CS ENERGY OPERATIONS PROCEDURE FOR

SINGLE FEED ELECTRICAL ISOLATION AND ACCESS CS-OHS-56

Responsible Officer: Electrical Services Engineering Manager
Responsible Manager: Group Manager Asset Management
Responsible Executive: Executive General Manager Operations

DOCUMENT HISTORY

Key Changes	Prepared By	Checked By	Approved By	Date
New Issue	C Kendrick-Ward	Electrical Safety Taskforce	A Brown	14/05/2012
Amended due to outcomes of Electrical Safety Review	D Kendrick	D Bell K Ussher	D Bell K Ussher	11/09/2013
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CONTENTS

CONVENTIONS USED IN THIS DOCUMENT

Overview

The following conventions and icons are used throughout this document to draw attention to critical information.

Warnings

This displays critical information and must be followed.

Note

Additional information or tips.

Business Rules or Requirements

Highlights specific rules or requirements.

1 INTRODUCTION

Purpose

To define and summarise the requirements at CS Energy's Power Station Sites for the isolation & restoration of single supply electrical equipment for Electrical & Mechanical work.

For multiple supply isolations (switching sheets), see CS-OHS-53 - Multiple Supply Electrical Isolation and Access

Scope

This procedure shall apply to all personnel who are authorised as:

- Permit to Work Officers (PTWO)
- Senior Permit to Work Officer (SPTWO)
- Electrical Safety Observers
- Officers In Charge (OIC)

2 RESPONSIBILITIES AND ACCOUNTABILITIES

Overview

This section details the responsibilities and accountabilities for the following roles:

- CS Energy
- Head of Health and Safety
- Senior Permit to Work Officer (SPTWO)
- Permit to Work Officer (PTWO)
- Officer in Charge (OIC)
- Person in Charge of Work (PICW)
- Work Party

CS Energy

CS Energy shall be responsible for:

- having a documented isolation and access procedure

Head of Health and Safety

The Head of Health and Safety is responsible for:

- ensuring all persons who are involved in the isolation and access procedures have been trained and assessed as competent to perform the roles for which they are responsible, and authorised
- maintaining a register of all authorised persons with details of any restrictions
- ensuring audits of the PTW system are carried out
- maintaining the Register of Authorised personnel

	• enforcing compliance with isolation procedures
Senior Permit To Work Officer (SPTWO)	The SPTWO is responsible to: • provide 'senior' direction and assistance for non-routine and/or routine isolation planning and perform plant isolations • provide PTWOs with specialist advice in relation to isolations required, plant operations and other operational requirements • undertake primary planning, coordination and isolation roles during plant outages and overhauls • set/prepare Isolation Sheets as required
Permit To Work Officer	The PTWO is responsible to: • draft isolation sheets and isolation guides • check isolations as required • perform plant isolations • report inconsistencies when plant numbering does not correspond with the isolation sheet • ensure isolations are effective for the scope of the PTW • consult with SPTWO and Officer in Charge as required • restore the plant to service
Officer in Charge (OIC)	The OIC is responsible to: • check isolation sheet covers the item of plant and scope of work • check the isolation has been applied as detailed on the Isolation Sheet • accept PTW and manage documentation • review the Job Safety Environment Analysis (JSEA) • ensure hazards and risks are controlled • perform the duties of the Person in Charge of Work (PICW) where there is no Person in Charge of Work (PICW) nominated for the PTW • return PTW for alteration if the scope of work changes
Person in Charge of Work (PICW)	The Person in Charge of Work is responsible to: • receive the PTW from the OIC • prepare the JSEA and implement all controls prior to work commencing • confirm work party is competent to perform the work activity • coordinate the work activity as per the JSEA and specific job procedures

	• maintain communication with the OIC during work activities • contact OIC to return PTW for alteration if the scope of work changes
Work Party	The Work Party members are responsible to: • understand obligations of a work party member working under PTW • review JSEA and scope of work, adding any further hazards to the JSEA if required • complete work in accordance with the JSEA, specific job procedures and instruction • maintain communication with the PICW throughout the work • during the work activity, maintain: - sign on/off requirements - lock on/off requirements

