distribution mains and overhead/ underground service work.

- Position of cable joints if any have been approved.
- Type of cable used.
- Type of joint made (if any).
- The accredited service provider's full name and phone number; and
- Reference points from which all other measurements must be taken.

Refer to annexure F for a template to assist in creating this diagram.

Where an underground service route deviates from the street alignment or crosses a roadway the requirements of Ausgrid's NS100 must be adhered to when compiling the location of the route.

Figure 1: Typical Sketch of the "As Constructed" Overhead Service Line



10.4.2 Low Voltage Links

Where a service is to be connected to a link pillar or a pole with a link or open point, the connection of the terminated service (electrically) must be indicated on the NOSW (i.e. which side of the links supplies the new service).

Where an ASP cannot determine the supply side of the LV links, after all attempts made this should be indicated on the NOSW. Failure to indicate the supply side of the LV links will result in Ausgrid issuing a defect against the ASP and charging an associated fee for the investigation to obtain the connectivity information.

10.4.3 Certificate of Compliance Electrical Work (CCEW)

A Certificate of Compliance Electrical Work (CCEW) form is required to be submitted to Ausgrid in the following cases:

- all new electrical installations; or
- any alterations or additions to an existing electrical installation that will require additional work to be done by or on behalf of the distributor in relation to the network connection for the installation (ASP/2 work); or
- work on a switchboard or associated electrical equipment (other than work to repair or replace equipment that does not alter the electrical loading, method of electrical protection, system of earthing or physical location of the switchboard or equipment being repaired or replaced).

CCEWs required by Ausgrid must be submitted within 7 business days of the work being completed. CCEWs can be submitted to Ausgrid, individually or in bulk, via email to datanorth@ausgrid.com.au.

All CCEWs that accompany a NOSW must be submitted via the portal with the NOSW. Only stand-alone CCEWs where there was no contestable works carried out are required to be submitted to datanorth@ausgrid.com.au.

Please note: CCEWs are a compliance requirement of the NSW Fair Trading. Please ensure all CCEWs are submitted directly to NSW Fair Trading using their online form.

NSW Fair Trading - CCEW online form:
https://www.fairtrading.nsw.gov.au/__data/assets/pdf_file/0020/371342/CCEW_template.pdf

10.4.4 Non-submission of Notification of Service Work (NOSW)

The corrective action that Ausgrid will be enforcing for ASPs who fail to submit NOSWs within the required two (2) working days is outlined below. These instances will be recorded over a rolling 12-month period.

Ausgrid regularly monitors ASP/2s for outstanding NOSWs for service work completed.

Where ASP/2s have failed submit NOSWs within the required two (2) working days, the following corrective action will be taken:

Table 4 Non-submission of NOSW corrective action

Offence	Corrective Action
1st Offence	Formal warning advising of occurrence and request for any missing NOSW's to be submitted within 2 days, including interview advising of the suspension of the company's ASP/2 authorisation for future breaches.
2nd Offence	One (1) month suspension of the company's ASP/2 authorisation.
Subsequent Offences	Three (3) month suspension of the company's ASP/2 authorisation.

*All outstanding NOSWs are required to be submitted prior to the reinstatement of the company's ASP/2 authorisation.

Ausgrid may review an ASP/2s company authorisation resulting in possible cancellation where subsequent offences occur.

10.5 ASP/2 Sealing Pliers

ASP/2s are required to seal all service equipment including, but not limited to, the service protection device (service fuse or circuit breaker), unmetered links, and sealable escutcheon plates, using approved seals and sealing pliers following any new work or alteration to the service equipment, or any other work that involves the breaking of existing seals, including testing.

ASPs issued with approved sealing pliers, who are engaged to re-seal service equipment for other electrical contractors, are advised to carry out appropriate checks to ensure they are completely satisfied that the work has been carried out correctly. NOSW forms must be submitted for this work and a completed CCEW for the electrical contractors' work.

Unauthorised use of approved sealing pliers and/or seals is not permitted and will lead to disciplinary action being taken by Ausgrid.

It is a condition of authorisation that ASP companies are responsible for the security of all sealing pliers issued to their authorised employees and to ensure they are used only by that individual whom they were assigned to. The ASP/2 company or individual must return the personalised dies to Ausgrid when they are no longer authorised and redeem the security deposit paid.

Sealing Pliers are available for purchase from Ausgrid. Sealing pliers are purchased outright and remain the property of the ASP. Sealing pliers supplied by Ausgrid will come with personalised dies, the personalised dies remain the property of Ausgrid. Requests for Sealing pliers and personalised dies can be made via email at ASPAuthorisations@ausgrid.com.au.

Table 5 Sealing plier cost

Part	Cost
Harcor Sealing Press (HA21100)	$175.00 + GST
Personalised dies	$62.00 + GST

A Security Deposit of $200 must be lodged with Ausgrid for personalised dies. The deposit is refundable to the ASP at any time on the condition that the personalised dies are returned to Ausgrid. The Security Deposit will not accrue interest.

Note: Personalised dies issued by Ausgrid remain the property of Ausgrid at all times. The personalised dies will be stamped with a unique identification number that is registered in the name of the authorised person and the ASP company. The imprint of the seal number must be distinguishable on each seal after sealing the equipment.

An authorised person is only permitted to carry one (1) set of NSW Electricity Distributor sealing pliers for contestable work (i.e. Ausgrid, Endeavour Energy or Essential Energy). Sealing pliers issued to an ASP company / individual ASP by another NSW Electricity Distributor or Metering Provider are acceptable for use in Ausgrid's area provided they are registered with Ausgrid during the authorisation process.

Only ASP/2s, or individuals performing metering work on behalf of a Metering Provider, who have approved sealing pliers that have been registered with Ausgrid are permitted to seal service and metering equipment. If an ASP does not carry an approved set of sealing pliers, then they must notify another ASP with the required authorisation to arrange for re-sealing where seals have been broken.

Note: Seals on Type 5 and 6 metering equipment terminal covers can only be broken by ASPs with Class 2D authorisation or individuals performing metering work on behalf of a Metering Provider. Register seals must not be broken. Any other Type 5 and 6 meter seals other than the terminal cover seal MUST NOT BE BROKEN.

