1. Purpose

This document will detail the procedures to be followed by every Customer Network Solutions Construction Coordinator when inspections are performed on any Accredited Service Provider.

2. Scope

This procedure outlines all the compliance inspections required to be carried out by the Construction Coordinators to the company standards for the Contestable construction works built by the Level 1 Accredited Service Providers

3. Actions

3.1 Preliminary organisation

3.1.1 Project document phase

The Customer Connections Administrator (CCA), upon receipt of the Letter of Intent from the developer and/or the Accredited Service Provider (ASP), requires sending the request to the Construction Coordinator inbox: Constructioncoordinators@endeavourenergy.com.au to determine the fees applicable for inspection and construction activities. The Construction Coordinator will estimate the fees and send the response within two days to the CCA, if the project belongs to their allocated area. Where transmission projects are involved, the Construction Coordinator will consult with the Transmission Project Manager (PM) before finalising the construction fees for the project.

After the completion of the Letter of Intent process, the CCA will send out the Letter to Proceed package to the developer and/or the ASP, and an electronic copy to the Construction Coordinators and where required, to the Nominated Project Manager in the Technical Brief.

The Letter to Proceed package will contain the following documents:

- Certified Design Copy
- Summary Environmental Report (SER) inclusive of Environmental Management Plan (EMP) with highlighted high environmental risk activities associated with the construction works;
- Critical project details e.g. Heritage status, property documents, etc;
- Technical Brief (if applicable);
- Payment order;
- Technical Asset Loader (TAL) spreadsheet;
- Construction Coordinator details;
- Material Return Forms (where applicable); and
- Safe Design Report

3.1.2 Approval for commencement of works

The ASP will submit Branch Form Customer Network Solutions FPJ 2021 – Project Commencement Notification to the Construction Coordinator at least 2 weeks prior to commencement of works or via email:

Constructioncoordinators@endeavourenergy.com.au.

Non- compliance in this regard will result a Branch Form Customer Network Solutions FPJ 4649A – Contestable Works Non Conformance Report to be raised.

Before the commencement of construction works, the Construction Coordinator will confirm the following requirements in the Project Commencement Form are met:

- Design certified;
- Letter to proceed attached;
- Project Safety Plan attached;
- Attached Company Form (Network) FAM 0009 – Request for Transformer Number for a Substation and the associated documentation for transformer/padmount substation sourced from external supplier (if applicable);
- Letter of intent received by CCA and Letter to Proceed send to the nominated Level 1 ASP;
- Construction fees paid;
- Estimated start date;
- Subcontractor details provided (if applicable);
- ASP Qualified Assessor details provided; and
- SET (FAT 0038) attached.

After above confirmation, the Construction Coordinator will provide an acknowledgement to the ASP, update the construction start date in CAMS and assign them self as the Construction Coordinator for the project in the “Application Team/Milestone” module in CAMS.

Note: For an externally sourced transformer or padmount substation by the ASP, the Construction Coordinators to follow the Company Procedure (Network) GAM 0025 – Supply of Padmount Substations for a Contestable Project from an Approved External Source.

3.1.3 Reference

Branch Form Customer Network Solutions FPJ 4201 –Construction Coordinator Checklist provides the reference list as set out in Section 4.9 – Process Flow Charts and Inspection Forms.

Site inspections are to be carried out on the various configurations of projects to company specifications and standards, available on the Network Standards Website.

The systems available for processing the Construction Coordinator activities are as follows:

- Customer Application Management System (CAMS);
- SAP;
- Advanced Distribution Management System (ADMS);
- Click;
- Conduit;
- SharePoint/OneDrive;
- Microsoft Word;
- Microsoft Office;

- Microsoft Excel;
- Content Server;
- GNet and SOPs; and
- SnagIt

3.1.4 Pre-commencement site inspection

Before the electrical works can commence, the Construction Coordinator will evaluate the project requirements and organise a site meeting with the Level 1 ASP. If a site meeting is not held, the reason for not having the site meeting needs to be documented in the project file and CAMS. The record/minutes of site meetings will be kept on the project file.

Some local councils also require a site inspection before electrical works can commence. In these instances, the Construction Coordinator will request the ASP to organise the required activities to comply with local council regulations.

For transmission projects, the nominated Project Manager in the Technical Brief will be involved in the site meeting to advise of any site issues and its design constructability.

If the site requires an induction, request the responsible ASP to organise entry for the site induction before you enter the site. Once onsite and prior to carrying out any work or activities, perform a risk assessment of the work or activity by using Company Form (Health & Safety) FSY 0118 – Worksite Hazard and Risk Assessment. This must be done for every site visit.

At the time of site meeting with the ASP, the Construction Coordinator must review the Safe Design Report with the Level 1 ASP. If any additional design safety risks are identified during this review, the designer must be consulted, and a revised Safety Design Report must be obtained. If required, the location of easements and adequate access to the substation or equipment as stated in the certified design will be checked. Possible problems that could occur on the project and how to rectify these problems must be discussed. If it is determined that the design cannot be built or requires major review to the design, the design will be rejected, and the Customer Network Officer/Engineer requested to withdraw the design certification with the reasons stated. For minor design reviews which do not impact on technical, financial, safety and environmental status can be constructed by obtaining the design confirmation to make up the works as executed drawings.

The Construction Coordinator must also review the SER and determine if Level 3 risks have been adequately mitigated.

A project plan (if available) from the ASP must be obtained and used for contractor inspection plan.

An asbestos management plan in accordance with Branch Procedure (Customer Network Solutions) NPJ 2014 – Asbestos Management Plan for Contestable Network Projects is required whenever construction works has the potential to impact asbestos or asbestos containing materials.

ASP must have/maintain the current Before You Dig Australia (BYDA) document for the site with them and all the services located and marked up as per the design before the 1st site meeting with the Construction Coordinator and the Construction Coordinator must sight this on site during the meeting.

3.1.5 Company coordination

If an ASP intends to work on the first feeder from a zone substation, coordination of company resources from the Region/Depot/Major Project Program will be organised by the Construction Coordinator to meet the system commissioning program and customer supply date in accordance to Company Procedure (Network) GAM 0047 – Work Involving Accredited Service Providers and the company – First Feeder Cable from Zone Substations – ‘K’ Type Projects (Customer Funded) and ‘Q” Type Projects (Funded by the company).

Branch Form (Customer Network Solutions) FPJ 2202 – Non Contestable works Notification to region must be sent to the relevant region to organise the resources to meet the customer supply date.

Branch Form (Customer Network Solutions) FPJ 4267 – Non-Contestable (N Projects)/Non-chargeable Connection Service to Customer Requirement – Notification to Regional Services – Network Asset Operations must be sent to the relevant region to organise the resources to meet the customer supply date.

3.1.6 System access/switching

For High Voltage (HV) network access, the ASP is required to give 25 working days' notice by submitting Branch Form (Customer Network Solutions) FPJ 4612 – HV Outage Request to the Construction Coordinator to arrange for system access. Construction Coordinators are to minimise the supply interruptions to the customers by requesting the ASP to organise the supply continuity to individual customers as well as network by rearrangements including LV paralleling.

For Low Voltage (LV) network access, the ASP is required to give 15 working days' notice by submitting Branch Form (Customer Network Solutions) FPJ 2204 – LV Outage Request to the Construction Coordinator to arrange the system access. The requirements for Low Voltage access for ASPs are stated in Branch Procedure (Customer Network Solutions) NPJ 2009 – Low Voltage Access for Accredited Service Providers (ASPs).

Based on the scope of the outage, the Construction Coordinators are to manage any identified life support customers in accordance with the relevant corporate procedures.

Disconnection/reconnection documentation showing all the isolation points must be forwarded to the ASP for their acceptance and their verification (refer to Branch Workplace Instruction (Customer Network Solutions) WPJ 4141 – Preparation and Submission of Requests for Planned Access to High Voltage and Low Voltage Network). The ASP must confirm that the documentation is correct and complies with site conditions via Branch Form (Customer Network Solutions) FPJ 4266 – D&R/ATW Documentation Verification Confirmation. ASP acknowledgement is to be retained in the project file.

Planned supply interruptions will be managed in line with company policy 9.8.2. Customers impacted by the interruption to supply must be notified as per the requirements of the policy.

The ASP is to submit Branch Form (Asset & Metering Data) FAD 2001 – Notification of Network Alteration Sheet (White Sheet) to the Construction Coordinator if they find the network system diagram appears incorrect. The Construction Coordinator is to send the white sheet to Network Asset Information to update the network records.

Life Support Customers supply interruption notification must be managed as outlined in Company Policy (Customer & Stakeholder Management) 10.2 – Life Support Customers. If the life support customer is unable to be contacted, the ASP is to contact the Contractor Operations Manager to provide alternative notification arrangements.

At the end of the outage notification process, the Construction Coordinator is to complete Branch Form (Customer Network Solutions) FPJ 4269 – Network Outage Notification Checklist and send the following confirmation in an email titled 'FYI Outage Impacted Life Support' to the Contractor Operations Manager by providing the DNR number and site address:

I have confirmed that:

1. *All life support customers known to our system at that time (with fresh reprints of maps at time of notification) within 250 metres of ALL extremities of the outage have been included on the life support impact check sheet and the life support customers impacted within this outage is shown on the Customer Interruption Log Sheet.*

2. *I have confirmed that the ASP has verified at site the connection arrangement of potentially impacted life support customers within 250 metres of all extremities of the outage and if any of them found affected included in the ASP notification list.*

3. *The ASP who was responsible for notifying was provided with the outage documentation and the list of life support customers potentially impacted by this outage was included in the package.*

4. *The ASP representative who was responsible for notifying has provided full information on all impacted life support customers to confirm that they have been notified or will not be impacted by the outage due to alternate arrangements.*

5. *I have reviewed the paperwork returned from the ASP and confirmed that there are notes against each of the life support customers impacted by the outage.*

The Contractor Operations Manager is to retain these emails for any future project audit compliance task.

Non- compliance in the above regards will result in a Branch Form (Customer Network Solutions) FPJ 4649A – Contestable Works Non Conformance Report to be raised.

3.1.7 Critical inspection plan

[Simple figures (diagrams/flowcharts) and tables can be used within the body of a policy/procedure to assist the reader. Tables and figures should be introduced in the body of the procedure ahead of the table/figure. Tables and figures should be numbered consecutively. More detailed diagrams, flowcharts or lengthy tables should be included as appendices.]

The Construction Coordinator is to organise the critical inspection plan in accordance with Branch Form (Customer Network Solutions) FPJ 4255 – Critical Inspections Checklist/Commissioning Checklist for Overhead and Underground Network Electrical Assets.

The regular inspection notes will be recorded in CAMS and a hard copy kept in the project file.

3.2 Construction phase

The ASP must give at least three full days' notice to the Construction Coordinator before the installation of any works. Notice can be given verbally; however, written documentation must follow for confirmation by submitting Branch Form (Customer Network Solutions) FPJ 2020 – Daily Activities Notification before the installation date.

The approved installation standards for all distribution works are located in MCI 0005 and MCI 0006 manuals. The inspection or audit of the works and the actual installation of the works are to be checked against the appropriate checklists.

Prior to the commencement of works onsite, the Construction Coordinator must confirm the following actions to be undertaken as follows:

- Receive Branch Form (Customer Network Solutions) FPJ 2203 – Contestable Works Plan Checklist for Level 1 ASP from the ASP;
- Where required, verify/check authorisation or/and pre-qualification of the ASP and its employees;
- Complete Company Form (Health & Safety) FSY 0118 – Workplace Health & Risk Assessment (WHRA) at site; or/and
- Cite the ASP's WHRA document for accuracy.

ASP employees must comply with the company's Electrical Safety Rules when working on or near the network. Construction Coordinators must verify the ASP's compliance with these rules.

Non- compliance in the above regards will result in Branch Form (Customer Network Solutions) FPJ 4649A – Contestable Works Non Conformance Report to be raised.

3.2.1 Safety observations/inspections and environmental inspections

The Construction Coordinators are responsible for conducting regular safety observations and inspections. Additionally, they are responsible for conducting regular environmental inspections to check for compliance to the SER. Environmental inspections must be conducted at least once during the course of every project for which a SER has been prepared. The Environmental Business Partner can be called upon as required to provide assistance during these inspections. Environmental inspections can also be conducted at random by an Environmental Business Partner.

Any safety non- compliance must be recorded as a major non- conformance and dealt with under ASP Relationship Management Framework in accordance with Branch Procedure (Customer Network Solutions) NPJ 6007 – Contestable Works Non- Conformances. Construction Coordinators are to carry out regular safety observations on ASP employees by completing Branch Form (Customer Network Solutions) FPJ 4650 – Contestable Works Observation Form.

Environmental inspections are conducted in accordance with EMS 0001- Environmental impact assessment and environmental management plans. Construction Coordinators are to complete Branch Form (Customer Network Solutions) FPJ 4683- Environmental Site Inspection Checklist for Contestable Works. Environmental non- conformances are dealt with in accordance with Branch Procedure (Customer Network Solutions) NPJ 6007- Contestable Works Non- conformances. The Construction Coordinator must pay particular attention to the following activities which typically present Level 3 environmental risks and will be highlighted in the SER to enable the Construction Coordinator to target inspections accordingly:

- Vegetation removal;
- Access needs to be improved;
- Generation of large amounts of spoil;
- The worksite is located in or near a contaminated site;
- The activity involves a potential impact on threatened species and/or populations of endangered ecological communities;
- The activity involves a potential impact on local, state or commonwealth listed heritage items;
- The activity involves a potential impact on Aboriginal heritage;
- The activity involves “out of hours works”;
- The worksite is located within a National Park or Water NSW Special Area; and
- The Activity is likely to impact on Acid Sulfate Soils.

3.2.2 Materials

All materials sourced by the ASP for the distribution projects must conform exactly to the company’s specifications (refer to MCI 0005 and MCI 0006 manuals). Similarly, for transmission projects, all materials must conform exactly to the Mains Design Instructions (MDI) standards and/or to the Technical Briefs

Materials used in the company franchise area are to have an approval number.

Construction Coordinators must request the ASP to produce purchasing documentation to verify compliance with company specifications.

For outsourced transformers/padmount substations, the Level 1 ASP is to complete Company Form (Network) FAM 0009 – Request for Transformer Number for a Substation and forward it to Construction Coordinator for transformer workshop to process the transformer number and to update the SAP system.

Non- compliance in this regard will result Branch Form (Customer Network Solutions) FPJ 4649A – Contestable Works Non Conformance Report to be raised.

3.2.3 Trenching/civil works

The ASP must obtain a copy of Before-You-Dig-Australia (BYDA) plans from the company prior to any excavation works.

The ASP must have the road opening permit before trenching the road or foot path.

The approved standards for the excavation, backfilling and restoration of trenches are located in MDI 0028 – Underground Distribution Network Design, MCI 0005 – Overhead Distribution Construction Standards Manual, MDI 0031 – Overhead Distribution: Design Standards Manual and MDI 0047 – Overhead Transmission Mains Design for underground distribution, overhead distribution and transmission works respectively. The inspection or audit of the trenches/civil works is to be checked against Branch Form (Customer Network Solutions) FPJ 4255 – Critical Inspections Checklist/Commissioning Checklist for Overhead and Underground Network Electrical Assets.