3 AUTHORISED ROLES & REGISTERS

Authorised Persons List	The list of authorised persons can be found at the following link in TRIM. • Kogan "Authorised Roles and Registers" • Callide "Authorised Roles" • Wivenhoe "Authorised Roles"
Arc Flash Labels	CS Energy's switchboards/cells have been labelled according to the Arc Flash Report which provides information relating to the arc flash potential and arc flash rating. Where a switchboard has no identifiable arc flush labelling, consult with your supervisor. Once the arc flash potential has been determined, ensure that appropriate control measures (PPE, proximity, safety observers) are in place before commencing work
Out of Scope	Remote operation of electrical equipment from the ICMS is not considered as part of this scope.
PPE Requirements for LV and HV Isolations and Switching	The minimum requirements at CS Energy is as per the procedure CS –OHS- 34, Selection, Maintenance and Use of Electrical Safety Equipment and PPE

4 DRAFT ISOLATION SHEET

Introduction

Isolation sheets list a step by step process for de-energising a system. The process for creating, updating and implementing are listed in this section.

Contents

4.1 Drafting Isolation sheet/WCD

Isolation Sheet

Drafting the isolation sheet for isolating LV and HV single supply equipment for the purposes of mechanical isolation requires a PTWO to draft and SPTWO to check and set prepare the isolation process as specified in the scope of work.

The isolation sheet shall incorporate an isolation or set of isolations that suitably eliminates all energy sources for the work to be done.

A decision tree is shown on the following page, showing how to select the correct type of isolation (Figure 4.1)

Note

Isolation of plant that contains multiple High Voltage (HV) and/or Low Voltage (LV) electrical feeds requires the use of switching sheets. The switching process has specific business and legislative requirements that shall be adopted (e.g. authorised electrical personnel, mandatory checks, etc.). Refer to CS-PTW-SOP-02 Training and Authorisation in the PTW System and CS-OHS-53 Multiple Supply Electrical Equipment Isolation and Access.