10.5.1 Lost, Stolen or Damaged Sealing Plier Personalised Dies

If the pliers or jaws are lost, stolen or damaged then the following charges will be applied to the ASPs Operations Account prior to any replacements:

Table 6 - personalised dies replacement cost

Part	Cost
Dies only	$62.00 + GST

If the sealing pliers are lost or stolen, then the ASP must report the incident to the NSW Police on (131 444) and then provide details of what occurred along with the NSW police reference number to Ausgrid prior to being issued a replacement pair of sealing pliers.

10.5.2 Request for Return of Sealing Plier Security Deposit

ASPs that no longer require their sealing pliers and would like to request the return of their security deposit are required to return the sealing pliers to their local Authorisations Officer accompanied with a letter requesting the return of the security deposit.

The letter must be:

- on a company letterhead and include:
  - the company's AUC No; and
  - the AUP No for the individual that the sealing pliers where issued to.
- the sealing plier number on the jaws and the company's security account details.

Once returned, if the pliers and the personalised jaws are in good working condition, the security deposit will be refunded.

10.5.3 Yellow Energy Seals

Only seals approved by Ausgrid can be used for ASP contestable work. Ausgrid approved Yellow Energy Seals (S/C: HA07014) are available for purchase from Harcor.

Harcor Website:
https://harcor.com.au/

Contact Harcor via:
Email: sales@harcor.com.au or Phone: (02) 9454 4200

10.6 Permanent Removal of Supply

The permanent disconnection and removal of supply from a customer's installation (including Temporary Builders Supplies (TBS)) which involves:

- the permanent disconnection and removal of an overhead/underground service; and
- the removal of the existing metering equipment.

May be carried out by ASPs with the relevant class of authorisation for the type of work being carried out.

For removal of Type 1-4 metering equipment the ASP must contact the owner of the metering or the electricity retailer and arrange for the removal of the metering equipment.

The approval must be obtained from Ausgrid prior to carrying out the disconnection. The ASP with Class 2D authorisation is responsible for the coordination of the work and for obtaining approval from Ausgrid.

The procedure to be followed for each NMI is as follows:

(a) A written request must be obtained from the owner (or their agent) of the premises. It must also include the written agreement of the occupier (customer) if they are not the owner.

(b) The retailer must also provide written agreement for the permanent removal of supply.

Note: The approval does not permit ASPs who have not been requested by the meter device owner to disconnect or remove the metering equipment (Type 1 – 4 meters) provided by an electricity retailer. This work requires separate AEMO Metering Provider accreditation for this type of work.

(c) The above written agreements and a request for disconnection must be forwarded to the Installation Data Operations section together with details of the installation address, size and type of overhead/underground service and the existing meter numbers.

If the above conditions have been met, the Installation Data Operations section will issue a job number to the ASP to proceed with the work.

Following disconnection, the ASP must return the recovered service wire and Type 5 and 6 metering equipment, together with a completed NOSW[18], to Ausgrid within two (2) working days of the disconnection. If applicable, the Type 5 and 6 meter numbers and ALL final Type 5 and 6 meter readings must be shown on the NOSW form. A fee will be charged as Ausgrid will audit inspect disconnected sites to ensure correct procedures have been followed.

If Type 1-4 Current Transformer (CT) metering is installed on the site, the ASP must make arrangements with the customer's electricity retailer to have the meters read before the disconnection of supply. Only individuals approved by the AEMO Metering Provider can remove Type 1 – 4 metering.

Where the proposed removal of supply is associated with a demolition, ASPs should be aware that the premises might have more than one (1) source of electricity supply. The perimeter of the building or premises should be inspected for any attached street lighting fittings, catenary wires supporting street lamps, or other wires or equipment provided by Ausgrid. Any such attachments must be noted and reported to the Field Operations office to arrange for their removal, prior to demolition.

ASPs that proceed to remove supply from premises without following the above procedure will be in breach of their authorisation and appropriate disciplinary action will be taken.

[18] Refer to section 10.4 for details on NOSW submission.

10.7 Permanent Unmetered Supplies (PUMS) - Public Roadway Installations

Authorisation as detailed in this document is required to install and connect overhead/underground services to private electrical installations located in a public roadway. Permanent Unmetered Supplies (PUMS) are installations such as public telephones, bus shelters, telecommunication installations (eg RCMs and RIMs), RMS and local council private lighting and illuminated street signs.

The customer's electrical installation (in the public roadway) up to the nominated Connection Point must comply with AS/NZS 3000 Wiring Rules and the Service and Installation Rules of NSW. The work can be carried out by licensed electrical contractors under the specific authority and responsibility of the owner of the installation (eg RMS, local council, Telstra, NBN, etc). A CCEW must be submitted for that portion of the work.

Special permission from Ausgrid is required for this work if the installation is to be erected on Ausgrid's poles, structures and/or equipment. Arrangements must be made with Ausgrid's Network Facilities Access Manager for this permission via pums@ausgrid.com.au..

Also refer to Ausgrid's S0054 NS183 Installation of Private Attachments on Ausgrid Poles.

The overhead/underground service, the connection between the customer's installation and Ausgrid's distribution mains (overhead or underground reticulation), can only be installed and connected by an ASP with the relevant class of authorisation as detailed in this document.

A NOSW must be submitted for the overhead/underground service work. The overhead/underground service can be energised to the installation prior to an inspection.

In the case of underground supplies to installations, such as where a pit is involved, the underground service can be left coiled in the consumer's pit (terminal box) ready for a suitably authorised ASP to extend and connect it to Ausgrid's distribution mains.

11.0 AUTHORISATION PROCESS FOR ASP/2S

11.1 General

All ASP/2 contestable work in Ausgrid's network area requires individuals conducting the work to be accredited with the NSW Office of Energy and Climate Change and authorised with Ausgrid. This includes telecommunications work in or on network assets.

11.2 Level 2 Company Authorisation Requirements

ASP level 2 companies must enter into an ASP/2 Company Authorisation Agreement. This document (ES4) shall be read in conjunction with the Ausgrid ASP/2 Company Authorisation Agreement. Details of this agreement are published separately by Ausgrid and available from the Ausgrid's website at www.ausgrid.com.au. The ASP/2 Company Authorisation Agreement must be in place and current prior to making an application for authorisation of an individual employee or subcontractor.

ASP companies will need to obtain accreditation from the NSW Office of Energy and Climate Change prior to entering into an authorisation agreement with Ausgrid.