Non-conformance with the standards will result Branch Form (Customer Network Solutions) FPJ 4649A – Contestable Works Non Conformance Report to be raised.

3.2.4 Civil works duct installation

The ASP will obtain a copy of Before-You-Dig-Australia (BYDA) plans from the company prior to any excavation works.

The specification for the installation of ducts is located in MDI 0028 – Underground Distribution Network Design. All civil works duct work must be checked against the signed declaration on the Duct, Easement and Trench plan supplied by the Developer.

If the ducts have not been installed as per the signed declaration on the Duct, Easement and Trench plan, or if there is a non-conformance with the standards, Branch Form (Customer Network Solutions) FPJ 4649A – Contestable Works Non Conformance Report will be raised.

It is important to confirm that all ducts identified for reimbursement have been installed as per the design. The changes to quantity noted on the design for reimbursement of ducts must not be accepted without the prior agreement by the Customer Connections Manager and must require the design recertification.

3.2.5 Underground cable installation

The ASP must give at least three full days' notice to the Construction Coordinator before the installation of any works. Notice can be given verbally however written documentation must follow for confirmation by submitting Branch Form (Customer Network Solutions) FPJ 2020 – Daily Activities Notification before the installation date. Non- compliance in this regard will result in Branch Form (Customer Network Solutions) FPJ 4649A – Contestable Works Non Conformance Report to be raised.

The installation of HV and LV cables will only be carried out under the direct on-site supervision of a person trained and competent in cable installations.

The approved standards for LV and HV cable installation are located in MDI 0028 – Underground Distribution Network Design. The inspection or audit of LV and HV cable installation is to be checked against the appropriate section in Branch Form (Customer Network Solutions) FPJ 4255 –

Critical Inspection Checklist/Commissioning Checklist for Overhead and Underground Network Electrical Assets.

Non- compliance in this regard will result in Branch Form (Customer Network Solutions) FPJ 4649A – Contestable Works Non Conformance Report to be raised.

3.2.6 Cable recording

The location of all underground cables and ducts are kept in the company's official cable records. It is important that the location of all ducts and cables are recorded on the day of installation.

Recording of underground details must make reference to the Company Standard SAD 0004 – Recording and Lodgement of WAE Network Information. To enable to accurately determine these locations on site, it will be necessary to get advice from the ASP when all cable installation works is taking place on each day by utilising Branch Form (Customer Network Solutions) FPJ 2020 – Daily Activities Notification.

Non- compliance in this regard will result in Branch Form (Customer Network Solutions) FPJ 4649A – Contestable Works Non Conformance Report to be raised.

3.2.7 Testing of underground cables

The ASP must give at least three full days' notice to the Construction Coordinator before the installation of any works. Notice can be given verbally however written documentation must follow for confirmation by submitting Branch Form (Customer Network Solutions) FPJ 2020 – Daily Activities Notification before the commencement of test.

Non- compliance in this regard will result Branch Form (Customer Network Solutions) FPJ 4649A – Contestable Works Non Conformance Report to be raised.

The ASP must conform to the test requirements in accordance with SDI 120 – Certificate of Availability for Service and Safety Performance for Network Electrical Assets – Transmission Projects. Branch Form (Customer Network Solutions) FPJ 2016 – Notification of Insulation Test Low Voltage Cable Underground/Overhead Cable/ABC and/or Branch Form (Customer Network Solutions) FPJ 2017 – Notification of Insulation Test for Distribution Mains excluding Strategic Cables High Voltage Mains – Underground/Overhead Cable/ABC respectively will be completed and forward to the Construction Coordinators after the completion of test.

Non- compliance in this regard will result in Branch Form (Customer Network Solutions) FPJ 4649A – Contestable Works Non Conformance Report to be raised.

3.2.8 Cable jointing

The ASP must give at least three full days' notice to the Construction Coordinator before the installation of any works. Notice can be given verbally however written documentation must follow for confirmation by submitting Branch Form (Customer Network Solutions) FPJ 2020 – Daily Activities Notification before the commencement of work.

Non- compliance in this regard will result in Branch Form (Customer Network Solutions) FPJ 4649A – Contestable Works Non Conformance Report to be raised.

Authorisation of the person carrying out the works is to be verified by the Construction Coordinator. The ASP must conform to the test requirements in SDI 120 – Certificate of Availability for Service and Safety Performance for Network Electrical Assets – Transmission Projects and submit Branch Form (Customer Network Solutions) FPJ 4258 – Overhead and Underground Jointing Checklist to the Construction Coordinator after the completion of testing of overhead or underground joints.

Non- compliance in this regard will result in Branch Form (Customer Network Solutions) FPJ 4649A – Contestable Works Non Conformance Report to be raised.

3.2.9 Padmount substation

The ASP must give at least three full days' notice to the Construction Coordinator before the installation of any works. Notice can be given verbally however written documentation must follow for confirmation by submitting Branch Form (Customer Network Solutions) FPJ 2020 – Daily Activities Notification before the installation date.

Non- compliance in this regard will result Branch Form (Customer Network Solutions) FPJ 4649A – Contestable Works Non Conformance Report to be raised.

The approved standards for the padmount substation installation are located in MCI 0006 – Underground Distribution: Construction Standards Manual, Section 7. The inspection or audit of padmount substation installation is to be checked against the appropriate section in Branch Form (Customer Network Solutions) FPJ 4255 – Critical Inspections Checklist/Commissioning Checklist for Overhead and Underground Network Electrical Assets.

3.2.10 Padmount substation footing installation

The ASP must give at least three full days' notice to the Construction Coordinator before any Padmount Substation footing can be installed. Notice can be given verbally however written documentation must follow for confirmation by submitting Branch Form (Customer Network Solutions) FPJ 2020 – Daily Activities Notification before the commencement of work.

Non- compliance in this regard will result in Branch Form (Customer Network Solutions) FPJ 4649A – Contestable Works Non Conformance Report to be raised.

Where the subdivision requires the installation of a Padmount Substation, the Developer will be responsible for the supply and installation of the Padmount Substation footing. For installation standards refer to MDI 0028 – Underground Distribution Network Design and MCI 0006 – Underground Distribution: Construction Standards Manual.

Non- compliance in this regard will result in Branch Form (Customer Network Solutions) FPJ 4649A – Contestable Works Non Conformance Report to be raised.

3.2.11 Padmount substation earthing

The ASP must give at least three full days' notice to the Construction Coordinator before any Padmount Substation earth grid can be installed and tested. Notice can be given verbally however written documentation must follow for confirmation by submitting Branch Form (Customer Network Solutions) FPJ 2020 – Daily Activities Notification before the commencement of work.

Non- compliance in this regard will result in Branch Form (Customer Network Solutions) FPJ 4649A – Contestable Works Non Conformance Report to be raised.

The Padmount Substation earth grid is to be installed and tested in the presence of the Construction Coordinator by a qualified person to the correct standards as per EDI 100 – Distribution Earthing Design, Construction and Test and EDI 005 – Distribution Earthing test.

Non- compliance in this regard will result in Branch Form (Customer Network Solutions) FPJ 4649A – Contestable Works Non Conformance Report to be raised.

The ASP must supply to the Construction Coordinator a completed Branch Form (Customer Network Solutions) FPJ 4231 – Substation Earthing Details two days prior to commissioning unless otherwise advised.

Non- compliance in this regard will result in Branch Form (Customer Network Solutions) FPJ 4649A – Contestable Works Non Conformance Report to be raised.

The actual readings are to be entered by the ASP into Technical Asset Loader (TAL).

3.2.12 Padmount substation or switching station locks

The new padmount substations or switching stations will be delivered to site with a D10 construction cylinder for ASP access. The Construction Coordinator must replace the D10 construction cylinder with D2 cylinder in the HV end and D3 cylinder in the LV end. This activity must be completed a minimum of 12 hours before the scheduled access authority issue time to facilitate any preliminary switching planned for the connection of substation. After the locks are changed, the ASPs are not allowed to access the padmount substation without an Access Authority issued to them. The ASP must submit Part A of Branch Form (Customer Network Solutions) FPJ 4247 – Works Complete Declaration and Handover of Assets to the company by ticking the box to indicate that the works have not been completed and the form given to the Construction Coordinator.

3.2.13 Padmount substation access

The substation access requires being fully compliant to MDI 0028 – Underground Distribution Network Design.

Construction Coordinator to confirm that full unrestricted access is available to substation 24hrs/7 days for employees and vehicles direct from the public street. Substation access area will be located so that it is safe at all times for operational and maintenance employees.

Where the fences are provided onsite, they must comply with company standards as detailed in MMI 0015 – Management of Endeavour Energy's Electrical Easements for access and locking.

Non- compliance in this regard will result in Branch Form (Customer Network Solutions) FPJ 4649A – Contestable Works Non Conformance Report to be raised.

3.2.14 Indoor substation

Inspections to be carried out on the various configurations of projects to the specifications in the following Standards:

Standard	Description
MDI 0028	Underground Distribution Network Design
SDI 108	Portable Spray Foam for Sealing Cable Penetrations
ETS 0070	Equipment technical specification for 11kV & 22kV padmount & indoor distribution transformers
MCI 0006	Underground distribution: Construction standards manual

Find out who the Project Manager is and deal through that person with everything associated with the job.

Where security locking of an indoor substation is required, the developer/ASP is responsible for installation of the locking system as per MCI 0006 – Underground Distribution: Construction Standards Manual and Branch Form (Customer Network Solutions) FPJ 4247 – Works Complete Declaration and Handover of Assets to the company, Part A must be provided to the Construction Coordinator.

Non Compliance with the above requirements will result in Branch Form (Customer Network Solutions) FPJ 4649A – Contestable Works Non Conformance Report to be raised.

Where HV circuit breaker protection settings are required, the Construction Coordinator is to coordinate with the Regions for the correct grading with the company's network.

The ASP will be provided with substation security signage for mounting on the access doors.

Construction Coordinator is to use Branch Form (Customer Network Solutions) FPJ 4243 – Distribution Substation Building Inspection Form to perform an inspection on the indoor substation.

The Level 1 ASP Project Manager will be advised of any non-conformances and having these fixed prior to final acceptance of the room,

3.2.15 Indoor substation earthing

The ASP must give at least three full days' notice to the Construction Coordinator before any Indoor Substation earth grid can be installed and tested. Notice can be given verbally however written documentation must follow for confirmation by submitting Branch Form (Customer Network Solutions) FPJ 2020 – Daily Activities Notification before the commencement of work.

Non- compliance in this regard will result in Branch Form (Customer Network Solutions) FPJ 4649A – Contestable Works Non Conformance Report to be raised. Construction Coordinator to oversee the construction of the room at critical stages, e.g. when earth stakes are installed, when penetrations are formed prior to pouring concrete and prior to fit out and witness the testing of the substation earthing system conducted by a qualified person to the requirements of EDI 100 – Distribution Earthing Design, Construction and Test and EDI 005 – Distribution Earthing Test.

The ASP must provide the Construction Coordinator a completed Branch Form (Customer Network Solutions) FPJ 4231 – Substation Earthing Details two days prior to commissioning unless otherwise advised.

Non- compliance in this regard will result in Branch Form (Customer Network Solutions) FPJ 4649A – Contestable Works Non Conformance Report to be raised.

3.2.16 Pillars

The installation of pillars by the ASP must conform to the standards as per MCI 0006 – Underground Distribution: Construction Standards Manual, section 5.

The ASP must provide the Construction Coordinator a completed Branch Form (Customer Network Solutions) FPJ 4224 – New Column/Pillar Checklist two days prior to commissioning unless otherwise advised.

Non- compliance in this regard will result in Branch Form (Customer Network Solutions) FPJ 4649A – Contestable Works Non Conformance Report to be raised.

3.2.17 Overhead mains installation

The ASP must give at least three full days' notice to the Construction Coordinator before the installation of any works. Notice can be given verbally however written documentation must follow for confirmation by submitting Branch Form (Customer Network Solutions) FPJ 2020 – Daily Activities Notification before the installation date.

Non- compliance in the above regards will result Branch Form (Customer Network Solutions) FPJ 4649A – Contestable Works Non Conformance Report to be raised.

The installation of overhead HV and LV mains will only be carried out under the direct on-site supervision of a person trained and competent in this field.

Inspections to be carried out by the Construction Coordinator to confirm that the installation of the overhead mains meet the design requirements (for example Sag tension criteria, clearance) of the certified design. The inspection or audit of LV and HV mains installation is to be checked against the appropriate section in Branch Form (Customer Network Solutions) FPJ 4255 – Critical Inspections Checklist/Commissioning Checklist for Overhead and Underground Network Electrical Assets.

The approved standards for LV and HV mains installation are located in MCI 0005 – Overhead Distribution Construction Standards Manual.

3.2.18 Testing of overhead mains

The ASP must give at least three full days' notice to the Construction Coordinator before the installation of any works. Notice can be given verbally however written documentation must follow for confirmation by submitting Branch Form (Customer Network Solutions) FPJ 2020 – Daily Activities Notification before commencement of test.

Non- compliance in this regard will result in Branch Form (Customer Network Solutions) FPJ 4649A – Contestable Works Non Conformance Report to be raised.

The ASP must conform to the test requirements in accordance with SDI 120 – Testing and Commissioning for Distribution Systems. Branch Form (Customer Network Solutions) FPJ 2016 – Notification of Insulation Test Low Voltage Cable and/or Branch Form (Customer Network Solutions) FPJ 2017 – Notification of Insulation Test for Distribution Mains Excluding Strategic Cables respectively must be completed and forward to the Construction Coordinators after the completion of test.

Non- compliance in this regard will result Branch Form (Customer Network Solutions) FPJ 4649A – Contestable Works Non Conformance Report to be raised.

3.2.19 Poles and associated hardware

In order to gain access to any existing underground assets, the ASP must obtain a copy of Before You Dig Australia (BYDA) plans from the company prior to any excavation works.

The ASP must give at least three full days' notice to the Construction Coordinator before the installation of any works. Notice can be given verbally however written documentation must follow for confirmation by submitting Branch Form (Customer Network Solutions) FPJ 2020 – Daily Activity Notification before the installation date.

The re-closer/load break switch/UGOH earthing system is to be installed and tested by a qualified person to the correct standards as per EDI 100 – Distribution Earthing Design, Construction and Test and EDI 005 – Distribution Earthing Test. A completed Branch Form (Customer Network Solutions) FPJ 4233 – HV Pole Top Termination Earthing must be submitted to the Construction Coordinator two days prior to commissioning unless otherwise advised.

Inspections are to be carried out by the Construction Coordinator to assess the installation of pole and associated hardware (for example Air Break Switch, Recloser, UGOH termination) for compliance with MCI 0005 – Overhead Distribution Construction Standards Manual. The inspection or audit of pole installation and associated hardware is to be checked against the appropriate section in Branch Form (Customer Network Solutions) FPJ 4255 – Critical Inspection Checklist/Commissioning Checklist for Overhead and Underground Network Electrical Assets.

3.2.20 Pole substation

The ASP must give at least three full days notice to the Construction Coordinator before any pole substation installation notice can be given verbally. However complete documentation must follow within for confirmation by submitted Branch Form (Customer Network Solutions) FPJ 2020 – Daily Activities Notification before commencement of work.