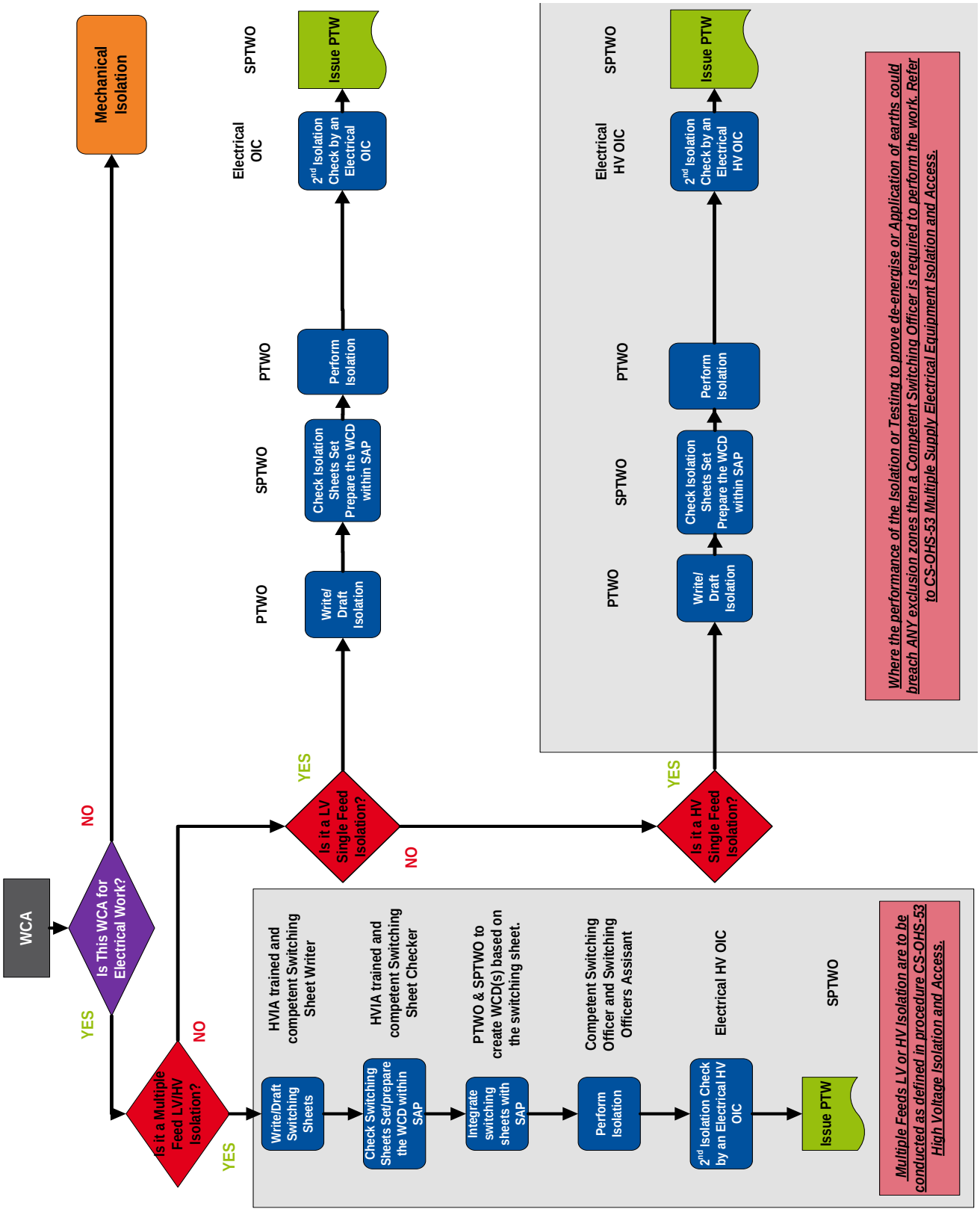


Figure 4.1 Decision Tree for Permit / Isolation Type

4.2 PTWO / SPTWO (Drafter)

Responsibility

The PTWO or SPTWO Drafter is responsible to:

- identify all isolation points to ensure removal of potential energy sources from the proposed work area
- consider special matters relating to the work, work environment, adjacent plant and any specific plant attributes
- draft the Isolation Sheet by:
    - review and utilise a standard isolation sheet
    - review and utilise a previously used isolation sheet
    - draft a new isolation sheet through a process of inspecting the plant, examining plant drawings and information and consulting with various personnel with expertise in that plant area
    - liaise with a Transmission Entity where the isolation requires access to and isolation of Transmission Entity plant

Other responsibilities

The PTWO or SPTWO Drafter is also responsible to:

- draft OIC Point of Control (POC) sheet that manages white POC lock and tags
- consult with the SPTWO or other personnel depending on the complexity of the work activity.

SPTWO Responsibility

The SPTWO is responsible to (when requested by the PTWO – Drafter):

- consider special matters relating to the work, work environment, adjacent plant and any specific plant attributes
- check and confirm the isolation sheet is accurate for scope of work and mark it ‘prepared’ in SAP

Isolating the Plant

The PTWO/isolation officer for the PTW must isolate the plant using a red isolation lock and Danger tag as specified in the isolation sheet.

A second person (OIC or other PTWO) shall confirm the isolations correspond with the isolation sheet. See Figure 4.2.

Note

Isolation of plant that contains multiple High Voltage (HV) and/or Low Voltage (LV) electrical feeds requires the use of switching sheets. The switching process has specific business and legislative requirements that shall be adopted (e.g. authorised electrical personnel, mandatory checks, etc.). Refer to CS-PTW-SOP-02 Training and Authorisation in the PTW System and CS-OHS-53 Multiple Supply Electrical Equipment Isolation and Access.

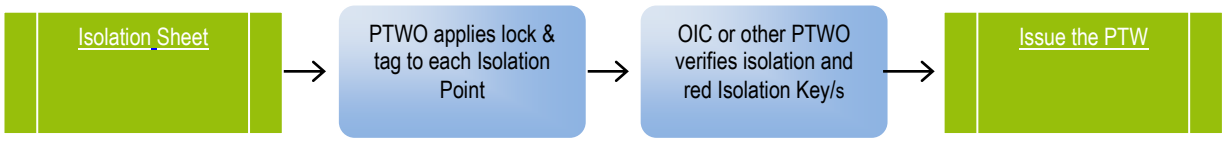


Figure: 4.2 Isolating the Plant

5 PLANT ISOLATION

Introduction

Isolation sheets list the steps to de-energise plant. This section details the practical aspects of effecting the isolations.