When applying for authorisation, Ausgrid will only recognise the trading name and ABN/ACN that is registered with the NSW Office of Energy and Climate Change on the letter issued to them granting the ASP company their accreditation.

11.2.1 ASP/2 Company – Initial Authorisation

Company authorisation requires the ASP/2 company to register in the *System* and provide all documentation required for ASP/2 company authorisation. Details on how to register are provided at the point of registration in the *System*.

Pre-start

To complete authorisation the ASP/2 company will need to provide the following documentation in the ASP Authorisation Management System:

- a completed and signed ASP/2 Company Authorisation Agreement.
- a current NSW Office of Energy and Climate Change Accreditation letter.

To ensure that companies understand their requirements and responsibilities when working on or near Ausgrid's network as an authorised ASP/2 company, Ausgrid will require new ASP/2 companies to attend an initial meeting with Ausgrid as part of the initial authorisation process.

This meeting is aimed at providing the company with information for working safely on or near Ausgrid's network, Ausgrid procedures and processes relevant to their work, and allow them to ask any questions they may have regarding ASP authorisation and compliance.

Following a successful meeting, the ASP company will be authorised to conduct contestable work in Ausgrid's network area for the construction of Level 2 contestable service work.

ASP/2 company authorisation is valid for 12 months.

11.2.2 ASP/2 Company – Maintain Authorisation

ASP/2 companies must ensure currency of their documentation in the *System* to maintain ASP/2 company authorisation. ASP/2 company authorisation is issued for a period of 12 months only, therefore requires an annual renewal.

Prior to the ASP/2 company authorisation expiry date an ASP/2 company will need to provide the following documentation in the ASP Authorisation Management System:

- a completed and signed ASP/2 Company Authorisation Agreement; and
- a current NSW Office of Energy and Climate Change Accreditation letter

All other documentation required to maintain ASP/2 company authorisation must be renewed in the *System* prior to its expiry date.

Where any required documentation expires the ASP/2 company authorisation will automatically be made non-current and must cease work on all contestable services covered by the ASP/2 Company Authorisation Agreement until the required documentation submitted in the *System* and verified.

11.2.3 Level 2 Individual Authorisation Classes

Details of the specific qualifications, units of competency, mandatory safety training or annual safety refresher training for each Level 2 ASP class are detailed in Ausgrid's ASP Authorisations Training Matrix[19].

Authorisation for Level 2 contestable work falls into the following classes:

Table 7 Level 2 individual authorisation classes

Class	Definition
Class 2A Disconnect and reconnect (previously known as ASP/2 category 1)	An electrically qualified individual who is authorised to conduct service work in accordance with clause 10.2.1at the Point of Attachment only.
Class 2B Underground service (previously ASP/2 category 2)	An electrically qualified individual who is authorised to conduct service work in accordance with clause 10.2.2 on the underground network.
Class 2C Overhead service (previously ASP/2 category 3)	An electrically qualified individual who is authorised to conduct service work in accordance with clause 10.2.3 on the overhead network.
Class 2D energising network assets (previously ASP/2 category 4)	An electrically qualified individual who is authorised to conduct service work in accordance with clause 10.2.4 at the customer's switchboard.
Class 2X Non-electrically qualified worker	A non-electrically qualified individual who is authorised to work near the network in accordance with clause 10.2.5.

Details of the specific qualifications, units of competency, mandatory safety training or annual safety refresher training for each Level 2 ASP class are detailed in Ausgrid's ASP Authorisations Training Matrix[20].

11.2.4 ASP/2 Individual Authorisation Agreement

All individuals are required to read, understand, and sign an ASP/2 Individual Authorisation Agreement as part of the ASP authorisation process. The ASP/2 Individual Authorisation Agreement is required for each company an individual works for.

The ASP/2 Individual Authorisation Agreement has no expiry date and remains in effect unless notified by Ausgrid of changes that require an ASP individual to resign the agreement or the individual's authorisation is suspended or cancelled.

11.3 ASP/2 Individual – Initial Authorisation

Once the ASP/2 company authorisation has been successfully completed or renewed, individual staff can then be authorised under that company.

Applications for individuals can be made by an authorised ASP/2 company in the *System*. ASP/2 companies must register an individual in the *System.* Once the individual is registered against the ASP/2 company the individual can be assigned the relevant role(s). The roles in the *System* represent the class/es of ASP/2 authorisation and list all relevant training and competency requirements for that authorisation.

All ASP/2 individual authorisations require the following as a minimum:

- an Individual ASP/2 authorisation agreement.

[19] Refer to section 6.6 for more information on Ausgrid's ASP Authorisations Training Matrix.

In addition to the above requirements, each role in the *System* has specific competencies required to be eligible for that authorisation. These competencies are detailed in Ausgrid's ASP Authorisations Training Matrix. ASP/2 companies will need to provide evidence for each competency in the *System* for verification.

Once all competencies for a role are verified the individual's ASP/2 authorisation will become compliant and they can conduct contestable works in Ausgrid's network area for the class of authorisation they have gained.

11.3.1 ASP/2 Individual – Online ASP Authorisation Induction

Individuals for whom an initial ASP authorisation has been applied will need to complete an online ASP authorisation induction. This replaces the previous requirement for individuals to attend an onsite ASP authorisation session with Ausgrid.

The online ASP authorisation induction provides information on the requirements for an individual to work on or near Ausgrid's network. Including ESR, Network Standards, authorisation requirements, PPE, documentation, and other relevant information.

The online ASP authorisation induction is valid for three (3) years at which time it needs to be refreshed. Ausgrid may require, at any time, that current ASP individuals refresh the online ASP authorisation induction within the three (3) year validity period, where Ausgrid are required to inform ASP/2s of changes to Ausgrid's policy, procedures, or standards.

11.4 ASP/2 Individual – Maintain Authorisation

To maintain an ASP/2 individual authorisation, all mandatory training and competencies required for that authorisation must remain current. Where any training or competency requires refresher, suitable evidence that the refresher course has been completed must be provided prior to it expiring.

Where any mandatory training or competency has expired the ASP/2 individual authorisation becomes non-compliant and the individual shall not perform any Level 2 contestable work on Ausgrid's network until the training or competency has been refreshed and evidence verified in the *System*.

To maintain the skills, knowledge, and competency to carry out ASP/2 work, ASP/2s must carry out contestable service works regularly to ensure they are well versed in the skills required to carry out work on Ausgrid's Network.