Non-compliance in this regard will result in Branch Form (Customer Network Solutions) FPJ 4649A – Contestable Works Non Conformance Report to be raised.

The installation of pole substations by the ASP must conform to the standards as per MCI 0005 – Overhead Distribution Construction Standards Manual, section 8.

Pole substation installation is to be checked against Branch Form (Customer Network Solutions) FPJ 4242 – Distribution Substation Checklist.

3.2.21 Pole substation earthing

The pole substation earthing system is to be installed and tested by a qualified person to the correct standards as per EDI 100 – Distribution Earthing Design, Construction and Test and EDI 005 – Distribution Earthing Test. A completed Branch Form (Customer Network Solutions) FPJ 4231 – Substation Earthing Details must be submitted to the Construction Coordinator two days prior to commissioning unless otherwise advised.

Non-compliance in this regard will result in Branch Form (Customer Network Solutions) FPJ 4649A – Contestable Works Non Conformance Report to be raised.

3.2.22 Street lighting

The ASP must give at least three full days' notice to the Construction Coordinator before the installation of Street Lighting. Notice can be given verbally however written documentation must follow for confirmation by submitting Branch Form (Customer Network Solutions) FPJ 2020 – Daily Activities Notification before the installation date.

Non-compliance in this regard will result in Branch Form (Customer Network Solutions) FPJ 4649A – Contestable Works Non Conformance Report to be raised.

For underground installations, the approved standards for street lighting installation are located in LDI 0001 – Public Lighting Design and LCI 0001 – Public Lighting Construction. The ASP must provide the Construction Coordinator Branch Form (Customer Network Solutions) FPJ 4224 – New Column/Pillar Checklist and Branch Form (Customer Network Solutions) FPJ 4221 – Ragbolt Checklist after Construction of Street Lighting Installations.

For overhead installations, the approved standards for the street lighting installation are located in LDI 0001 – Public Lighting Design and LCI 0001 – Public lighting Construction.

The ASP must conform to the test requirements in accordance with LDI 0003 – Commissioning of Public Lighting Assets. The inspection or audit of streetlight installation is to be checked against the appropriate section in Branch Form (Customer Network Solutions) FPJ 4255 – Critical Inspections Checklist/Commissioning Checklist for Overhead and Underground Network Electrical Assets.

For partial/staged street light commissioning, the TAL upload into SAP must be completed for every portion/stage immediately after commissioning to initiate the street light billing process. All records of streetlighting documents must be kept in the shared Construction Coordinator SharePoint project folder.

Non-compliance in the above regards will result in Branch Form (Customer Network Solutions) FPJ 4649A – Contestable Works Non Conformance Report to be raised.

3.2.23 Transmission works (overhead and underground installation)

The ASP must give at least three full days' notice to the Construction Coordinator before work commences. Notice can be given verbally however written documentation must follow for confirmation by submitting Branch Form (Customer Network Solutions) FPJ 2020 – Daily Activities Notification before commencement of work.

Non-compliance in this regard will result in Branch Form (Customer Network Solutions) FPJ 4649A – Contestable Works Non Conformance Report to be raised.

All Inspections are to be organised with the Major Project and Program Project Management section by the Construction Coordinator for any transmission works constructed by the Level 1 ASP. Branch Form (Customer Network Solutions) FPJ 4201 – Contractor Inspection Checklist, and the Inspection and Test plan in Annexure B – Network Assurance Inspection and Test Plans must be used as a main reference to aid the Construction Coordinator's inspection plans. Additional specific requirements for the Inspection and Test plan will be prepared by the Mains Project Manager.

References to company transmission standards can be found in various parts of the Annexure B – Transmission Mains O/H & U/G Inspection and Test plan.

3.2.24 Terminations/Jointing

[Simple figures (diagrams/flowcharts) and tables can be used within the body of a policy/procedure to assist the reader. Tables and figures should be introduced in the body of the procedure ahead of the table/figure. Tables and figures should be numbered consecutively. More detailed diagrams, flowcharts or lengthy tables should be included as appendices.]

The ASP must give at least three full days' notice to the Construction Coordinator before work commences. Notice can be given verbally however written documentation must follow for confirmation by submitting Branch Form (Customer Network Solutions) FPJ 2020 – Daily Activities Notification before commencement of work.

Non-compliance in this regard will result in Branch Form (Customer Network Solutions) FPJ 4649A – Contestable Works Non Conformance Report to be raised.

For the first feeder emanating from the zone substation, the company will be responsible for carrying out zone substation cable termination or first feeder cable section as defined in Company Procedure (Network) GAM 0047 – Work involving ASP's and the company – First Feeder Cable from Zone Substation – 'K' type project (Customer Funded) and 'Q' type projects (Funded by the company) and complete Branch Form (Customer Network Solutions) FPJ 4258 – Overhead & Underground Jointing Checklist. This checklist will be forward to the Construction Coordinator for records.

For work on UGOH terminations is subject to the company's discretions. Completion of UGOH terminations will have Branch Form (Customer Network Solutions) FPJ 4258 – Overhead & Underground Jointing Checklist and Branch Form (Customer Network Solutions) FPJ 4233 – HV Pole Top Termination Earthing completed and forwarded to the Construction Coordinator for records.

The approved standards for UGOH termination are located in MDI 0047 – Mains Design Instructions – Overhead & Underground Transmission Mains standards.

3.2.25 Protection

Before the transmission network is abnormally configured or augmented, verification of the protection scheme of the transmission network by the Operations Manager, Protection & Control or Operations Manager Transmission P&C is required as to determine whether the network is adequately protected. The Construction Coordinator is to coordinate with the Operations Manager, Protection & Control or Operations Manager Transmission P&C on the transmission works whether the protection needs isolation prior to testing and/or recalibration of the protection scheme.

3.2.26 Testing

Company testing division engaged by the ASP as part of the non- contestable works nominates a qualified assessor who will be responsible for carrying out all the tests as per current standards and if any variations, the test results will be provided to the Major Projects and Program Project Manager for rectification and approval from the Mains Asset Manager. The qualified assessor will forward the completed test results to the Construction Coordinator for records.

3.3 Pre-commissioning phase

All test results for low voltage and high voltage distribution received from the ASP qualified assessor and the transmission test results received from the company qualified assessor are verified for its compliance with the standards.

For underground distribution system, the Construction Coordinator is to verify Branch Form (Customer Network Solutions) FPJ 4248 – Pre-commissioning/Commissioning Checklist for Low Voltage Underground completed by the ASP and sign off all the relevant completed works.

3.4 Commissioning phase

If a power outage is organised on the day of commissioning, the Construction Coordinator has to confirm that the ASP has notified the affected customers in accordance with Branch Procedure (Customer Network Solutions) NPJ 2009 – Low Voltage Access for Accredited Service Providers (ASPs) and the ASP has adequate resource for the work to complete as to avoid extended outage time.

On completion of the work and prior to energising the electrical network, the following tasks that the Construction Coordinator has to meet are:

- Perform the critical inspection in accordance with Branch Form (Customer Network Solutions) FPJ 4255 – Critical Inspections Checklist/Commissioning Checklist for Overhead and Underground Network Electrical Assets.
- Perform a final onsite inspection with a council representative and/or a nominee from the Transmission Mains, where required, to confirm their requirements have been met.
- Confirm Branch Form (Customer Network Solutions) FPJ 4254 – Access Authorisation (AA)/Access to Work (ATW) Restoration Checklist for Distribution Network is completed by the Access Authority/Access to Work holder and validate the network asset ready for the restoration.
- Confirm Branch Form (Customer Network Solutions) FPJ 4247 – Works Complete Declaration and Handover of Assets to the company part A is signed off by the ASP. Check against the project checklist and Branch Form (Customer Network Solutions) FPJ 4201 – Contractor Inspection Checklist for all completed tasks.

Non-compliance in the above requirements by the ASP will result Branch Form (Customer Network Solutions) FPJ 4649A – Contestable Works Non Conformance Report to be raised.

In addition to the above requirements, the Construction Coordinator, as outlined in Division Procedure (Network Divisions) GNV 1044 – Commissioning Network Electrical Assets, will:

- For network distribution projects, complete Division Form (Network Divisions) FNV 1043 – Certificate of Availability for Service for Network Electrical Assets and handover the certificate to company Commissioning Officer/District Operator or otherwise, leave it in the switching folder. After verification, the Commissioning Officer/District Operator returns a copy of acknowledged Division Form (Network Divisions) FNV 1043 – Certificate of Availability for Service for Network Electrical Assets to the Construction Coordinator for records. The Commissioning process flow charts are attached in the Annexure A.1 – Commissioning Network Electrical Assets for Transmission Projects, Annexure A.3 – Commissioning Network Electrical Assets for HV Distribution Projects & Annexure A.4 – Commissioning Network Electrical Assets for Low Voltage Projects are to be referred to complete the process.
- For transmission projects, advise the Major Project and Program Project Manager who then produces the Division Form (Network Divisions) FNV 1043 – Certificate of Availability for Service for Network Electrical Assets and Division Form (Network Divisions) FNV 1045 – Commissioning Advice/Authority to Energise System High Voltage Apparatus and send them to the Commissioning Officer. After energising the electrical network, the Commissioning officer to provide copies of the acknowledged Division Form (Network Divisions) FNV 1043 – Certificate of Availability for Service for Network Electrical Assets and Division Form (Network Divisions) FNV 1045 – Commissioning Advice/Authority to Energise System High Voltage Apparatus to the Contract Inspector for records. The Commissioning process flow chart is attached in the Annexure A.2 – Commissioning Network Electrical Assets for Transmission Projects is to be referred to complete the process.

3.5 Project close phase

3.5.1 Works-as-executed (WAE) drawings

The ASP must send the fully marked-up final WAE drawings in accordance with SAD 0004 – Recording and Lodgement of WAE Network Information within seven days from the final commissioning of all works to the Construction Coordinator.

The Construction Coordinator must check the WAE against his own records and notes to confirm the WAE is consistent with the as built assets condition at site. Also, the quality of all marked-up Works as Completed drawings to be reviewed by the Construction Coordinator and uploaded into the company system Conduit, as detailed in Company Procedure (Network) GAM 0036 – Management of Drawing Records by no later than 14 days after the final commissioning. All project documents must be kept in the shared Construction Coordinator SharePoint project folder.

Branch Form (Customer Network Solutions) FPJ 4649A – Contestable Works Non Conformance Report to be issued to ASP for poorly executed drawings.

Note that Network Property is to be informed of any changes to the easements over assets not constructed as designed. The HV reimbursement details must be as per the design and no change will be accepted without prior agreement by the Customer Connections Manager and may require design recertification.

3.5.2 Equipment to be returned

Assets to be returned as specified in the certified design are to be returned in good order to the appropriate Field Service Centre at the Developers cost and the company receipt of the assets acknowledgement on Branch Form (Customer Network Solutions) FPJ 4252 – Equipment to be Returned to the company (Switchgear – Transformers – All Copper Conductor – Bare or insulated) and/or Branch Form (Customer Network Solutions) FPJ 4253 – Equipment to be Returned to the company – Treated Timber Poles less than 10 years old and Exceeding 11m After Removal (excluding Pole Butt) will be forwarded to the Construction Coordinator for the company's records.

Assets that are not returned require to be itemised on Branch Form (Customer Network Solutions) FPJ 4247 – Works Complete Declaration and Handover of Assets to the company by the ASP stating the reasons and submit to the Construction Coordinator for acknowledgement and records.

Non-compliance in this regard will result Branch Form (Customer Network Solutions) FPJ 4649A – Contestable Works Non Conformance Report to be raised.

3.5.3 Letter of acceptance

Before a Letter of Acceptance can be issued on any project, check:

- Works as Completed drawings received from the ASP and checked.
- Signed declaration Duct, Easement and Trench plan received from ASP where required.
- Technical Asset Loader received from the ASP and validation.
- Inspection fees paid as shown in CAMS.
- Safe Design Report received.
- Notification of all Tests received signed and all critical paperwork received.
- Branch Form (Customer Network Solutions) FPJ 4247 – Works Complete Declaration and Handover of Assets to the company Part B received.
- Acknowledgment of equipment return Branch Form (Customer Network Solutions) FPJ 4252 – Equipment to be Returned to the company (Switchgear – Transformers – All

Copper Conductor – Bare or Insulated) and/or Branch Form (Customer Network Solutions) FPJ 4253 – Equipment to be Returned to the company – Treated Timber Poles less than 10 years old and Exceeding 11m After Removal (excluding Pole Butt) from ASP.

Branch Form (Customer Network Solutions) FPJ 2009 – Project Assessment Contractor Performance URD Construction is in the CAMS and is filled out in conjunction with that process at the end of a project. If a non- conformance is issued in accordance with clause 6.0, the assessment rating has to be adjusted to relevant categories in the project assessment to impact the total score on performance of the project for the ASP. A copy has to be forwarded to the ASP for acknowledgement. Contract Operations Manager must review the accuracy of assessment by utilising the 'ASP Scores Comparison Report' monthly and any rescaling noted, advice the Construction Coordinator to correct the error and amend the project assessment in CAMS and issue the amended project assessment to the ASP.

3.5.4 End of project paperwork

Before closing off the project, the Construction Coordinator will:

- Upload Technical Asset Loader.
- Advise CCA of issuing of Letter of Acceptance to the ASP and scan a copy into the relevant CAMS application directory.
- Receive an acknowledged Branch Form (Customer Network Solutions) FPJ 2009 – Project Assessment Contractor Performance URD Construction from the ASP.
- Complete all milestones related to construction activity in CAMS.
- Keep all WAE documents such as test results, streetlighting documents, Safe Design Report, asbestos management plan and checklists including completed and closed- off SER in the shared Construction Coordinator SharePoint project folder.
- Keep material return forms and hazardous material clearance and disposal certificates in the project file.
- Keep Copy of Contractors Works as Completed certificate in the project file where required.
- File all diary notes on inspection in the shared Construction Coordinator SharePoint project folder.

3.5.5 Scanning into CAMS

All the information such as test results, Safe Design Report and checklists including completed and closed- off SER in the project file are to be scanned and uploaded into a new folder called 'Inspection Package CC' in the relevant CAMS application directory.

Copies of all marked-up final Works as Completed drawings are to be uploaded into the CAMS System.

3.6 Non-Conformance

When the customer funded contestable work undertaken by the ASP does not comply with company Standards and documented contestable works policies, procedures and instructions, Branch Form (Customer Network Solutions) FPJ 4649A – Contestable Works Non Conformance Report will be issued to the ASP.

Branch Procedure (Customer Network Solutions) NPJ 6007 – Contestable Works Non Conformance provides a framework for issuing and reporting of a non-conformance.

3.7 Types on non-conformances

3.7.1 Major non-conformance

A major non- conformance can be issued to an ASP for any major construction defects that are or have potential to be a threat to the safety of any person or to have the potential to damage any property or to disrupt or have the potential to disrupt the electricity network or are a major non-conformance to specifications, material and/or project drawing.

In the event of an electricity distributor becoming aware of a major defect it will issue a non-conformance notice to the ASP or customer specifying the defect and details of the non-conformance. Where the works do not comply with the distributors Network Management Plan, the distributor could cause the disconnection and/or physical removal of the defective work from the transmission and distribution system.