Contents

PTWO Responsibility

The PTWO is responsible to:

- print out the Isolation Sheet and Danger Tags
- select and identify the location of the Isolation Storage Rack
- prepare red Isolation Locks and locking devices
- perform plant isolation and apply a red Isolation Lock and Danger Tag for each isolation step as detailed in the Isolation Sheet
- check/ensure the isolation adequacy/effectiveness (e.g. no passing, visual break, double block & bleed etc)
- stop the isolation process when the plant identification process does not match the corresponding items in the isolation sheet. Follow site process to rectify
- initial each isolation step on the isolation sheet as it is completed.
- electronically record the isolation steps completed in SAP.

- secure the red Isolation Key/s with a green PTWO Lock at the Isolation Storage Rack with the original isolation sheet in the isolation storage rack.
- After the OIC (or suitably competent person) has performed the second check of the isolation steps
- Secure the green PTWO lcok in a PTW Board with a printed out PTW
- Issue the PTW to the OIC with a yellow lock securing the PTW Board.

5.1 Single Primary LV Feed Isolations for Mechanical Work

Completing Isolations	Isolations are to be completed as per the PTW system as detailed in CS-PTW-01 Permit to Work (PTW) Manual. Permit to Work Officers (PTWOs) are authorised to perform single feed electrical isolation & restoration sheets for mechanical work.
Isolation Verification	To verify the electrical isolation point, either the presence of a visual break or the position indication on a suitably rated device shall be used to identify an effective isolation.
Arc Flash Rating	When opening cubicle doors for operating control circuit breakers, removing LV fuses or opening isolators then the arc flash rating of the cubicle will determine the category of arc flash PPE required. This can be determined by a label indicating the potential arc flash energy or if not labelled, the site arc flash report shall be referred to in the determination of the arc flash hazard management category. The PPE requirements for each arc flash category are defined in CS-OHS-34 - Selection, Maintenance and Use of Electrical Safety Equipment and PPE.

5.2 LV Fuse Removal

- **Must be performed by a PTWO.**
- **Must have a Safety Observer, if exposed live conductors are present in the work area.**
- **Once fuse is pulled/removed, danger tags and locks shall be applied to prevent the fuse being re-installed until work is completed.**

5.3 Electrical Isolations for Mechanical Work

OIC Verifying the Isolations (Second check)	If an OIC is required to second check a lock/fuse removal and it is inside an electrical cubicle then they must consult with a PTWO to assist them in confirming the isolation. No electrical cubicle doors should be left open without a proper risk assessment

and controls to manage any hazards are in place. Some controls may include but not limited to:

- relevant signage to notify of the conditions
- barricading

If cubicle doors are required to be left open (by open we mean not secured so that the integrity of the board/panel is lessened) then the process outlined below needs to be followed:

- the cubicle needs to be clearly marked and identified
- a barrier needs to be erected to define the potential arc flash boundary (indicated on the cubicle and/or switchboard
- if the barrier obstructs the entire walking area inside the switchroom then a sign will be also placed on the doors of the switchroom

OIC Responsibility

The OIC is responsible to:

- physically verify and record that all isolations have been performed as shown on the Isolation Sheet
- where is it not possible to physically verify the isolation point (e.g. HV switchgear in switch room), a suitably competent person is to verify the isolation on behalf of the OIC
- verify that the Isolation Storage Rack contains the red Isolation Key/s, secured by the green PTWO Lock
- verify the isolation boundaries are sufficient to allow the work to be undertaken (seek clarification from the PTWO as required)

Note

During overhauls and outages this role can be performed by a PTWO separated by time and space from the plant isolation process.