11.5 Level 2 Field Safety Audits

To ensure authorised ASP/2s are compliant with their requirements for working on or near Ausgrid's network, Ausgrid will conduct on site Field Safety Audits. The requirement for an ASP/2 to have a Field Safety Audit is generally based on performance, however Ausgrid may also conduct random Field Safety Audits.

Field Safety Audits are conducted on site by an Ausgrid Officer, to review the work practices and competency of the individual to carry out at least one (1) class of contestable work under their authorisation. ASP/2s are encouraged to engage in discussions with the Ausgrid Officer and raise any concerns or issues they would like clarification on.

Where an ASP holds more than one (1) class of authorisation, Ausgrid may conduct an audit of each class of authorisation to assess the ASP's competence to hold multiple authorisations. It will include the correct use of personal protective equipment (PPE) and other relevant safety equipment, site specific written risk assessment, safe work procedures and compliance with work requirements of other statutory authorities such as SafeWork NSW and RMS.

Upon completion of a successful Field Safety Audit, the Ausgrid Officer will issue a Safety Audit slip. Where an ASP/2 fails a Field Safety Audit Ausgrid's Officer will initially discuss the reason for the failure with the ASP/2. Depending on the nature of the failure, Ausgrid's Officer may refer the Field Safety Audit to Service and Installation Compliance management for review.

Where a Field Safety Audit is conducted and finds that a major safety breach occurred, disciplinary action will be taken. Refer to section 10.3 for more information.

12.0 LEVEL 3 CONTESTABLE WORK

12.1 General

Level 3 contestable works includes designing the sub-transmission and distribution electrical reticulation systems, including underground or overhead mains and apparatus and substations. This also includes augmenting the network to increase the existing network's capacity. Level 3 contestable works is generally referred to as contestable design work.

These designs must be submitted to Ausgrid for certification in accordance with the contestable connection and relocation process, and contractual requirements prior to commencing construction to ensure compliance with our Network Standards.

Level 3 contestable work generally falls into the following classes:

(a) Class 3A – Design of overhead electricity reticulation.
For example: Evaluate cost estimations, design overhead networks, design network substations, develop high and low voltage protection systems, design substation modifications, prepare and manage detailed construction plans for electricity network infrastructure including overhead street lighting, organise and implement electricity supply line and easement surveys.

(b) Class 3B – Design of underground electricity reticulation.
For example: Evaluate cost estimations, design underground networks, design network substations, develop high and low voltage protection systems, design substation modifications, prepare and manage detailed construction plans for electricity network infrastructure including underground street lighting, organise and implement electricity supply line and easement surveys.

Note: It is recognised that a Class 3A will need to design small components of underground systems, for example, cables may run down a pole to a service pillar or a High Voltage cable may run down a pole to a nearby substation on a consumer's property. Similarly, a Class 3B is permitted to enter into the overhead space to design for example, an underground interface to an overhead system

ASP/3s who undertake contestable network designs require secure access to specific network information via the external WebGIS to enable them to prepare and submit proposed design scope and contestable designs.

Ausgrid has established an authorisation scheme to ensure secure access to specific network information. This authorisation scheme will require ASP/3 individuals to be authorised to access Ausgrid information for the purpose of the preparation and submission of proposed design scope and contestable designs within Ausgrid's network area.

All individuals who are required to perform ASP/3 contestable designs for the submission to Ausgrid for certification must be accredited in accordance with the Scheme Rules and authorised in accordance with section 13 of this document.

ASP/3s are not authorised to work on or near the network. If they are required to access the network to undertake contestable network designs, the individual must either:

- be separately authorised as an ASP/1; or
- be under the direct supervision of an authorised ASP/1, and within the limits of that ASP/1s authority.

12.2 Requirements for Level 3 Authorised Individuals

All ASP/3 authorised persons must ensure that they only perform work for which they are authorised to do. If they are found to be in breach of this, the individual's authorisation may be suspended or cancelled.

ASP/3 authorised employees must:

(a) protect and safeguard the network information against unauthorised publication or disclosure.

(b) ensure that the network information is held solely within Australia, and not accessible from outside Australia.

(c) not use network information for any reason or purpose except for the preparation and submission of a proposed design scope or contestable design.

(d) comply with any Cyber security and Network Information security measures in connection with network information that may be required by Ausgrid; and

(e) fulfil their obligations with regards to the network information under their authorisation which continue after the completion or termination of any employment with the ASP/3, engagement, or assignment in relation to contestable projects.

12.3 Site Visits, Pre-construction and Design Site Meetings

Ausgrid requires all ASP/3 authorised persons when performing level 3 contestable work to take into consideration all relevant site conditions, including considering any requirements of applicable laws, professional standards, industry codes of practice, Network Standards, and the specific Environment Impact Assessment (EIA)/Summary Environmental Report (SER) for the relevant project. To enable a suitable assessment of site conditions, the individual(s) who are performing the ASP/3 contestable designs for the relevant project or a suitable alternative representative of the ASP/3 must attend site in person prior to completion and submission of a design and EIA/SER to Ausgrid. This must be confirmed in the EIA/SER.

Ausgrid requires the individual(s) who are performing the ASP/3 contestable designs for the relevant project or a suitable alternative representative of the ASP/3 attends the pre-construction site meeting attended by Ausgrid in person. Attendance at the pre-construction meeting allows for the ASP/3 to answer any design or other level 3 contestable work related questions or concerns before construction commences. This is in accordance with the requirements for Customers and their ASPs as outlined in the Contract for Design Related Services and relevant Connection Contract.

The pre-construction site meeting aims to identify any potential concerns, issues or impacts that may require re-design prior to construction commencing or during construction, in order to reduce the likelihood and length of delays to the relevant Customer's project.

Ausgrid may require the individual(s) who are performing the ASP/3 contestable designs for the relevant project or a suitable alternative representative of the ASP/3 to attend additional site meeting(s) in person where there are concerns about a certified or amended certified design with respect to site conditions.

The ASP/3 must make the Customer aware of their obligations including the need for in person attendance on site for design, pre-construction meetings, and any requested for resolving concerns with designs.

In the event the individual(s) who are performing the ASP/3 contestable designs for the relevant project or a suitable alternative representative of the ASP/3 is unable to attend the pre-construction or any arranged site meeting in person, prior approval must be sought from Ausgrid to make an alternative arrangement. Alternative arrangements may include remote video or phone attendance, however, will be assessed on a case by case basis. Such requests will not be approved should Ausgrid consider the lack of onsite presence detrimental to the Customer outcome.