Examples of major non- conformances are as follows:

- Failure to cover energised underground cables.
- Underground cable laid on alignment, to a depth, or covered such that it constitutes a risk or hazard.
- Poor electrical installation earth integrity.
- Exposed live parts created in installation within statutory clearance.
- Failure to test the equipment prior to energising the electrical network.
- Overhead conductor erected below statutory clearance.
- High connection resistance in the continuity of circuits.
- Service cable installed with incorrect phase rotation.
- Low insulation resistance of the cables and equipment.
- Use of non-company approved materials.
- Open circuit in the system after energising.
- Incorrect phasing at the terminations.
- Service cable installed with incorrect polarity.
- Unsecured pillar/column/substation.
- Major inadequate Traffic Management

3.7.2 Minor non-conformance

A minor non- conformance can be issued to an ASP for minor construction defects which the company can demonstrate do not have potential to be a threat to the safety of any person or to have the potential to damage any property or to disrupt or have the potential to disrupt the electricity network or are a major non- conformance to specifications, material and/or project drawing.

Examples of minor non- conformances are as follows:

- Failure to pay inspection fees.
- Inadequate project management, e.g. Late for a planned outage.

- Insufficient resources for undertaking the work.
- Inadequate tools and equipment for undertaking the work.
- Failure to notify customers of outage.
- Non-Compliance with MCI 0005 – Overhead Distribution Construction Standards Manual.
- Non-Compliance with MCI 0006 – Underground Distribution: Construction Standards Manual.
- Non-Compliance with Mains Maintenance Instruction.
- Inadequate Traffic Management.
- Unsatisfactory workmanship which does not compromise the safety or reliability of the network.
- Failure to comply with this workplace instruction, except for major non- conformances mentioned in section 4.7.1.

3.7.3 Safety non-conformance

A safety non- conformance can be issued to an ASP for all breaches of Electrical Safety Rules including the minor breaches of the Electrical Safety Rules that do not result in near miss or accident/incident.

Examples of safety non- conformances are as follows:

- Out of date safety helmet.
- Inappropriate Personnel Protective Equipment (PPE).

Note: All non- conformances to the Electrical Safety Rules are reportable incidents.

3.7.4 Significant electrical network incidents (SENI)

A significant electricity network incident is one which involves the electricity network and which meets one of the following conditions and is reportable to the NSW Department of Industry:

- A serious electricity network accident which requires the involvement of the network but not necessarily of electricity and the person dies or suffers permanent disability, is hospitalised, receives treatment from a health care professional or is unable to attend work on any period of time.
- A serious electrical accident is an accident involving the network in which electricity is involved and as a consequence of which a person dies or suffers permanent disability, is hospitalised, receives treatment from a health care professional or is unable to attend work for any period of time.
- An actionable safety incident, which is not a serious electricity network accident involving the electricity network, but there was a significant risk that a person could have been seriously hurt by the incident, for example, design defect in network equipment causing the explosion and risk of serious injury.
- An actionable asset incident is an incident involving network assets, but not persons, for example, loss of supply to more than 20,000 customers for more than one minute or to multiple urban customers for more than 12 hours or to rural customers for 24 hours or more.

The above SENI incidents require to be reported immediately to Senior Management and to the Manager HSE Assurance and Improvements.

3.7.5 Environmental non-conformance

An environmental non- conformance will be issued to an ASP who does not implement the mitigative measures identified in the SER and who does not take suitable actions to control their work to prevent environmental harm. Non- compliance with the SER, with respect to Level 3 Risk constitutes an environmental incident which must be reported through the company Call Centre on 131 003 and logged in MySafe. Environmental incidents can also be notifiable incidents or serious breaches of the NSW Code of Practice for Authorised Network Operators. Refer EMS 0008- Environmental incident response and management for details on handling these incidents.

3.8 Post commissioning defects and faults

If defects or faults are discovered after the commissioning of the electricity works, the following actions are required:

- a non-conformance notice is to be issued to the ASP or customer by the electricity distributor; and
- a “Project Assessment Level 1 ASP sheet” is to be completed by the electricity distributor and forwarded to the NSW Department of Industry, for inclusion on the accreditation database and any further action if cancellation or downgrading of the accreditation is warranted.

The Project Assessment for an ASP is in the CAMS and is filled out in conjunction with that process at the end of a project.

Copies of all safety and/or environmental breaches and construction defects and corrective action notices are to be forwarded to the ASP Relationship section, Customer Network Solutions Branch for their records, actions and follow up.

3.9 Process flow charts and inspection forms

3.9.1 Work process flow chart

The flow charts in Annexure A – Contract Inspection Process, Annexure A.1 – Commissioning Network Electrical Assets for Transmission Projects, Annexure A.2 – Commissioning Network Electrical Assets for Transmission Projects, Annexure A.3 – Commissioning Network Electrical Assets for HV Distribution Projects, Annexure A.4 – Commissioning Network Electrical Assets for Low Voltage Projects and Annexure B – Network Assurance Inspection and Test Plans displays the different processes which the Construction Coordinator gets involved in during the course of the work day and the type of projects that are contestable in the current construction climate.

3.9.2 Inspection forms

The relevant Inspection Forms as provided under clause 2.0 – References provides the details of inspections of asset compliance to relevant company standards and specifications.

3.9.3 Network assurance inspection and test plans

The enclosed Network Assurance Inspection and Test Plans for Distribution Underground, Overhead and Transmission works in Annexure B – Network Assurance Inspection and Test Plans provides the details of audit process and ready reference to evaluate the compliance of work to company standards from all stakeholders.

4. Authorities and responsibilities

Head of Customer Network Solutions has the authority and responsibility for:

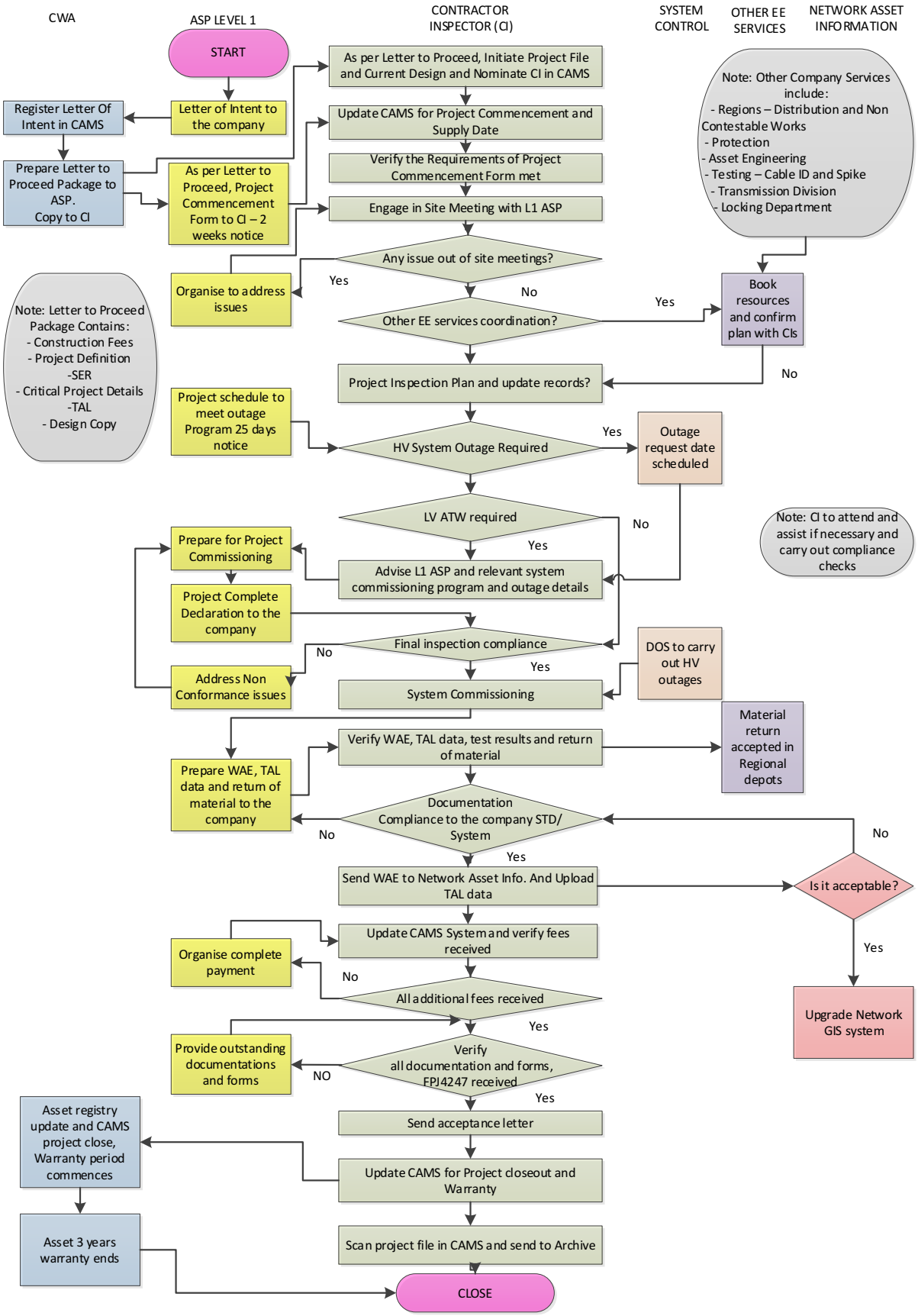
- Approving this workplace instruction and subsequent amendments; and
- allocating of resources to enable adherence to the instruction.

Customer Connections Manager has the authority and responsibility for:

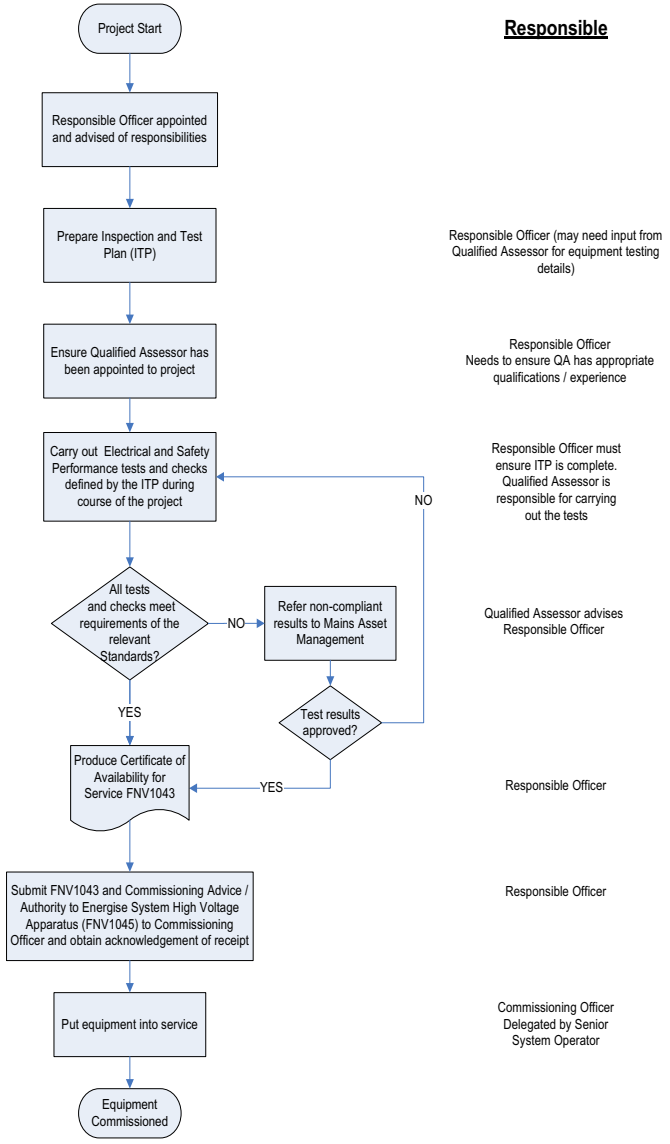
- establishing systems to monitor and control performance to this instruction; and
- the day-to-day operational management of resources required to oversee compliance.

Construction Coordinators have the authority and responsibility for confirming that the Level 1 ASP construction work fully complies with the company policies and standards by carrying out regular inspections in compliance with this instruction before accepting the contestable work assets into the company's system.

Annexure A – Contract Inspection Process



Annexure A.1 – Commissioning Network Electrical Assets for Transmission Projects



Scenario 1 – Majority of contestable work by ASP, eg First Feeder 11kV/22kV from Zone Substation

Construction Coordinator from Customer Network Solutions is the responsible officer for the project & the Project Manager from Major Projects and Programs (33Kv and above) or Regional Project Manager (11Kv to 22Kv) is responsible for the customer funded company portion of work and ASP Project Manager is responsible for the project management from ASP organisation.

Construction Coordinator to utilise Branch Workplace Instruction (Customer Network Solutions) WPJ 4140 – Inspections Performed by Construction Coordinators, procedure for Standard Quality Assurance Inspection Plans for distribution – Underground/Overhead along with the Branch Form (Customer Network Solutions) FPJ 4201 – Construction Coordinator Checklist. In addition to this the Project Manager Major Projects and Programs or Regional Project Manager has to prepare the Inspection and Test plans on specific requirements on company portion of work.

ASP to nominate an electrically qualified EFM, who has the experience in the electrical distribution system testing as a Qualified Assessor or ASP project manager can assign himself for this role, if he has the competencies to ASP portion of work and engage company testing division to carry out the testing for first feeder work. And company testing division to nominate the Qualified Assessor for their portion of project work.

ASP Qualified Assessor is responsible for carrying out all the tests as per current standard for their portion of work and company Qualified Assessor is responsible for carrying out all the tests as per the current standards for the first feeder work. If any variations noted either by the ASP Qualified Assessor or by the company Qualified Assessor, the variation details to be provided to Construction Coordinator. All the test results will be forwarded to Construction Coordinators records and Project Manager, Major Projects and Programs as well as to ASP Project Manager records by the Qualified Assessors. The Construction Coordinator is to obtain approval from the Mains Asset Manager on any variations to test results advised by the Qualified Assessors.

ASP Project Manager to provide Branch Form (Customer Network Solutions) FPJ 4247 – Works Complete Declaration and Handover of Assets to the company Part A – Works Complete Declaration, Branch Form (Customer Network Solutions) FPJ 4254 – Access Authorisation (AA)/Access to Work (ATW) restoration checklist for Distribution Network to Construction Coordinator and the Project Manager, Major Projects and Programs or Regional Project Manager to provide the Division Form (Network Divisions) FNV 1043 – Certificate of Availability for Service for Network Electrical Assets, and Division Form (Network Divisions) FNV 1045 – Commissioning Advice/Authority to Energise System High Voltage Apparatus for company portion of works to Construction Coordinator.