5.4 Isolation and Restoration – Single Feed for Electrical Work

Requirements

Requirements are the same as for isolations for mechanical work (refer to 5.3) with the additional requirements as follows:

- test for de-energised and effective isolation of equipment for electrical work is to be carried out by an Authorised Electrical Person or Authorised Licensed Electrical Worker
- the OIC will verify that the isolation and de-energisation of the equipment or circuit has been accomplished. **(Test before you Touch).** This testing is to be completed at point of contact with the equipment, if the OIC wishes to

confirm the isolation by testing in other locations of the isolated circuits, this can be completed at the OIC discretion

- the OIC shall test and prove de-energised prior to commencing work following any alteration to the WCA

5.5 Restoration of Plant

Surrendered PTW

Check that the Isolation Sheet from the Surrendered PTW is not linked to another PTW. If not, the isolation can be reversed and the plant restored to service. See Figure 5.5

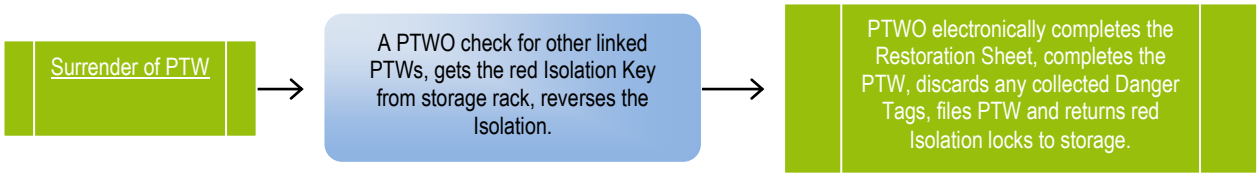


Figure 5.5: Restoration of Plant

5.6 Draft Restoration Sheet

PTWO Responsibility

The PTWO is responsible to:

- check for linking between another PTW and the Isolation Sheet
- print out the Restoration Sheet

5.7 Restore Plant

PTWO Responsibility

The PTWO is responsible to:

- obtain the red isolation key and Isolation Sheet from the Isolation Storage Rack
- reverse the isolation, initialling each step on the Restoration Sheet as completed

5.8 Complete PTW

PTWO Responsibility

The PTWO is responsible to:

- discard any Danger Tags collected during the restoration process in the PCR
- complete and file the PTW and associated documentation
- return the red Isolation Locks & Key/s to the correct storage location

6 DEFINITIONS

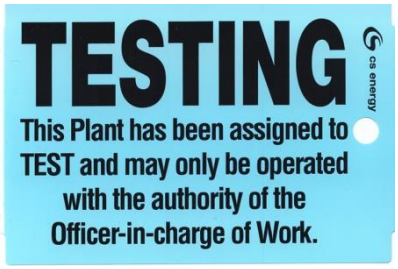
Term	Definition
Access	Is a process of allowing personnel access to live electrical plant or in-service mechanical plant for testing or fault-finding purposes without isolation. Access to live plant is to be undertaken in accordance with the Electrical Safety Procedure CS-OHS-31 and via the use of a PTW Issued for Access.
Alive (or Live)	Plant and apparatus that is not isolated. (E.g. plant that is in service or endorsed to test, operator stand-by or under access).
Apparatus	Is any Electrical Equipment used for controlling, generating, supplying, transforming or transmitting electricity at a voltage greater than extra low voltage.
Applicant	A person wishing to be issued a PTW to isolate electrical apparatus. They have conveyed this desire by filling out a Work Clearance Application (WCA).
Associated equipment (for an electric line)	Means something ordinarily found in association with the electric line, especially for the purpose of protecting, insulating or supporting the operation of, the electric line. Note: examples include: a bracket, casing, coating, covering, duct, frame, insulator, pillar, pipe, pole, tower, or tube enclosing, surrounding or supporting a wire or conductor; or an air break, circuit breaker, switch, transformer or other apparatus connected to a wire or conductor
Authorised Person (for an electrical part)	Means a competent person who has enough technical knowledge and experience to do work that involves contact with, or being near to, the electrical part; and has been approved by CS Energy to do work that involves contact with, or being near to, the electrical part.
Commissioned plant	Plant that has undertaken final testing and been accepted by the Operator/Maintainer as fit for normal operational service.
Competent person	A person who has, through a combination of training, education and experience, the current knowledge and skill enabling that person to perform correctly a specified task. This person must also meet all the requirements under the Fit for Duty Policy and complies with the relevant training schedule provided in the associated PTW procedures for the specified task undertaken. Note: Prescriptive requirements for a person to be able to undertake a specific task may be found in relevant Australian standards, industry standards, advisory standards, industry codes of practice and other legislation as applicable.
Danger Tag or Danger Do Not Operate Board (DNOB)	A danger notice in the form of a tag\board that: • is fixed to a red isolation lock at isolation points; • provides warning and information to persons involved in plant isolation, access, inspection, maintenance and repair; • identifies a PTW number and step number corresponding to the associated PTW; • signifies that the isolation point is not to be interfered with or operated under any circumstances; and • Must only be hung or removed by a Switching Officer, SPTWO\PTWO. 