13.0 AUTHORISATION PROCESS FOR ASP/3S

13.1 Pre-requisite Training and/or Qualifications for Authorisation

Prior to applying for ASP/3 authorisation, an applicant must also provide evidence of the successful completion of the following Ausgrid training course:

- Cyber Security.

This course is delivered via Ausgrid's on-line learning website. To complete the Cyber Security contact Ausgrid's training section, refer to section 6.7 for more information.

Cyber Security training is valid for 24 months and must be refreshed prior to expiry to maintain currency for an ASP/3 authorisation. Individuals who have Cyber Security training that has expired will become non-current and must not perform any work covered by their ASP/3 authorisation until the Cyber Security training has been refreshed.

Note: Prior to attempting to complete this course, the applicant must be registered in the Ausgrid Training Management System and have obtained an Ausgrid Training ID number (H ID#). This number is obtained by completing and returning the 'ASP/3 Training ID Information Form'.

The Ausgrid Training ID number is critical when signing into the on-line learning system and failure to use the correct number will mean that the course must be completed again.

Contact Ausgrid to obtain the 'ASP/3 Training ID Information Form' which must be filled out and returned to ASPLevel3@ausgrid.com.au.

13.2 Australian Federal Police (AFP) National Police Check

As an electricity network owner and operator, Ausgrid has a duty of care and responsibility for ensuring the safety and security of sensitive and important information that authorised ASP/3s can access. Ausgrid has a number of security measures for individuals applying for ASP/3 authorisation.

Prior to applying for ASP/3 authorisation, an applicant must provide a copy of an Australian Federal Police (AFP) check certificate completed within the previous six (6) months.

Note: When completing the Australian Federal Police (AFP) check application for the purpose of ASP/3 authorisation, please ensure that Code 40 – Other Commonwealth purpose only is used.

More information on how to apply can be found at the AFP website at the following location:
http://www.afp.gov.au/what-we-do/police-checks/national-police-checks

13.3 How to Apply for Authorisation

To arrange for individual employees or sub-contractors to be authorised the required documentation must be emailed to Ausgrid at ASPLevel3@ausgrid.com.au.

The following documentation must be submitted with each application (Please ensure ALL the required documents are sent):

- a completed ASP/3 Authorisation Application or Change of details form (Annexure D).
- a copy of the AFP national police check certificate (completed within the last six (6) months).
- a copy of the applicant's current drivers' licence or passport.
- a copy of the current NSW Office of Energy and Climate Change Accreditation letter for the ASP company (receipt not accepted).
- a copy of the NSW Office of Energy and Climate Change Registration letter with the ASP company the individual is to be authorised under nominating the respective class/s they wish to be authorised with (receipt not accepted).

- a recent digital passport-style colour photo of the individual being authorised. This photo must be against a plain background of the head and shoulders only. Hats or sunglasses are not to be worn; and
- the date the applicant has completed Ausgrid's Cyber Security training (completed within the last two (2) years). It is beneficial to provide a copy of the certificate or other evidence of completing the Ausgrid's Information Security Awareness training.

Once the application has been approved and processed Ausgrid will:

- issue the applicant an email confirming acceptance; and
- issue the applicant an ASP/3 Authorisation card in the mail.

ASP/3 authorisation is valid for two (2) years.

13.4 How to Apply for Re-authorisation

To request re-authorisation for individual employees or sub-contractors to be authorised the required documentation must be emailed to Ausgrid at ASPLevel3@ausgrid.com.au.

The following documentation must be submitted with each application (Please ensure ALL the required documents are sent):

- a completed ASP/3 Authorisation Application or Change of details form (Annexure D).
- a copy of the current NSW Office of Energy and Climate Change Accreditation letter for the ASP company (receipt not accepted).
- a copy of the NSW Office of Energy and Climate Change Registration letter with the ASP company the individual is to be authorised under nominating the respective class/s they wish to be authorised with (receipt not accepted).
- a recent digital passport-style photo of the individual being authorised. This photo must be against a plain background of the head and shoulders only. Hats or sunglasses are not to be worn; and
- the date the applicant has completed Ausgrid's Information Security Awareness training (completed within the last two (2) years). It is beneficial to provide a copy of the certificate or other evidence of completing the Ausgrid's Information Security Awareness training.

Once the re-authorisation application has been processed Ausgrid will:

- Issue the applicant an email confirming acceptance; and
- Issue the applicant an ASP/3 Authorisation card in the mail.

13.5 Checking of Contestable Designs and Breaches of Authorisation

Checking of an authorised person's contestable designs submitted for certification is conducted by the Ausgrid officer responsible for facilitating the contestable project. Design Certification is a desk top audit undertaken to certify that a design (if implemented) will not compromise the safety or operation of the Ausgrid network, as defined in Ausgrid's Contract for Design Related Services.

Examples of breaches of an ASP/3's authorisation (including an individual ASP/3's authorisation) may include, but are not limited to:

- Large or excessive extracts of network data. WebGIS extracts should be confined to a single contestable project design.
- Sharing network information with non-authorised persons for purposes other than the preparation or submission of proposed design scope or contestable designs.
- Sharing authorised Ausgrid WebGIS log on details to any other authorised or non-authorised persons.
- Intentionally altering a certified design.
- Repeated failure to design in accordance with Ausgrid's Network Standards.

- Failure of an ASP/3 to ensure that the individual(s) who are performing the ASP/3 contestable designs for the relevant project or a suitable alternative representative of the ASP/3 attend the site in person.
- Failure of an ASP/3, when performing level 3 contestable work, to take into consideration all relevant site conditions, including considering any requirements of applicable laws, professional standards, industry codes of practice, Network Standards, and the specific Environment Impact Assessment (EIA)/Summary Environmental Report (SER) for the relevant project.
- Refusal of the individual(s) who are performing the ASP/3 contestable designs for the relevant project or a suitable alternative representative of the ASP/3 to attend any site meeting in person where in person attendance is required.
- Breaches relating to an individual or companies conduct in line with section 6.20.

Breaches of an individual's ASP/3 authorisation will lead to corrective or disciplinary action that may include the suspension or cancellation of their authorisation.