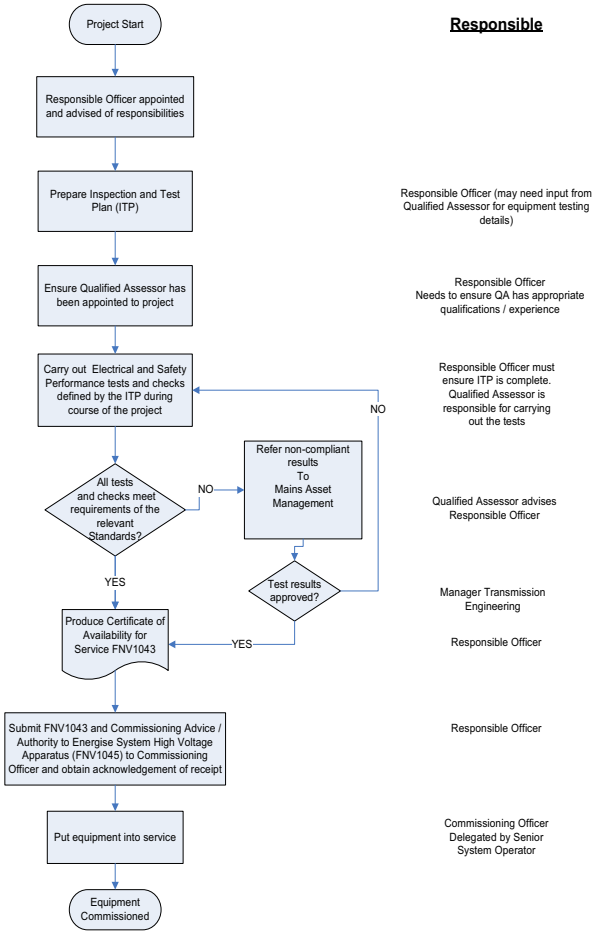
Construction Coordinator to produce the Division Form (Network Divisions) FNV 1043 – Certificate of Availability for service for Network Electrical Assets and Division Form (Network Divisions) FNV 1045 – Commissioning Advice/Authority to Energise System High Voltage Apparatus, for the whole project and submit these certificates to the Commissioning Officer. An acknowledgement on receipt of certificates must be obtained from the Commissioning Officer.

The Commissioning Officer must return the Division Form (Network Divisions) FNV 1043 – Certificate of Availability for Service for Network Electrical Assets and Divisions Form (Network Divisions) FNV 1045 – Commissioning Advice/Authority to Energise System High Voltage Apparatus certificates to Construction Coordinator via fax/scan and e-mail/hard copy by mail.

Construction Coordinator is to retain the Division Form (Network Divisions) FNV 1043 – Certificate of Availability for Service for Network Electrical Assets and Division Form (Network Divisions) FNV 1045 – Commissioning Advice/Authority to Energise System High Voltage Apparatus, in the shared Construction Coordinator SharePoint project folder and in CAMS along with all the test reports and the project documentations.

Annexure A.2 – Commissioning Network Electrical Assets for Transmission Projects

Scenario 2: Majority of Transmission work by the company excluding the first feeder distribution work



Construction Coordinator from Customer Network Solutions & the Project Manager from Major Projects and Programs are nominated responsible officers for the Customer Network Solutions Contestable Projects and ASP Project Manager is responsible for the project management from ASP organisation.

Construction Coordinator to utilise the Branch Workplace Instruction (Customer Network Solutions) WPJ 4140 – Inspections Performed by Construction Coordinators procedure for Standard Quality Assurance Inspection Plans for Transmission – Underground & Overhead along with the Branch Form (Customer Network Solutions) FPJ 4201 – Construction Coordinator Checklist. In addition to this The Project Manager from Major Project and Programs has to prepare the Inspection and Test plans on specific requirements.

ASP to engage company testing division to carry out the testing. And company testing division to nominate the Qualified Assessor for the project.

Company Qualified Assessor is responsible for carrying out all the tests as per the current standards and inform the Project Manager from Major Project and Programs if any variations noted. All the test results will be forwarded to Construction Coordinators records and ASP Project Manager records by the Qualified Assessor.

Project Manager from Major Projects and Programs to obtain approval from the Mains Asset Manager on any variations to test results advised by the Qualified Assessor.ASP Project Manager to provide Branch Form (Customer Network Solutions) FPJ 4247 – Works Complete Declaration and Handover of assets to the company Part A – Works Complete Declaration, Branch Form (Customer Network Solutions) FPJ 4254 – Access Authority (AA)/Access to Work (ATW) Restoration Checklist for Distribution Network to Construction Coordinator.

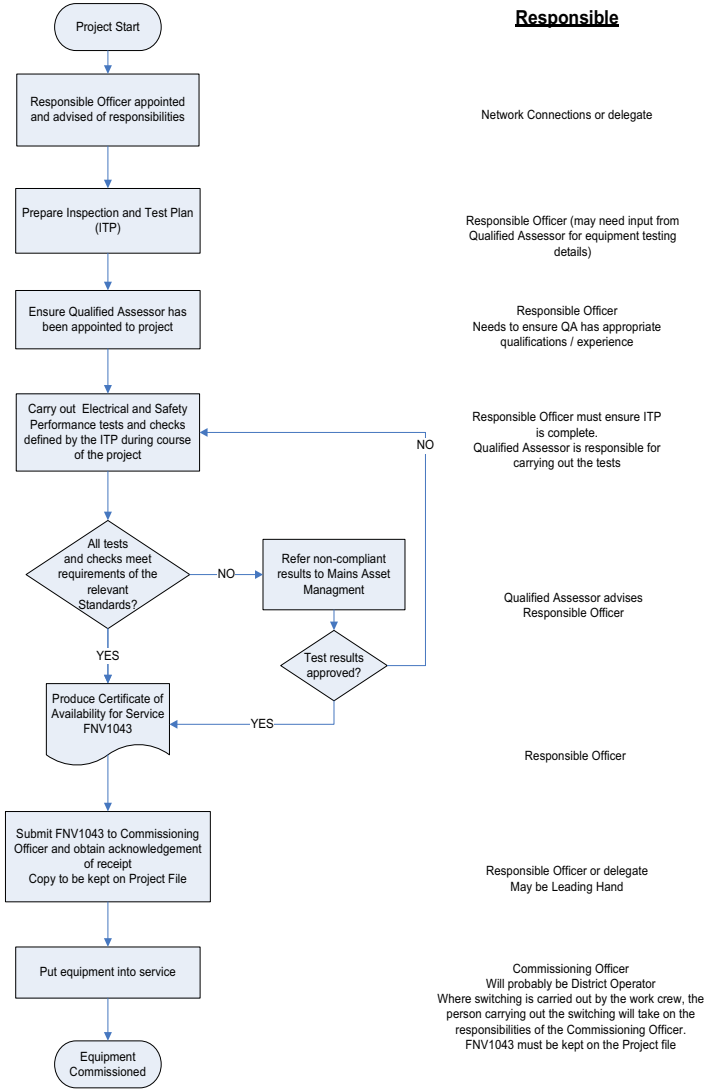
Construction Coordinator advises the Project Manager from Major Projects and Programs on works completion.

Project Manager from Major Projects and Programs to produce the Division Form (Network Divisions) FNV 1043 – Certificate of Availability for service for network electrical assets and Division Form (Network Divisions) FNV 1045 – Commissioning Advice/Authority to Energise System High Voltage Apparatus and submit these certificates to Commissioning Officer. An acknowledgement on receipt of certificates will be obtained from the Commissioning Officer.

The Commissioning Officer must return the Division Form (Network Divisions) FNV 1043 – Certificate of Availability for Service for Network Electrical Assets and Division Form (Network Divisions) FNV 1045 – Commissioning Advice/Authority to Energise System High Voltage Apparatus, certificates to Project Manager from Major Projects and Programs via fax/e-mail/hard copy & the Project Manager from Major Projects and Programs will forward a copy of these forms to Construction Coordinator record via fax/scan and e-mail/hard copy by mail.

Construction Coordinator is to retain the copy of Division Form (Network Divisions) FNV 1043 – Certificate of Availability for Service for Network Electrical Assets and Divisions Form (Network Divisions) FNV 1045 – Commissioning advice/Authority to Energise System High Voltage Apparatus, in the shared Construction Coordinator SharePoint project folder and in CAMS along with all the test reports and the project documentations.

Annexure A.3 – Commissioning Network Electrical Assets for HV Distribution Projects



Construction Coordinator is nominated responsible officer for the Customer Network Solutions Contestable Projects and ASP Project Manager is responsible for the project management from ASP organisation.

Construction Coordinator to utilise the Branch Workplace Instruction (Customer Network Solutions) WPJ 4140 – Inspections Performed by Construction Coordinators procedure for Standard Quality Assurance Inspection Plans for Underground Distribution Systems or Overhead Distribution systems as applicable along with the Branch Form (Customer Network Solutions) FPJ 4201 – Construction Coordinator Checklist.

ASP to nominate an Electrically Qualified EFM, who has the experience in the Electrical Distribution System testing as a Qualified Assessor for the project or ASP Project Manager can assign himself for this role if he has the competencies.

ASP qualified assessor is responsible for carrying out all the tests as per current standards (MCI 0005 or MCI 0006 – Underground Distribution: Construction Standards Manual and inform the Construction Coordinator if any variations noted.

Construction Coordinator to obtain approval from the Mains Asset Manager on any variations to test results advised by the qualified assessor.

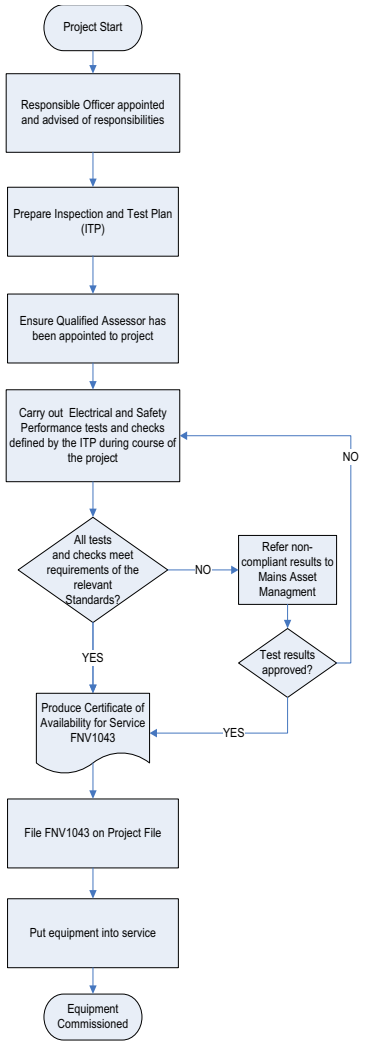
ASP Project Manager to provide Branch Form (Customer Network Solutions) FPJ 4247 part A – Works Complete Declaration and Handover of Assets to the company and Branch Form (Customer Network Solutions) FPJ 4254 – Access Authorisation (AA)/ Access to Work (ATW) Restoration Checklist for Distribution Network to Construction Coordinator.

Construction Coordinator to produce the Division Form (Network Divisions) FNV 1043 – Certificate of availability for service for network electrical assets and handover the certificate to Commissioning Officer/District Operator. If the Commissioning Officer/District Operator not on site at the time of works completion, Division Form (Network Divisions) FNV 1043 – Certificate of Availability for Service for Network Electrical Assets certificate must be left in the switching folder.

The Commissioning Officer/District Operator must return the Division Form (Network Divisions) FNV 1043 – Certificate of Availability for Service for Network Electrical assets certificate to Construction Coordinator and if the certificate is collected from the switching folder then it will be returned to Construction Coordinator via fax/scan and e-mail/hard copy by mail.

Construction Coordinator to retain the Division Form (Network Divisions) FNV 1043 – Certificate of Availability for Service for Network Electrical Assets in the shared Construction Coordinator SharePoint project folder and in CAMS along with all the test reports and the project documentations.

Annexure A.4 – Commissioning Network Electrical Assets for Low Voltage Projects



Responsible

network Connections or Delegate

Responsible Officer (may need input from Qualified Assessor for equipment testing details)

Responsible Officer
Needs to ensure QA has appropriate qualifications / experience

Responsible Officer must ensure ITP is complete. Qualified Assessor is responsible for carrying out the tests

Qualified Assessor advises Responsible Officer

Responsible Officer

Responsible Officer

Work crew
Has responsibilities of Commissioning Officer

Construction Coordinator is a nominated responsible officer for the Customer Network Solutions Contestable Projects and ASP Project Manager is responsible for the project management from ASP organisation.

Construction Coordinator to utilise the Branch Workplace Instruction (Customer Network Solutions) WPJ 4140 – Inspections Performed by Construction Coordinators for Standard Quality Assurance Inspection Plans for Underground Distribution Systems or Overhead Distribution systems as applicable along with the Branch Form (Customer Network Solutions) FPJ 4201 – Contractor Inspection Checklist.

ASP to nominate an Electrically Qualified EFM, who has the experience in the Electrical Distribution System testing as a Qualified Assessor for the project or ASP Project Manager can assign himself for this role if he has the competencies.

ASP Qualified Assessor is responsible for carrying out all the tests as per current standards (MCI 0005 – Overhead distribution construction standards manual or MCI 0006 – Underground Distribution Construction Standards Manual) and inform the Construction Coordinator if any variations noted.

Construction Coordinator is to obtain approval from the Mains Asset Manager on any variations to test results advised by the Qualified Assessor.

ASP Project Manager to provide Branch Form (Customer Network Solutions) FPJ 4247 Part A – Works Complete Declaration and Handover of Assets to the company and Branch Form (Customer Network Solutions) FPJ 4254 – Access Authorisation (AA)/Access to Work (ATW) Restoration Checklist for Distribution Network to Construction Coordinator.

Construction Coordinator is to produce the Division Form (Network Divisions) FNV 1043 – Certificate of availability for service for network electrical assets and carry out the commissioning of Low Voltage network.

Construction Coordinator is to retain Division Form (Network Divisions) FNV 1043 – Certificate of Availability for Service for Network Electrical Assets in the shared Construction Coordinator SharePoint project folder and in CAMS along with all test reports and the project documentations.