Term	Definition
De-commissioned plant	Plant that has been permanently removed from service and had all energy sources removed.
De-energise	The process of disconnecting lines or apparatus from all conducting sources of electrical energy.
De-energised	Disconnected from all conducting sources of electrical energy but may be energised by capacitive charge or induction.
Designated area	A clearly identified area for which a risk assessment has been undertaken and approval has been received from the OIC stating the area is safe to carry out normal high voltage work. 
Direct contact (Person)	A person is in direct contact with an electrical part if: • the person is touching the electrical part with the person's bare hands or another bare part of the person's body, or • the person is touching a conductive object with a bare part of the person's body and the conductive object is touching the electrical part, or • an article of clothing worn by the person is touching the electrical part, or • an article of clothing worn by the person is touching a conductive object and the conductive object is touching the electrical part.
Direct contact (Operating Plant)	Operating plant is in direct contact with an electrical part if: • any part of the operating plant is touching the electrical part, or • anything the operating plant is handling is touching the electrical part.
Direct contact (Vehicle)	A vehicle is in direct contact with an electrical part if: • any part of the vehicle is touching the electrical part, or • anything being carried or otherwise handled by the vehicle is touching the electrical part.
Discharged	Having been connected to the general mass of earth in such a manner as to remove any residual electrical energy in a conductor or conducting object.
Earthed	Earthed means phases are short-circuited and connected to the general mass of earth.
Earths	Earths are fixed or portable devices that connect lines and apparatus to the general mass of earth.
Electrical Isolation	An isolation is deemed to be initiated if any energisation, or switching surge will not cross the isolation point and the isolation point is fitted with a locking device and accompanying danger tag. Isolation of remote controls via software logic alone, is not acceptable.
Emergency Switching	Unplanned switching for safeguarding personnel and preventing damage to plant.
Employer	CS Energy
Equipment Designation	Individual labelling of lines and apparatus to provide positive identification during switching operations.
Exclusion Zones	Exclusion Zones to exposed HV conductors or articles are defined for authorised electrical workers and Instructed persons in Schedule 2 of the *Queensland Electrical Safety Regulations 2010 and Code of Practice Working Near Exposed Live Parts*. See Section 12.3 Attachment 3
Extra Low Voltage (ELV)	Means voltage of 50V or less AC RMS, or 120V or less ripple-free DC.