14.0 WORK NOT REQUIRING AUTHORISATION

14.1 General

An electrical contractor does not require authorisation or accreditation under the Scheme Rules to perform the following work.

14.2 Determining the Method of Connecting Supply and Metering Requirements

Electrical contractors can determine the method of connecting supply to a premise and the associated provisions to be made for the location of service equipment in accordance with the Service Rules. This includes any new installations, additions, alterations, relocations or repairs.

Ausgrid must be notified of the proposed method of connecting supply using a Connection Application form.

14.3 Replacing Blown Service Fuse Elements

In emergency situations involving failure of electricity supply to a customer's installation, licensed electrical contractors are permitted to break the seals on the service fuse holders and replace blown service fuse elements. A risk assessment must be carried out to ensure the work can proceed safely.

Electrical contractors must not, attempt to either:

- Replace the service protective device (service fuse base or circuit breaker); or
- Replace the elements in older style fuse holders that are mounted on "hinged-down" wooden panels.

Only Ausgrid or a suitably authorised Level 2 ASP can carry out this work.

Where seals have been broken, Electrical Contractors must arrange for an authorised person with approved sealing pliers to attend site and reseal the service equipment within two (2) working days. Refer to the Service Rules for further details and conditions for disconnection and removal of service fuses.

Seals to other metering equipment must not be broken by unauthorised electrical contractors. Unauthorised interference with metering equipment or any other Ausgrid equipment will result in prosecution.

14.4 Installation and Maintenance of Type 1-4 Metering

Where an AEMO accredited metering provider installs or maintains a Type 1-4 metering installation, ASP/2 accreditation and authorisation is not required. This includes the removal of Ausgrid Type 5 or 6 metering.

The AEMO Accredited Metering Provider must work in accordance with the provisions for installation of advanced meters by retailers and metering providers provided in the Electricity Supply Act.

15.0 INSTALLATION AND CONNECTION OF CONSUMERS MAINS IN SUBSTATIONS

Electrical contractors (ECs) and ASPs are NOT permitted to enter any of Ausgrid's energised substations (including kiosk substations) to pull in consumers mains; this includes excavating under an energised kiosk substation. The pulling in of consumer mains to substations must be carried out in accordance with one (1) of the three (3) scenarios below, as appropriate.

(a) At new contestable customer substations, where the new contestable customer substation is under construction (under an equipping permit) by an ASP/1. The ASP/1 constructing the substation (nominated on the equipping permit) must pull-in and install the consumers mains within the substation and connect them to the substation LV board, on behalf of the EC, before the substation is commissioned. The EC must coordinate directly with the ASP/1 to arrange the completion of this contestable work.

(b) At existing substations, where the existing substation is under access by an ASP/1, for associated contestable substation upgrading works or asset relocation works. The ASP/1 must pull-in and install the consumer's mains within the substation and connect them to the substation LV board, on behalf of the EC, before the substation is re-energised. The EC must coordinate directly with the ASP/1 to arrange the completion of this contestable work.

(c) At all other substations (e.g. existing substations with no associated contestable substation upgrading works or asset relocation works), Ausgrid will pull-in and install the consumers mains within the substation and connect them to the substation LV board, on behalf of the EC.

Ausgrid costs associated with options (b) and (c), such as switching and issuing of permits by Operators, LV parallels to allow de-energising of adjacent LV panels, screening of the LV board etc will be recovered by Ausgrid in accordance with Ausgrid's publication Connection Policy.

Note: To arrange for the scheduling of any applicable works requiring the isolation of an Ausgrid substation supply, please ensure an applicable Application for Connection has been submitted to Ausgrid that has been approved, then make contact with ressupportservice@ausgrid.com.au.

The Electrical Contractor must carry out all of the following associated work:

- Supply and install the consumers mains left coiled up at a point close to the substation nominated by the ASP/1 or Ausgrid, as appropriate.
- Provide the consumers mains cable termination lugs and suitable equipment for the installation and if practical, install the lugs on the consumer's mains. Alternatively, the ASP/1 or Ausgrid, as appropriate, may quote to install the lugs on the consumer's mains, on behalf of the EC; and
- Seal or reseal any penetrations associated with the consumer's mains to provide suitable fire protection as well as water and vermin proofing.

Note: ECs are reminded to take extra care and avoid machine excavation when excavating in the vicinity of substations to avoid damaging the substation earthing or other cables. The requirements of Ausgrid's publication S0083 NS156 Working Near or Around Underground Cables and S0082 NS141 Site Selection and Site Preparation Standards for Kiosk Type Substations must be followed.

16.0 RECORD KEEPING

The table below identifies the types of records required to be held, their storage location and retention period.

Table 8 – Recordkeeping

Type of Record	Storage Location	Retention Period*
Approved copy of the Network Standard	Document repository Network sub process Standard – Company	Unlimited
Draft Copies of the Network Standard during amendment/creation	Work Folder for Network Standards (HPRM ref. 2014/21250/344)	Unlimited
Working documents (emails, memos, impact assessment reports, etc.)	Records management system Work Folder for Network Standards (HPRM ref. 2014/21250/344)	Unlimited

* The following retention periods are subject to change e.g. if the records are required for legal matters or legislative changes. Before disposal, retention periods should be checked and approved by the Records Manager.

17.0 DOCUMENT CONTROL

Content/Distribution Coordinator : Senior Engineer – Asset Standards

Content Owner : Head of relevant Business Unit

ASP/1: Head of Contract Delivery

ASP/2: Head of Operating, Installations & Emergency Response

ASP/3: Head of Customer & Partner Experience

Annexure A – Substation Construction Key Request Form

Applicant's Details:

Individuals Name:	**Contact Number:**
Individuals Authorisation (AUP) No:	**Work Location:**
Trade Classification: ☐ Electrician; or ☐ Jointer.	
Training: ☐ SC1000 Substation Entry; or ☐ SC1200 Substation Entry & Safe Work near Underground Assets.	**Training Date:**

Company Details:

Company Name:	**Company Accreditation (AUC) No:**

Company Management Endorsement:

I can confirm the employee nominated above requires an Ausgrid substation construction key to conduct ASP1 contestable works on behalf of our company. I acknowledge this key is the responsibility of the individual and our company. Should the individual nominated above cease employment with our company it is the responsibility of our company to recover the key and return it to Ausgrid or have it reissued to a suitably authorised person within our company. If the key is to be reissued to another individual please complete this form for the person the key is to be issued to.