Annexure B – Network Assurance Inspection and Test Plans

Underground Distribution:

Seq. No.	Activity	Resource	Reference	Action	Timeline	Comments
1.0	Letter of intent	• Customer Connections Administrator (CCA) • CAMS	• WPJ4140 • WPJ4303 • NSW Department of Planning and Environment ASP list	• Check for level 1 ASP Accreditation. • Check for warranty maintenance bond. • Certified design. • Request fees from CCs. • Update CAM.	2 days	Contestable Network Section Framework
1.1	Set Construction Fees	Construction Coordinator (CC)		Set construction fees to CCA and nominate CC in CAMS.	2 days	
1.2	Letter to Proceed	• CCA • CAMS • DOCS	WPJ4303	• Prepare the Letter to Proceed package. • A copy of Letter to Proceed package to CC. • Update CAMS	2 days	
2.0	Project Commencement	Level 1 ASP	• Project Commencement Notification Form – FPJ2021. • FAM0009	• Completed form FPJ2021 to CC. • Provide Project Safety Plan/Program to CC. • Provide SER to CC • Provide the Letter to Proceed to CC • Pay Construction Fees to the company. • ASP to provide FAM0009 where applicable. • Asbestos Management Plan.	2 weeks	Level 1 ASP education required to implement this activity.
2.1	Approval for Commencement of Works	• Construction Coordinator • CAMS • PM database	WPJ4140	Verify fees payment and organise site meeting. Refer Project Management database for Critical/Major Projects details and setup the milestones with Region.	5 days	

Seq. No.	Activity	Resource	Reference	Action	Timeline	Comments
2.2	Site Meeting	• Level 1 ASP • Construction Coordinator	WPJ4140	• Address all site issues including substation site access and easement. • Keep records/minutes in project file. • Design can be built – if not, advise CNE to issue defect note to Level 3 ASP • Review the Safe Design Report, SER & Asbestos Management Plan. • Get action plan from Level 1 ASP for any site critical issues. • Obtain Project Plan/Program from ASP. • Update CAMS.	10 days	Level 1 ASP education required to implement this activity
2.3	Company co-ordination	• Construction Coordinator • Level 1 ASP Network Connection Project Manager	• WPJ4140 Check for company works on other K, Q and N type projects where works are required to be carried out simultaneously with ASPs. • Procedure for K & Q type projects – GAM 0047. • FPJ2022, FPJ4267	• Notify the Regions for ASPs work on the first feeder from a zone substation by submitting FPJ2022. • Notify Network Contestable Project Manager for any changes to ASP program which impact company works. • Provide access for ASP into assets to carry out works.	ASP Level 1 – Project Program timeline	Procedure for first feeder from zone subs is in draft. Project Management Framework to manage the Project Milestones for major or critical projects.
2.4	System Access/Switching	• Construction Coordinator • Level 1 ASP	• WPJ4140 • NPJ2009 • FPJ4612 • FPJ2204 • FPJ4269 • GIS • SOP • RequestIt	• L1 ASP to submit form FPJ 4612 HV outage requests as per WPJ 4140 • L1 ASP to submit form FPJ 2204 for LV outage/ATW requests as per WPJ 4140 • CC to organise HV outage to network by writing D&Rs and performing and organising ATW's. • Coordinate generator connections.	WPJ4140	

Seq. No.	Activity	Resource	Reference	Action	Timeline	Comments
2.5	Critical Inspection Plan	• Construction Coordinator • Level 1 ASP	• WPJ4140 • FPJ4256 • FPJ4201 • Level 1 ASP Project Plan/Program • CAMS	• Prepare Critical Inspection plan as per Form FPJ4256.	2 days	Level 1 ASP education required before implementation.
2.6	Safety site inspection prior to commissioning and/or during course of work	Construction Coordinator	• WPJ4140 • FPJ4201 – Construction Coordinator Checklist. • FPJ4259 – Construction Coordinator Safety Checklist	Construction Coordinator to conduct safety inspection prior to commissioning and during course of work as required.	Prior to commissioning and/or during course of work as required.	Level 1 ASP education required before implementation.
2.7	Environmental site inspection during course of work	• Construction Coordinator • Environmental Business partner (as required)	• EMS0001 • FSEYYYY • Environmental Site Inspection Checklist for Class 3 Works	Construction Coordinator to conduct environmental inspection at least once during course of work.	During course of work	Level 1 ASP and Construction Coordinator education required before implementation.
3.0	Material Compliance	• Construction coordinator • Level 1 ASP • Company standards website	• WPJ4140 • Product Approval database • MCI0006 • FAM0009	• ASP is to use only company approved materials. • CC to confirm L1 ASP compliance to using approved materials by consulting approved materials list.	ASP Level 1 – Project Program timeline and as per critical inspection program.	Access to Standards database on product approval needs to be arranged.
3..1	Trench, Ducts, Civil Work & Cable Recording	• Construction Coordinator • Level 1 ASP • Company standards website	• WPJ4140 • MDI0047 • MDI0020 • SAD0004 • FAD1005	• L1 ASP to obtain BYDA plans (FAD 1005) prior to excavation. • L1 ASP to mark up the latest certified project drawings with conduit covers and offsets as per SAD0004. • L1 ASP to submit FPJ2020	• ASP Level 1 – Project Program timeline • Daily	

Seq. No.	Activity	Resource	Reference	Action	Timeline	Comments
3.2	Underground Cable Installation	• Construction Coordinator • Level 1 ASP • Company standards website	• WPJ4140 • MCI0006 • SAD0004 • FPJ4255	• L1 ASP to submit FPJ2020. • L1 ASP to markup WAE/FB as per SAD0004. • CC to use FPJ4255 to inspect the underground cable installation.	• Daily • ASP Level 1 – Project Program timeline	
3.3	Testing of Underground cables	• Construction Coordinator • Level 1 ASP	• WPJ4140 • MCI0006 • FPJ2019 • FPJ2017	• L1 ASP to submit FPJ2020. • L1 ASP to test all cables before and after jointing and complete forms FPJ2016 or/and FPJ2017 upon completion of works.	ASP Level 1 – Project Program timeline	
3.4	Joints, terminations & pits	• Construction coordinator • Level 1 ASP • Company standards website	• WPJ4140 • MCI0006 • FPJ4233 • FPJ4258	• L1 ASP to submit FPJ2020. • L1 ASP to fill in forms FPJ4233 or/and FPJ4258 upon completion of works	• Daily • As per WPJ4140	
3.5	Padmount Substations	• Construction coordinator • Level 1 ASP • Company standards website	• WPJ4140 • MCI0006 • SDI standards • FAM0009 • SAD0004 • FPJ4231	• L1 ASP to submit FPJ2020. • L! ASP to confirm sub landed in pegged easement. Any changes to be marked up on WAE/FB as per SAD0004. • L! ASP to arrange for NA2 inserts to be installed in padmount substation. • CC to witness the installation and testing of earth grid prior to connection of other earths. • L! ASP to fill in form FPJ4231 and Technical Asset Loader on completion of test. • CC to check site access for accessibility by the company.	• Daily • As per critical inspection program	

Seq. No.	Activity	Resource	Reference	Action	Timeline	Comments
3.6	Indoor Substations	• Construction coordinator • Level 1 ASP • Company standards website	• WPJ4140 • MCI0006 • MDI0028 • SDI108 • FPJ4243 • FPJ4231 • FAM0009	• L1 ASP to submit FPJ202. • CC to approve room as per form FPJ4243 before any equipment is to be installed. • L1 ASP to fill in form FPJ4231 and Technical Asset Loader on completion of test. • CC to coordinate locking section fo the installation of the substation locking system. • CC to coordinate with Region to apply correct protection settings for HV CBs. • CC will supply signage for the ASP to label with sub number and mount on access doors.	• Daily • ASP L1 – Project Program timeline • As per critical inspection program	
3.7	Pillars	• Construction Coordinator • Level 1 ASP • Company standards website	• WPJ4140 • MCI 0006 • FPJ 4224	• L1 ASP to submit FPJ 2020. • L1 ASP to fill in form FPJ 4224 after the installation of the pillar.	Daily	
3.8	Street Lighting	• Construction coordinator • Level 1 ASP • Company standards website	• WPJ 4140 • LDI 0001 • LDI 0003 • LCI 0001 • FPJ 4224 • FPJ 4255 • FPJ 2016	• L1 ASP to submit FPJ 2020. • L1 ASP to fill in forms FPJ 4222, FPJ 4221 for all columns and ragbolts installed. • L1 ASP to test all cables in accordance to Seq no.3.3. • CC to inspect all columns and megger all circuits prior to commissioning.	• Daily • ASP L1 – Project Program timeline	

Seq. No.	Activity	Resource	Reference	Action	Timeline	Comments
4.0	Pre-Commissioning	• Construction coordinator • Level 1 ASP	• WPJ 4140 • FPJ 4248 • SDI 120 • EDI 005	• CC to verify all the test results provided by the ASP. • CC to check all WAE documents were received prior to commissioning. • L1 ASP to complete all underground checks by filling in FPJ 4248.		
5.0	Commissioning	• Construction coordinator • Level 1 ASP	• GNV 1044 • GNV 1047 • WPJ 4140 • NPJ 2009 • FPJ 4254 • FPJ 4255 • FPJ 4247 • FNV 1043 • SAD 0004	• L1 ASP to submit prior to commissioning: – Supply interruption notification sent to the affected customers. – Adequate resource organised to avoid extended outage time. – Works Complete Declaration and asset handover form part A (Form FPJ 4247). – Signed WAE drawing and Duct, Easement and Trench plan. – Signed off FPJ 4254 upon cancellation of AA/ATW. – All forms as specified in other activities in this document that have been carried out relevant to individual project. – Safe Design Report • CC to complete the following tasks: – Confirm the relevant activities in the Critical Inspection Checklist FPJ 4255 have been completed prior to and after commissioning. – Check LV phasing at substation as required. – Check LV phasing and supply voltage at all open points. – Provide completed form FNV 1043 to the Commissioning Officer for verification.		Customer Network Solutions to manage the Level 1 ASP non-conformance process.

Seq. No.	Activity	Resource	Reference	Action	Timeline	Comments
				– After verification, keep FNV 1043 in the project file. – Receive all signed notification of tests and critical paperwork. – Check Job site restored satisfactorily. • Conduct final on-site inspection with Local Council if required. Get letter if OK. Get ASP back if not.		
6.0	Project Close Phase	• Construction coordinator • Level 1 ASP	• WPJ 4140 • FPJ 4252 • FPJ 4253 • Certified design • CAMS • Field Book • WAE • TAL • SDR • GNV 1047 • SAD 0004	• Before issuing the Letter of Acceptance, CC to check the following process: – Received Final Works as Completed project drawing; – Received Safe Design Report – Received and validated Technical Asset Loader (TAL) from L1 ASP; – Verify CAMS for inspection fees paid; – All WAE documents were received; – Works Complete Declaration and asset handover form part B (Form FPJ 4247); – Acknowledgment of equipment return form FPJ 4252 or/ and FPJ 4253 from L1 ASP where required; and – Received completed and closed- off SER. • Complete Project Assessment for L1 ASP form FPJ 2009 in CAMS and send a copy to the ASP. • Works as Completed project drawing prepared by the ASP and validated by the Inspector and scan electronically into the required network directory for Network Asset Information and in a WAE folder in CAMS.	As per WPJ4140	

Seq. No.	Activity	Resource	Reference	Action	Timeline	Comments
7.0	End of Project Paperwork	• Construction Coordinator • Level 1 ASP • CCA/CNE	• WPJ 4140 • FPJ 2009 • CAMS	• CC to complete the following activities: – Upload Technical Asset Loader. – Scan Letter of Acceptance with electronic signature into the relevant CAMS application directory. – Advise CCA of issuing of Letter of Acceptance to the ASP. – All milestones related to construction activity in CAMS completed. – All WAE documents to be kept on the shared Construction Coordinator SharePoint project folder e.g. Declaration, test results, forms, checklists, Safe Design Report and closed off SER. – Scan all WAE documents into CAMS application directory. – Contents of closed file sent to Information Support team for scanning and archiving. • CCA/CNE to issue Network Connection letter to Client/Nominated ASP. • CCA to process the reimbursements on receipt of invoice from ASP/Client.	As per WPJ4140	

Overhead Distribution:

Seq. No.	Activity	Resource	Reference	Action	Process Timeline	Comments
1.0	Letter of intent	• Customer Connections Administrator (CCA) • CAMS	• WPJ4140 • WPJ4303 • NSW Department of Planning and Environment ASP list	• Check for level 1 ASP Accreditation. • Check for warranty maintenance bond. • Certified design. • Request fees from CCs. • Update CAM.	2 days	Contestable Network Section Framework
1.1	Set Construction Fees	Construction Coordinator (CC)		• Set construction fees to CCA and nominate CC in CAMS.	2 days	
1.2	Letter to Proceed	• CCA • CAMS • DOCS	WPJ 4303	• Prepare the Letter to Proceed package. • A copy of Letter to Proceed package to CC. • Update CAMS.	2 days	
2.0	Project Commencement	Level 1 ASP	• Project Commencement Notification Form – FPJ 2021 • FAM 0009	• Completed form FPJ2021 to CC. • Provide Project Safety Plan/ Program to CC. • Provide SER to CC • Provide the Letter to Proceed to CC. • Pay Construction fees to the company. • ASP to provide FAM 0009 where applicable. • Asbestos Management Plan	2 weeks	Level 1 ASP education required to implement this activity.
2.1	Approval for Commencement of Works	• Construction Coordinator • CAMS • PM database	WPJ 4140	• Verify fees payment and organise site meeting. • Refer Project Management data base for Critical/ Major Projects details and setup the milestones with Region.	5 days	

Seq. No.	Activity	Resource	Reference	Action	Process Timeline	Comments
2.2	Site Meeting	• Level 1 ASP Construction Coordinator • CAMS	WPJ 4140	• Address all site issues including substation site access and easement. • Keep records/ minutes in project file. • Design can be built – if not, advise CNE to issue defect note to Level 3 ASP. • Get action plan from Level 1 ASP for any site critical issues. • Review the Safe Design Report, SER & Asbestos Management Plan • Obtain Project Plan/Program from ASP. • Update CAMS.	10 days	Level 1 ASP education required before implementation.
2.3	Company co-ordination	• Construction Coordinator • Level 1 ASP • Customer Network Solutions Project Manager	• WPJ 4140 • Procedure for K & Q type projects – GAM 0047 • FPJ 2202, FPJ 4267	• Notify the Regions for ASP's work on the first feeder from a zone substation by submitting FPJ 2202. • Check for company works on other K, Q & N type projects where works are required to be carried out simultaneously with ASP's. • Notify Network Contestable Project Manager for any changes to ASP program which impact works. • Provide access for ASP into assets to carry out works.	ASP Level 1 – Project Program timeline	• Procedure for first feeder from zone sub is in draft. • Project Management Framework to manage the Project Milestones for major or critical projects.
2.4	System Access/ Switching	• Construction Coordinator • Level 1 ASP	• WPJ 4140 • WPJ 4141 • NPJ 2009 • FPJ 4612 • FPJ 2204 • FPJ 4269 • GIS • SOP • RequestIT	• L1 ASP to submit form FPJ 4612 HV outage requests as per WPJ 4140 • L1 ASP to submit form FPJ 2204 for LV outage/ATW requests as per WPJ 4140 • CC to organise HV outage to the network by writing D&Rs and performing and organising ATW's. • Coordinate generator connections.	WPJ 4140	

Seq. No.	Activity	Resource	Reference	Action	Process Timeline	Comments
2.5	Critical Inspection Plan	• Construction Coordinator • Level 1 ASP	• WPJ 4140 • FPJ 4255 • FPJ 4201 • Level 1 ASP Project Plan/Program • CAMS	• Prepare Critical Inspection plan as per Form FPJ 4255.	2 days	Level 1 ASP education required before implementation
2.6	Safety site inspection prior to commissioning and/or during course of work	Construction Coordinator	• WPJ 4140 • FPJ 4201- Construction Coordinator Checklist • FPJ 4259- Construction Coordinator Safety Checklist	• Construction Coordinator to conduct safety inspection prior to commissioning and during course of work as required	Prior to commissioning and/or during course of work as required	Level 1 ASP education required before implementation
2.7	Environmental inspection	• Construction Coordinator • Environmental Business Partner (as required)	• EMS 0001 • FSE YYYY Environmental Site Inspection Checklist for Class 3 Works	• Construction Coordinator to conduct environmental inspection at least once during course of work.	During course of work	Level 1 ASP and Construction Coordinator education required before implementation
3.0	Material Compliance	• Construction Coordinator • Level 1 ASP • Company standards website	• WPJ 4140 • Product Approval database • MCI 0005 • FAM 0009 • Certified design	• ASP is to use only approved materials. • All materials sourced by the ASP must conform exactly with company's specifications as per MDI standards.	ASP Level 1 – Project Program timeline and as per critical inspection program	Access to Standards database on product approval need to be arranged.
3.1	Excavation/ foundation construction – Civil work	• Construction Coordinator • Level 1 ASP • Company standards website	• WPJ4140 • MCI0005 • Certified design • FAD 1005	• L1 ASP to obtain BYDA plans (FAD 1005) prior to excavation. • CC to inspect the excavation/foundation construction compliance to the construction	ASP Level 1 – Project Program timeline	

Seq. No.	Activity	Resource	Reference	Action	Process Timeline	Comments
				standard and location as per the certified design. • Onsite inspection as per FPJ2020		
3.2	Overhead Mains Installation	• Construction Coordinator • Level 1 ASP • Company standards website	• WPJ 4140 • MCI 0005	• L1 ASP to submit FPJ 2020. • CC to use FPJ 4255 to inspect the overhead mains installation.	• Daily • ASP Level 1 – Project Program timeline	
3.3	Testing of Overhead Mains	• Construction Coordinator • Level 1 ASP • Company standards website	• WPJ 4140 • MCI 0006 • SDI 120 • FPJ 2016 • FPJ 2017	• L1 ASP to submit FPJ 2020. • L1 ASP to test all cables/conductors before and after jointing and complete forms FPJ 2016 or/and FPJ 2017 upon completion of works.	ASP Level 1 – Project Program timeline	
3.4	Joints & terminations	• Construction Coordinator • Level 1 ASP • Company standards website	• WPJ 4140 • MCI 0005 • FPJ 4258	• L1 ASP to submit FPJ 2020. • L1 ASP to fill in forms FPJ 4258 upon completion of works.	Daily	
3.5	Poles and associated hardware	• Construction Coordinator • Level 1 ASP • Company standards website	• WPJ 4140 • MCI 0005 • FPJ 4255 • MDI Standards • Certified Design • FPJ 4233	• CC to perform the following tasks with an aid of Critical Inspection Checklist FPJ 4255: – Inspects poles to confirm the correct poles used as per the certified design. – Assesses the poles and associated hardware are assembled to match the type of construction in accordance with the design and Integral Energy standards. – Inspects the installation of poles and the methods – the use of correct poles slings, lifting method, positioning, alignment and safe practise.		

Seq. No.	Activity	Resource	Reference	Action	Process Timeline	Comments
				– Assesses the stabilisation of poles to enable the conductor installation. – Assesses the installation of overhead conductors to meet the sag tension criteria of the certified design and the clearance from ground, other structures and other overhead conductors. – Check the poles, air break switches and under slung links are numbered correctly. • L1 ASP to test recloser/load break switch/ UGOH earthing installation and complete Form FPJ 4233. • Onsite inspection as per FPJ2020		
3.6	Pole Substations	• Construction Coordinator • Level 1 ASP • Company standards website	• WPJ4140 • MCI0005 • SDI standards • FAM0009 • FPJ 4242 • FPJ 4231 • Certified design	• CC to use FPJ 4242 to inspect correct construction of substation. • CC to check substation is numbered correctly. • CC to witness the installation and testing of earthing system prior to connection of other earths. • L1 ASP to fill in form FPJ 4231 and TAL on completion of test. • Onsite inspection as per FPJ2020		
3.7	Street Lighting	• Construction Coordinator • Level 1 ASP • Company standards website	• WPJ 4140 • LDI 0001 • LDI 0003 • LCI 0001 • FPJ 4224 • FPJ 4255 • FPJ 2016	• L1 ASP to submit FPJ 2020. • L1 ASP to test all cables in accordance to Seq no.3.3. • CC to inspect street lighting installations as per FPJ 4255.	• Daily • ASP Level 1 – Project Program timeline	

Seq. No.	Activity	Resource	Reference	Action	Process Timeline	Comments
4.0	Pre-Commissioning	• Construction Coordinator • Level 1 ASP	• WPJ 4140 • SDI 120 • FPJ 4248 • EDI 005	• CC to verify all the test results provided by the ASP. • CC to check all WAE documents were received prior to commissioning.		
5.0	Commissioning	• Construction Coordinator • Level 1 ASP	• WPJ 4140 • GNV 1044 • NPJ 2009 • FPJ 4254 • FPJ 4255 • FPJ 4247 • FNV 1043 • GNV 1047 • SAD 0004	• L1 ASP to submit prior to commissioning: – Supply interruption notification sent to the affected customers. – Adequate resource organised to avoid extended outage time. – Works Complete Declaration and asset handover form part A (Form FPJ 4247). – Signed off all WAE drawings. – Signed off FPJ 4254 upon cancellation of AA/ATW. – All forms as specified in other activities in this document that have been carried out relevant to individual project. – Safe Design Report received. • CC to complete the following tasks: – Confirm the relevant activities in the Critical Inspection Checklist FPJ 4255 have been completed prior to and after commissioning. – Check LV phasing at substation as required. – Check LV phasing and supply voltage at all open points. – Provide completed form FNV 1043 to the Commissioning Officer for verification. – After verification, keep FNV 1043 in the project file. – Check Job site restored satisfactorily.		Customer Network Solutions to manage the Level 1 ASP non-conformance process.

Seq. No.	Activity	Resource	Reference	Action	Process Timeline	Comments
				– Conduct final on-site inspection with Local Council if required. Get letter if OK. Get ASP back if not.		
6.0	Project Close Phase	• Construction Coordinator • Level 1 ASP	• WPJ 4140 • FPJ 4252 • FPJ 4253 • FPJ 4247 • Certified design • CAMS • Field Book • WAE • TAL • SDR • GNV 1047 • SAD 0004	• Before issuing the Letter of Acceptance, CC to check the following process: – Received Final Works as Completed project drawing; – Received and validated Technical Asset Loader (TAL) from L1 ASP; – Verify CAMS for Inspection fees paid; – All WAE documents were received; – Safe Design Report (SDR) received; – Works Complete Declaration and asset handover form part B (Form FPJ 4247); – Acknowledgment of equipment return form FPJ 4252 or/and FPJ 4253 from L1 ASP where required; and – Received completed and closed- off SER. • Complete Project Assessment for L1 ASP form FPJ 2009 in CAMS and send a copy to the ASP. • Works as Completed project drawing prepared by the ASP and validated by the Inspector and scan electronically into the required network directory for Network Asset Information and in a WAE folder in CAMS.	As per WPJ 4140	
7.0	End of Project Paper Work	• Construction Coordinator • Level 1 ASP • CCA/CNE	• WPJ 4140 • FPJ 2009 • CAMS • GAM 0036 • WPJ 4304	• CC to complete the following activities: – Upload Technical Asset Loader. – Scan Letter of Acceptance with electronic signature into the relevant CAMS application directory.	As per WPJ 4140	

Seq. No.	Activity	Resource	Reference	Action	Process Timeline	Comments
				– Advise CCA of issuing of Letter of Acceptance to the ASP. – All milestones related to construction activity in CAMS completed. – All WAE documents to be kept on project file e.g. Declaration, test results, forms, checklists, Safe Design Report and closed off SER. – Scan all WAE documents into CAMS application directory. – Contents of closed file sent to Information Support team for scanning and archiving. • CCA/CNE to issue Network Connection letter to Client/Nominated ASP. • CCA to process the reimbursements on receipt of invoice from ASP/Client.		

Transmission Projects – U/G & O/H

Seq. No.	Activity	Resource	Reference	Action	Process Timeline	Comments
1.0	Letter of Intent	• Customer Connections Administrator (CCA) • CAM system • Nominated Project Manager in the TB	• WPJ 4110 • WPJ 4303 • NSW Department of Industry ASP list • Pre-Qualification from Transmission Mains	• Check for Level 1 ASP Pre-qualification Accreditation. • Major Project and Programs Project Manager to grant approval for ASP to perform Transmission Works • Check for warranty maintenance bond. • Certified design • Request fees from CC's • Update CAMS	2 days	Contestable Network Section Framework Pre-Qualification register for transmission works held currently by ASP Relationship Section
1.1	Set Construction Fees	• Construction Coordinator (CC) • Nominated Project Manager in the TB		• Set construction fees to CCA. • Nominate by CC (after consultation with the Nominated Project Manager in the TB) in CAMS	2 days	Major Projects and Programs to advise.
1.2	Letter to Proceed	• CCA • CAM system • DOCS	WPJ4303	• Prepare the Letter to Proceed package. • Copy of Letter to Proceed to CC's • Copy of Letter to Proceed to the Nominated Project Manager in the TB Update CAMS	2 days	
2.0	Project Commencement	Level 1 ASP	• Project Commencement Notification Form – FPJ2021 • Certified design	• Completed form FPJ2021 to CC. • Provide Project Safety Plan/Program to CC. • Provide SER to CC • Asbestos Management Plan • Provide Letter of Proceed • Pay construction fees to the company		Level 1 ASP education required to implement this activity
2.1	Approval for Commencement of Works	• Construction Coordinator • CAM system • PM database	• WPJ4140 • Certified design	• CC to verify fees payment and organise site meeting. • CC to refer to Project Management data base for Critical/ major projects details.	5 days	

Seq. No.	Activity	Resource	Reference	Action	Process Timeline	Comments
2.2	Site Meeting	• Level 1 ASP Construction Coordinator • CAM System • Nominated Project Manager in the TB	• WPJ4140 • Certified design • Technical Brief	• Hold a pre-construction meeting to address all site issues. • Review Safe Design Report, SER & Asbestos Management Plan • If the design can be built – if not, advise CNE to issue defect note to Level 3 ASP. • Get action plan from Level 1 ASP for any site critical issues. • Input from the Nominated Project Manager in the TB requested on project design. • Obtain Project Plan/Program from ASP. • Update CAMS.	10 days	Level 1 ASP education required before implementation.
2.3	Company co-ordination	• Construction Coordinator • Level 1 ASP Customer Network Solutions Project Manager	• WPJ 4140 • Procedure for K & Q type projects – GAM 0047 • FPJ 2202, FPJ 4267	• Notify the Regions for ASP's work on the first feeder from a zone substation by submitting FPJ 2202. • Check for company works on other K, Q & N type projects where works are required to be carried out simultaneously with ASP's. • Notify Network Contestable Project Manager for any changes to ASP program which impact works. • Provide access for ASP into assets to carry out works.	ASP Level 1 – Project Program timeline	Project Management Framework to manage the Project Milestones for major or critical projects.
2.4	System Access/ Switching	• Construction Coordinator • Level 1 ASP	• WPJ 4140 • WPJ 4141 • NPJ 2009 • FPJ 4612 • FPJ 2204 • GIS • SOP • RequestIT	• L1 ASP to submit form FPJ 4612 HV outage requests as per WPJ 4140 • L1 ASP to submit form FPJ 2204 for LV outage/ATW requests as per WPJ 4140 • CC to organise HV outage for the network by writing D&Rs and performing and organising ATW's. • Coordinate generator connections. • Coordinate installation and removal of live line links	WPJ 4140	

Seq. No.	Activity	Resource	Reference	Action	Process Timeline	Comments
2.5	Safety site inspection prior to commissioning and/or during course of work	Construction Coordinator	• WPJ 4140 • FPJ 4201- Construction Coordinator Checklist • FPJ 4259- Construction Coordinator Safety Checklist	Construction Coordinator to conduct safety inspection prior to commissioning and during course of work as required.	Prior to commissioning and/or during course of work as required.	Level 1 ASP education required before implementation.
2.6	Environmental inspection	• Construction Coordinator • Environmental Business Partner (as required)	• EMS 0001 • FSE YYYY Environmental Site Inspection Checklist for Class 3 Works	Construction Coordinator to conduct environmental inspection at least once during course of work	During course of work	Level 1 ASP and Construction Coordinator education required before implementation
3.0	• Critical Inspection Plan	• Construction Coordinator • Level 1 ASP • Nominated Project Manager in the TB	• WPJ 4140 • FPJ 4255 • FPJ 4201 • Level 1 ASP Project Plan/Program • CAMS • Certified design • Technical Brief	• Nominated Project Manager in the TB to prepare Critical Inspection plan on specific requirements. • Level 1 ASP to send daily activity form FPJ2020.	• 2 days • Daily	• Level 1 ASP education required before implementation.
3.1	• Material Compliance	• Construction Coordinator • Level 1 ASP • Nominated Project Manager in the TB	• WPJ4140 • Product Approval database • MDI Standards • Certified design • Transmission material approval list.	• All materials sourced by the ASP must conform exactly to the company's specifications as per MDI standards or be listed on the Transmission products material approval list. • Onsite inspection as per FPJ 2020	• ASP Level 1 – Project Program timeline • Daily	• Access to Standards database on product approval need to be arranged. • Transmission approval contact: (Mains Asset Manager)

Seq. No.	Activity	Resource	Reference	Action	Process Timeline	Comments
3.2	Excavation/ foundation construction – Civil work	• Construction Coordinator • Level 1 ASP • Nominated Project Manager in the TB	• WPJ4140 • MCI0005 • SAD0004 • MDI0047 • Certified design • Technical Brief	• CC to inspect the excavation/foundation construction compliance to the construction standard and location as per the certified design. • L1 ASP to obtain BYDA plans (FAD 1005) prior to excavation. • Onsite inspection as per FPJ2020	• ASP Level 1 – Project Program timeline • Daily	
3.3	Cable and Duct Installation	• Construction Coordinator • Level 1 ASP • Nominated Project Manager in the TB	• Company standards website • WPJ4140 • SAD0004 • MDI0047 • MCI0006	• L1 ASP to submit FPJ 2020 • L1 ASP to mark up WAE/FB as per SAD0004	• Daily • ASP Level 1 – Project Program timeline	
3.4	Poles and structures associated hardware	• Construction Coordinator • Level 1 ASP • Nominated Project Manager in the TB	• WPJ4140 • MCI0005 • MDI Standards • Certified Design • MDI0047 • Company standards website • FPJ 4255	• CC to perform the following tasks with an aid of Critical Inspection Checklist FPJ 4255: – Inspection of poles to confirm the correct poles used as per the certified design. – Assess the poles and associated hardware are assembled to match the type of construction in accordance with the design and company standards. – Inspection of the installation of poles and the methods – the use of correct poles slings, lifting method, positioning, alignment and safe practise. – Assessment of the stabilisation of poles to enable the conductor installation. – Assessment of the installation of over head conductors to meet the sag tension criteria of the certified design and the clearance from ground, other structures and other overhead conductors.	ASP Level 1 – Project Program timeline	

Seq. No.	Activity	Resource	Reference	Action	Process Timeline	Comments
				– Check the poles, air break switches and under slung links are numbered correctly • Inspections may be carried out with the assistance of delegate from transmission mains. • Onsite inspection as per FPJ 2020.		
3.6.	Terminations/ Jointing	• Construction Coordinator • Level 1 ASP • Company standards website • Termination Manufacturers Instructions • Nominated Project Manager in the TB	• WPJ4140 • SAD0004 • MDI0047 • MCI0006 • FPJ 4258 • FPJ 4233	• L1 ASP to submit FPJ 2020. • L1 ASP to fill in forms FPJ 4258 upon completion of works as required. • For UGOH terminations, Transmission section to complete forms FPJ 4258 and FPJ 4233 upon completion of works where required. • CC to receive the above-mentioned forms for records.	• Daily • As per WPJ 4140	
3.7	Protection	• Construction Coordinator • Level 1 ASP • Nominated Project Manager in the TB • Protection • Test Section	• Certified design • Technical Brief • PDI4000 • PDI4001 • PDI4004 • PDI4008 • Email	• Operations Manager – Protection and Control to be notified if the following works: – Head works are involved. – Any work on the transmission network by the ASP which directly or indirectly impacts on a protection scheme, the protection will need to be isolated prior, tested, restored and checked in service at the completion. • If non-contestable works are required notification to the project manager is required.	As required.	Contact Operations Manager – Protection and Control for protection enquiries.