Name:	**Position:**	**Signed:**	**Date:**

Key Issue:
Substation keys will be issued by registered post to the ASP companies registered address.

Forward completed forms to ASPAuthorisations@ausgrid.com.au

Annexure B – ASP/2 Major Safety Breaches/Defects

Ausgrid classes the major safety breaches/defects as those departures from AS/NZS 3000 which are **immediately** or **potentially** dangerous to life, health or property. Any major safety breaches/defects must not be connected to the network or, if already connected, shall not be left connected.

Any other departures from AS/NZS 3000 are classed as minor safety breaches/defects, which are not immediately or potentially dangerous. Minor safety breaches/defects do not warrant immediate disconnection or isolation. Minor safety breaches/defects must be repaired or rectified within a reasonable time. Ausgrid recommends that minor safety breaches/defects are repaired or disconnected as soon as practicable.

The minimum acceptable insulation resistance for **new** electrical low voltage wiring is 1,000,000 ohms (1MΩ) as detailed in section 8 of AS/NZS 3000. Insulation resistance values measuring less than the requirements of section 8 of AS/NZS 3000 must be classed as a **major** safety breach.

The minimum acceptable insulation resistance for **existing** low voltage wiring in electrical installations is 250,000 ohms. This reduced minimum insulation resistance is accepted as the minimum safe value for the insulation of existing wiring which has been subject to the ageing process.

The minimum insulation resistance between conductors and between conductors and earth of new *service mains* must not be less than the minimum stipulated in either the Ausgrid document NS161 or New South Wales Service and Installation Rules.

Major Safety Breaches

Major safety breaches/defects are regarded as those departures from AS 3000 Wiring Rules, which are dangerous to life, health or property. In general, the following types of safety breaches/defects are to be regarded as major safety breaches/defects:

a) Exposed Live Parts

- exposed live terminals on accessible equipment. *This does not include lamp holders and fuse bases*. Accessible must be taken to mean access by unauthorised persons, without the use of a tool or key.
- exposed conductors of unterminated or damaged cables which can be energised by the operation of a switch, or circuit-breaker or insertion of a fuse,
- bare aerial conductors in accessible positions.

b) Earthing System

- open circuit or high resistance (>2 ohms) from any point on the installation required to be earthed to the neutral conductor of the supply system,
- unearthed exposed metal which is in an earthed situation.

c) Insulation Resistance

- low resistance (<100,000 ohms) between live conductors and earthing conductors of a cable,
- low resistance (<10,000 ohms) between live parts and earthed parts of appliances which incorporate a heating element.
- low resistance (<100,000 ohms) on other low voltage equipment.

d) Overloaded Equipment

- socket outlets, switches, switchboard equipment, cables and accessories operating in excess of 125% of current rating,
- appliances and cables which have overheated to such an extent that serious damage or fire has occurred or could be expected to occur

e) Overcurrent Protection and Earth Leakage Current Protection

- no overcurrent device, or residual current device provided where required.

f) Polarity

- incorrect connection of active, neutral and earthing conductors at socket outlets, lamp holders, switchboard equipment and appliances, isolating device not operating in active conductor(s).

g) Unsuitable Equipment

- equipment, exposed to the weather or other damp situations, which is not adequately protected against the ingress of water,
- equipment, installed in a hazardous location, which is not of an explosion protected type or equivalent,
- equipment used in a dangerous manner,
- equipment, installed for the supply of fire and smoke control equipment and lifts, which does not provide the required level of protection against fire & mechanical protection.

Annexure C – Replacement Electricity Supply Industry (ESI) Skills Passport Application Form

Details - Applicant (Please use BLOCK LETTERS)

Applicant - First Name: _____ Surname: _____

Mailing Address: _____

Date of Birth: _____ Gender: Male ☐ Female ☐

Phone: _____ Fax: _____ Mobile: _____

USI No: _____ * Unique Student Identifier. For more information and to register, please visit usi.gov.au.

Details - Company/Sole Trader (Please use BLOCK LETTERS)

Company Name: _____

Mailing Address: _____

Company Email Address: _____

Company Phone: _____ Fax: _____ Mobile: _____

Select your primary function role from the list below:

☐ Electrician ☐ Cable Jointer ☐ Lineworker ☐ Non Electrical

For replacement passports, please supply your previous passport number: _____

Please note you may be asked to supply evidence of training and qualifications prior to being issued a Passport

Applicant Signature: _____ Date: _____

*Please send completed form and supporting documentation to: training@ausgrid.com.au

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Annexure D – ASP/3 Authorisation Application or Change of Details Form

This form is required to request authorisation as a Level 3 Accredited Service Provider in Ausgrid's distribution area to access Ausgrid's network information to prepare and submit contestable designs.

☐ Initial Authorisation ☐ Re-Authorisation ☐ Upgrade or Additional Authorisation

Details - Authorised Person (Please use BLOCK LETTERS)

Applicant - First Name:_____ Surname:_____ AUP No: _____

H ID#: (existing ASP's only):_____ Category of Accreditation: ☐ Overhead (3A) ☐ Underground (3B)

Email Address: (Must be a unique email address): _____

Phone: _____ Mobile: _____

Note: If the applicant does not have a **H ID#** then they must complete the *ASP3 Training ID Information Form* and submit it to **ASPLevel3@ausgrid.com.au** requesting the number be created. This number will be required when logging into the eLearning page to complete the *Cyber Security* training.