Seq. No.	Activity	Resource	Reference	Action	Process Timeline	Comments
4.0	Pre-Commissioning – Testing	• Construction Coordinator • Level 1 ASP • Nominated Project Manager in the TB • Test Section • Protection	• Email • WPJ4140 • SDI 535 • MCI0006 • MMI0025 • SDI100 • SDI 120 • Australian Standards, • Certified design, • Technical Brief.	• Testing Section to carry out all tests as per standards and provide CC the test results on completion of test. • CC to check all WAE documents were received prior commissioning. • Onsite inspection as per FPJ 2020	Prior to Commissioning	
5.0	Commissioning	• Construction Coordinator • Level 1 ASP • Nominated Project Manager in the TB • Testing Section • System Operations	• WPJ4140 • WSY 0037 • GNV 1044 • FPJ 4247 • FPJ 4254 • FPJ 4255 • FNV 1043 • FNV 1045 • GIS • CAMS • SOPS • Certified design • Test Reports • SDR • GNV 1047 • SAD 0004	• L1 ASP to submit prior to commissioning: – Supply interruption notification sent to the affected customers. – Adequate resource organised to avoid extended outage time. – Works Complete Declaration and asset handover form part A (FPJ 4247). – Signed off all WAE drawings. – Safe Design Report received. – Signed off FPJ 4254 upon cancellation of AA/ATW. – All forms as specified in other activities in this document that have been carried out relevant to individual project. • Major Projects and Programs Project Manager to produce the FNV 1043 and FNV 1045 to Commissioning Officer. • Testing Section to phase at the substation/open points. • CC to complete the following tasks: – Confirm the relevant activities in the Critical Inspection Checklist FPJ 4255		Customer Network Solutions to manage the Level 1 ASP non-conformance process.

Seq. No.	Activity	Resource	Reference	Action	Process Timeline	Comments
				have been completed prior to and after commissioning. – Receive acknowledged FNV 1043 and FNV 1045 from Commissioning Officer for records prior to energising the network. – Check Job site restored satisfactorily. • Conduct final on-site inspection with Local Council if required. Get letter if OK. Get ASP back if not.		
6.0	Project Close Phase	• Construction Coordinator • Level 1 ASP • Nominated Project Manager in the TB	• WPJ 4140 • FPJ 4252 • FPJ 4253 • FPJ 4247 • Certified design • CAMS • Field Book • WAE • TAL • SDR • GNV 1047 • SAD 0004	• Final Inspection to be carried out by Construction Coordinator and a nominated person/s from transmission mains. • Before issuing the Letter of Acceptance, CC to check the following process: – Received Final Works as Completed project drawing; – Safe Design Report (SDR) received; – Received and validated Technical Asset Loader (TAL) from L1 ASP; – Verify CAMS for inspection fees paid; – All WAE documents were received; – Works Complete Declaration and asset handover form part B (Form FPJ 4247); – Acknowledgment of equipment return form FPJ 4252 or/and FPJ 4253 from L1 ASP where required; and Received completed and closed- off SER. • Complete Contractor Project Assessment for L1 ASP form FPJ 2009 in CAMS and send a copy to the ASP. • Works as Completed project drawing prepared by the ASP and validated by the Inspector and scan electronically into the	As per WPJ 4140	

Seq. No.	Activity	Resource	Reference	Action	Process Timeline	Comments
				required network directory for Network Asset Information and in a WAE folder in CAMS.		
7.0	End of Project Paper Work	• Construction Coordinator • Level 1 ASP • CCA/CNE	• WPJ 4140 • FPJ 2009 • CAMS	• CC to complete the following activities: – Upload Technical Asset Loader. – Scan Letter of Acceptance with electronic signature into the relevant CAMS application directory. – Advise CCA of issuing of Letter of Acceptance to the ASP. – All milestones related to construction activity in CAMS completed. – All WAE documents to be kept on project file e.g. Declaration, test results, forms, checklists, Safe Design Report and closed-off SER. – Scan all WAE documents into CAMS application directory. – Contents of closed file sent to Information Support team for scanning and archiving. • CCA/CNE to issue Network Connection letter to Client/Nominated ASP. • CCA to process the reimbursements on receipt of invoice from ASP/Client.	As per WPJ 4140	

5. Terms and definitions

Term	Definition
ASP	**Accredited Service Provider** – is a person with accreditation under Part 3 of the Electricity Supply (Safety and Network Management) Regulation 2014 categorised into Levels 1, 2 and 3 as defined by the Department of Industry Resources & Energy under the Accredited Service Provider (ASP) Scheme for contestable works. An ASP is allowed to perform work on behalf of an Authorised Network Operator (ANO) where the ANO is the Determining Authority for that work, as prescribed by Section 110(1) of the Environmental Planning and Assessment Act 1979.
CAMS	**Customer Application Management System** – a web-based application used to manage customer connections to the network.
EMP	**Environmental Management Plan** – Section 1 of Branch Form (Health, Safety and Environment) FAT 0038 – Summary Environmental Report (SER) is the Environmental Management Plan (EMP) with details of mitigated measures to address risks identified in Section 2 of the form.
Level 1 ASP	A company employing authorised persons and accredited by the Department of Industry, Resources & Energy to engage in the construction and installation of Transmission and Distribution works.
Level 3 risk	If a Level 3 environmental risk has been identified for an activity, it means that sensitive features are present in the activity area and may be impacted on even though generic mitigation measures are proposed.
Notifiable incident	An incident that must be reported immediately to the Environment Protection Authority (EPA) and/or the Office of Environment and Heritage (OEH) via the Environment Hotline Phone – 131 555 pursuant to the Protection of the Environment Operations Act 1997 (NSW). A notifiable incident is one that causes material harm to the environment. More specifically, harm to the environment is material if it: • involves actual or potential harm to the health or safety of human beings or to ecosystems that is not trivial; and/or, • results in actual or potential loss or property damage in excess of $10,000, including the costs and expenses that would be incurred in taking all reasonable and practical measures to prevent, mitigate or remediate harm to the environment
NOA	**Notification of Arrangement** – a requirement by constituent Council proving that the development has met the company's requirements to supply lots created under the subdivision.
Responsible Officer	The company employee responsible for delivering the agreed business outcomes for a contestable network project.
Serious breach of the NSW Code of Practice for Authorised Network Operators	Non- compliance to the SER which results in or is likely to result in a material adverse impact on the environment and is reportable to the Independent Pricing and Regulatory Tribunal (IPART).

Term	Definition
SER	**Summary Environmental Report** – the SER is the form of environmental impact assessment (EIA) used to assess a Class 3 activity under the NSW Code of Practice for Authorised Network Operators. A Class 3 activity is a proposal that is reasonably expected to have environmental impacts that are minor and neither extensive nor complex. A Level 3 ASP uses Branch Form (Health, Safety and Environment) FAT 0038 – Summary Environmental Report (SER) to prepare the SER and submit it to the company for design certification.
UGOH	Underground cable to overhead connection.

6. Document information

Content Coordinator	Customer Connections Manager(s)
Process Category	Network
Amendment No	12
Approved By	Manager Customer Network Solutions
Approved Date	29/09/2023
Review Date	29/09/2026
Relevant Legislation	*Electricity Supply Act 1995 (NSW)* Electricity Supply (Safety and Network Management) Regulation 2008 Department of Trade & Investment NSW, Accreditation of Service Providers Scheme Service and Installation Rules of NSW International Standard NSW Code of Practice for Authorised Network Operators, NSW Department of Planning and Environment, September 2015
Relevant Standards / Codes	ISO 14001 – Environmental management systems – Requirements with guidance for use
Related Policies	Company Policy (Network) 9.1.7 – Commissioning Network Electrical Assets Company Policy (Network) 9.8.2 – Planned Electricity Supply Interruption Company Policy (Customer & Stakeholder Management) 10.2 – Life Support Customers
Related Procedures / Workplace Instructions	Company Procedure (Network) GAM 0025 – Supply of Padmount Substations for a Contestable Project from an Approved External Source Company Procedure (Network) GAM 0036 – Management of Drawing Records Company Procedure (Network) GAM 0047 – Work Involving Accredited Service Providers and the Company – First Feeder Cable from Zone Substations – 'K' type Projects (Customer Funded) and 'Q' type Projects (Funded by the company) Electrical Safety Rules Company Procedure (Health & Safety) GSY 1066 – Worksite Hazard and Risk Assessment Division Procedure (Network Divisions) GNV 1044 – Commissioning Network Electrical Assets Branch Procedure (Customer Network Solutions) NPJ 2009 – Low Voltage Access for Accredited Service Providers (ASP's) Branch Procedure (Customer Network Solutions) NPJ 2014 – Asbestos Management Plan for Contestable Network Projects Branch Procedure (Customer Network Solutions) NPJ 6007 – Contestable Works Non-Conformance Branch Workplace Instruction (Customer Network Solutions) WPJ 4327 – Method of Communication between Customer Network

	Solutions Branch and Regional Services in Relation to Customer Connection Projects ETS 0070 – Equipment Technical Specification – 11kV & 22kV Padmount and Indoor Distribution Transformers EDI 004 – Earthing Design, Construction and Testing of Overhead Transmission Mains EDI 005 – Distribution Earthing Test EDI 100 – Distribution Earthing Design Construct and Test EMI 0001 – Environmental impact assessment and environmental management plans EMI 0008 – Environmental incident response and management MCI 0005 – Overhead Distribution Construction Standards Manual MCI 0006 – Underground Distribution Construction Standards Manual MDI 0047 – Mains Design Instructions – Overhead Transmission Mains Design MDI 0028 – Mains Design Instructions – Underground Distribution Network Design MDI 0031 – Overhead Distribution Design Standards Manual MDI 0044 – Easements and Property Tenure Rights SAD 0004 – Recording and Lodgement of WAE Network Information SDI 108 – Substations Design Instructions – Portable Spray Foam for Sealing Cable Penetration SDI 120 – Testing and Commissioning for Distribution Systems LDI 0001 – Lighting Design instructions – Public Lighting LDI 0003 – Commissioning of Public Lighting Assets LCI 0001 – Public Lighting Constructions Environmental Guidelines Handbook Annexure A – Contractor Inspection Process Annexure A.1 – Commissioning of Network Electrical Assets for Transmission Projects – Scenario 1 – Majority of Work is Contestable Annexure A.2 – Commissioning of Network Electrical Assets for Transmission Projects – Scenario 2 – Majority of Work is Transmission Work Annexure A.3 – Commissioning of Network Electrical Assets for HV Distribution Projects Annexure A.4 – Commissioning of Network Electrical Assets for Low Voltage Projects Annexure B – Network Assurance Inspection and Test Plan for Underground Distribution Network Assurance Inspection and Test Plan for Overhead Distribution Network Assurance Inspection and Test Plan for Transmission Projects – U/G & O/H
Related Forms	Company Form (Network) FAM 0009 – Request for Transformer Number for a Substation Company Form (Health & Safety) FSY 0118 – Worksite Coordination / Hazard and Risk Assessment Division Form (Network Divisions) FNV 1043 – Certificate of Availability for Service for Network Electrical Assets Division Form (Network Divisions) FNV 1045 – Commissioning Advice/Authority to Energise System High Voltage Apparatus Branch Form (Asset & Metering Data) FAD 2001 – Notification of Network Alteration Sheet (White Sheet)

	Branch Form (Safety and Environmental Services) FAT 0038 – Summary Environmental Report (SER) Branch Form (Customer Network Solutions) FPJ 2009 – Project Assessment Contractor Performance URD Construction Branch Form (Customer Network Solutions) FPJ 2016 – Notification of Insulation Test Low Voltage Cable Branch Form (Customer Network Solutions) FPJ 2017 – Notification of Insulation Test Distribution Mains Cable Excluding Strategic Cables Branch Form (Customer Network Solutions) FPJ 2020 – Daily Activities Notification Branch Form (Customer Network Solutions) FPJ 2021 – Project Commencement Notification Branch Form (Customer Network Solutions) FPJ 2202 – Non Contestable works Notification to Regional Branch Form (Customer Network Solutions) FPJ 2203 – Contestable Works Plan Checklist for Level 1 ASPs Branch Form (Customer Network Solutions) FPJ 2204 – LV Outage Request Branch Form (Customer Network Solutions) FPJ 4201 – Contractor Inspection Checklist Branch Form (Customer Network Solutions) FPJ 4221 – Ragbolt Checklist Branch Form (Customer Network Solutions) FPJ 4224 – New Column/Pillar Checklist Branch Form (Customer Network Solutions) FPJ 4231 – Substation Earthing Details Branch Form (Customer Network Solutions) FPJ 4233 – HV Pole Top Termination Earthing Branch Form (Customer Network Solutions) FPJ 4242 – Distribution Substation Checklist Branch Form (Customer Network Solutions) FPJ 4243 – Distribution Substation Building Inspection Form Branch Form (Customer Network Solutions) FPJ 4247 – Works Complete Declaration and Handover of Assets to the company Branch Form (Customer Network Solutions) FPJ 4248 – Pre-commissioning/Commissioning Checklist for Low Voltage Underground Branch Form (Customer Network Solutions) FPJ 4252 – Equipment to be returned to the company (Switch gear – Transformers – All Copper Conductor – Bare or Insulated) Branch Form (Customer Network Solutions) FPJ 4253 – Equipment to be returned to the company – Treated Timber Poles Less than 10 Years Old and Exceeding 11m After Removal (Excluding Pole Butt) Branch Form (Customer Network Solutions) FPJ 4254 – Access Authorisation (AA)/Access to Work (ATW) Restoration Checklist for Distribution Network Branch Form (Customer Network Solutions) FPJ 4255 – Critical Inspections Checklist/Commissioning Checklist for Overhead and Underground Network Electrical Assets Branch Form (Customer Network Solutions) FPJ 4258 – Overhead & Underground Jointing Checklist Branch Form (Customer Network Solutions) FPJ 4266 – D&R/ATW Documentation Verification Confirmation Branch Form (Customer Network Solutions) FPJ 4267 – Non-Contestable (N-Projects)/Non-Chargeable Connection Service to Customer Requirement – Notification to Regional Services – Network Asset Operations

	Branch Form (Customer Network Solutions) FPJ 4269 – Network Outage Notification Checklist Branch Form (Customer Network Solutions) FPJ 4612 – HV Outage Request Branch Form (Customer Network Solutions) FPJ 4649A – Contestable Works Non Conformance Report Branch Form (Customer Network Solutions) FPJ 4650 – Contestable Works Observation Form Branch Form (Customer Network Solutions) FPJ 4683 - Environmental Site Inspection Checklist for Contestable Works