Details - Level 3 Accredited Service Provider company (Please use BLOCK LETTERS)

Trading name (as appears on the letter from the NSW Office of Energy and Climate Change and the *ASIC* website)

Company Name: _____

AUC Number: _____ Expiry Date:_____Class of Accreditation: ☐ Overhead (3A) ☐ Underground (3B)

ABN/ACN: _____ Company Email Address: _____

Postal Address: _____

Company Phone: _____ Company Mobile: _____

I certify that I have attached copies of:

- ☐ A copy of an AFP National Police Check certificate (completed within the last six months)
- ☐ A copy of a current proof of identity (drivers license, passport etc)
- ☐ A copy of the company's NSW Office of Energy and Climate Change accreditation letter (receipt not accepted)
- ☐ A copy of the individual's NSW Office of Energy and Climate Change accreditation registration letter (receipt not accepted)
- ☐ A 'JPEG' passport style colour photo of the applicant

I certify that I have:

- ☐ A copy of and have read and understand Ausgrid's Code of Conduct
- ☐ Completed Ausgrid's Cyber Security training. Date: _____

By signing below, you are confirming that:

- you have obtained copies of and reviewed the relevant Ausgrid network standards and policies relevant to your work;
- the relevant network standards and policies are consistent with your arrangements for performing Level 3 Accredited Service Provider work in Ausgrid's Distribution area;
- you will protect and safeguard the network information against unauthorised publication or disclosure;
- you will ensure that the network information is held solely within Australia, and not accessible from outside Australia;
- you will not use network information for any reason or purpose except as required for the preparation and submission of a proposed design scope or contestable design;
- you will comply with any security measures in connection with network information that may be required by Ausgrid;
- you acknowledge your obligations with regards to the network information under this authorisation continue after the completion or termination of any employment with the Level 3 ASP, engagement or assignment in relation to contestable projects; and
- you acknowledge and agree that Ausgrid may suspend or cancel your authorisation at any time on the grounds of non-compliance with Ausgrid policies and the conditions of your authorisation and accreditation with the NSW Office of Energy and Climate Change Accreditation of Providers of Contestable Services (Scheme Rules).

Applicant Signature: _____ Date: _____

Supervisor Signature: _____ Date: _____

*Please send completed form and supporting documentation to: ASPLevel3@ausgrid.com.au (Enquires should be via email to the same address)

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Annexure E – Field Recording of Network Assets Authorisation Application Form

Applicant's Details: Initial Authorisation ☐ Reauthorisation ☐

Individuals Name:		**Contact Number:**
Male ☐ Female ☐	**D.O.B:**	**USI *:**
Email Address:		**Company Contact No:**
Company Name:		**Company Email Address:**
Company Postal Address:		

* Unique Student Identifier. For more information and to register, please visit usi.gov.au.

Required Prerequisites and Training:

1. Qualifications or Experience (Initial Applications Only) ☐ Diploma (or higher qualification) in Electrical Engineering; or ☐ Diploma (or higher qualification) in Civil Engineering; or ☐ Diploma (or higher qualification) in Geographic Information System (GIS); or ☐ Diploma (or higher qualification) in Mapping; or ☐ Diploma (or higher qualification) in Drafting; or ☐ Diploma (or higher qualification) in Surveying; or ☐ Minimum twelve (12) months experience in the field recording of utility company assets within the previous three (3) years (See Note). Note: Evidence of experience must include an accompanying portfolio with a minimum of three (3) previously completed field recordings of utility company assets and a letter from the employer confirming employment.	**Copy Attached ☐** **Copy Attached ☐** **Copy Attached ☐** **Copy Attached ☐** **Copy Attached ☐** **Copy Attached ☐** **Evidence Attached ☐** **N/A (Reauthorisation) ☐**
2. SafeWork NSW General Construction Induction card – "White Card"	**Copy Attached ☐**
3. Mandatory Safety Training ☐ Ausgrid's Electrical Safety Rules (ESRs) (See notes 1 & 2); ☐ Ausgrid's Environmental Procedures (NS174) (See notes 1 & 2); ☐ HLTAID001 – Provide Cardiopulmonary Resuscitation (See note 1); ☐ UETTDRRF06B – Perform rescue from a live LV panel (See note 1); ☐ UETTDRRF09B – Apply access procedures to work on or near electrical network infrastructure (See note 1); ☐ UETTDRRF10B – Provide first aid in an ESI environment (See note 1); ☐ SC1100A – Safe work near underground assets or equivalent; and Note: To arrange any of the required mandatory safety training please refer to section 6.7.	**Evidence Attached ☐**
4. Field Recording of Network Assets training (AMGS0001) ☐ Completed already ☐ Required - Training will be arranged following the successful assessment of Items **1-3** above. Training will be conducted at either **Silverwater** or **Wallsend**.	**Evidence Attached ☐** **Preferred Training Location:** Silverwater ☐ Wallsend ☐
5. ID Photo (Preferably in JPEG format)	**Copy Attached ☐**
6. Do you consent to having your companies contact details added to the list of authorised Field Recorders available on the Ausgrid website? Which Ausgrid Network Area are you proposing to work in? **Ausgrid Network Area** relates to the geographic area North and/or South of the Hawkesbury River in which the nominated company has indicated they are willing to conduct the field recording of network assets.	**Yes ☐** **No ☐** **Ausgrid Network Area:** North of the Hawkesbury ☐ South of the Hawkesbury ☐ Both ☐

Company Management's Approval

I confirm that the applicant should be assessed for compliance with the prerequisites for Field Recording of Network Assets training, and if assessed to meet these requirements, be authorised/reauthorised to conduct this work.

Name:	Position:	Signed:	Date:

Initial application forms to gis@ausgrid.com.au **Reauthorisation** application forms to Electricalauthorisations@ausgrid.com.au

Notes:

1. This training requires an **annual refresher**.
2. Ausgrid's Electrical Safety Rules (ESRs) and Environmental Procedures (NS174) training is to be delivered through Ausgrid's Training Group only. Training provided by another RTO or Distributor will not be recognised.

Annexure F – Example NOSW Sketch template

NOTIFICATION OF SERVICE WORK (NOSW)

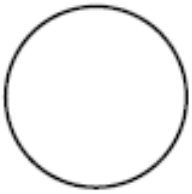
DIAGRAM of OH and/or UG Service Line to the Point of Attachment **Job No.** _____

House/Lot No. _____ Street _____

Nearest Cross Street _____

Suburb _____ Service Provider AUC No. _____

(North Point)



For Unmetered Installations (PUMS)

Customer Site ID:_____

GPS Co-ordinates:_____

The sketch of the service main route to the customer's POA must show the following details:

General:

- Street alignments
- Lot boundaries
- Lot/House numbers
- Name of street and suburb
- North point
- Nearest cross street
- Accredited Service Provider's name and phone number
- Route of service mains
- Reference points from which all measurements were taken
- As per Service and Installation Rules of NSW

Underground:

- Pillar/Pole Number, indicate any open points, (which side).
- Reference the position of the service in the ground
- Depth of cover over the service
- Position of cable joints and conduits (and their end points)
- Type of joint (if applicable)
- All deviation points

Overhead:

- Pole number
- Service connection side at distributor pole
- Position of new service in relation to open points (which side)