Term	Definition
Functional Switching	Is switching that is carried out in the normal course of operation and is not for the purpose of gaining access to live parts. Examples of functional switching are starting a HV motor or isolating a HV motor for mechanical work on the driven element.
Hazardous energy source	Source of energy that may be hazardous to people, plant or the environment. This includes: • electricity • plant or materials under the influence of gravity • moving plant or materials • atmospheres and fluids under pressure • materials that may be particularly hazardous or at an extreme temperature, • systems that store energy • devices that may cause a build up of energy or material if not controlled in a certain way
High Voltage (HV)	Means voltage greater 1000V AC RMS or 1500 ripple free DC.
High Voltage System	The HV system includes all lines and apparatus normally energised at high voltage. For the purposes of HV isolation, the HV system shall extend to LV isolation point(s) where necessary. For Rectiformers, from the diodes to the DC isolators are part of the HV system.
Individual of Work Party	A person trained to carry out specific duties associated with work on lines and apparatus under the PTW System whilst under direction of an Officer In Charge.
Isolation	The process of separating all sources of energy from an item of plant.
Isolation guide (may be known as Standard Isolation Sheet)	An isolation sheet that has been previously prepared and is stored ready for easy access. These are to be approved by a nominated SPTWO.
Isolation Storage Rack	The isolation storage rack is: • located at the Permit Control Room • used to store and secure the key to a series of isolation locks hung during an isolation • used to store an isolation sheet once isolations have been made and locked out • used to store left over isolation locks not used as part of a series of locks • capable of having locks attached to it to restrict access to the isolation lock key/s
Isolation Sheet	A form specifying the plant to be isolated, numbers of locks and tags required to affect the isolation, as well as a detailed list of instructions that must be followed during the isolation process.
Isolation Lock (Red)	Individually keyed and numbered locks that are used to lock High Voltage Isolation Points and Operator Earths.
Isolation Point	A location or control device that enables a source of energy to be disconnected or physically restricted.
Isolator	A device, when in the open position, is capable of preventing accidental energisation by lightning or switching surge
Instructed person	For an electrical part, means a person who is acting under the supervision of an authorised person for the electrical part.

Term	Definition
Lethal Current	Current in excess of 10mA alternating current or 300 mA direct current through the human body as specified in *Australian Standard AS60479.1-2010 Effects of current on human beings and livestock.*
Lines and Apparatus	Those parts of any conductor or articles, such as underground cables, overhead lines or electrical plant and equipment, which are normally energised at a high voltage.
Low Voltage (LV)	Voltage greater than extra low voltage, but not more than 1000V AC RMS or 1500V ripple-free DC. (50V AC to 1000V AC, and 120V ripple-free DC to 1500V ripple-free DC)
Multiple Supply	Each peice of equipment (functional location at lowest level) can be energised from multiple sources (e.g. 415V bus tie CB) NOTE: 3 phase circuits with 3 individual fuses shall be considered as 1 source of supply.
Non-commissioned /De-commissioned	Lines and apparatus which cannot be energised by a normal switching operation.
OIC - Officer in Charge of Work	The OIC is an authorised person who has successfully completed all appropriate OIC training and is deemed competent. They coordinate the work and where applicable, a workgroup which is operating within a specific PTW. The OIC carries the responsibility for the PTW once issued and the OIC shall surrender the PTW on completion of the job.
Phasing Out (or Phased)	A Test to determine whether energised conductors are the same polarity and may be satisfactorily connected.
Plant	Plant is any: • installations, equipment and pressure vessels directly involved in electricity generation • fixed installations, equipment and machinery • a component of plant • a fitting, connection, accessory or adjunct to plant **(This includes any plant hard-wired, permanently piped or physically connected to an energy source.)**
PTW (Permit to Work)	A PTW is an authorisation, on the prescribed form, giving approval for work on specified equipment.
PTW Board	A PTW Board is a lockable board that is: • used to house all isolation and PTW documentation once the PTW is issued • used to secure the key(s) of a PTWO lock once isolations have been made and locked out • capable of having an OIC lock and personal locks attached to it to secure access to the PTWO key(s)
PTWO – PTW Officer	The PTWO is an authorised person who has successfully completed all appropriate PTW training and is deemed competent to isolate the plant and issue a PTW allowing work to safely proceed, then on return close the PTW and restore the plant.

Term	Definition
PTWO / SPTWO (Drafter)	The PTWO/SPTWO is responsible to: • identify all isolation points to ensure removal of potential energy sources from the proposed work area • consider special matters relating to the work, work environment, adjacent plant and any specific plant attributes • draft the Isolation Sheet by: - review and utilise a Standard Isolation Sheet - review and utilise a previously used Isolation Sheet - draft a new Isolation Sheet through a process of inspecting the plant, examining plant drawings and information and consulting with various personnel with expertise in that plant area - liaise with a Transmission Entity where the isolation requires access to and isolation of Transmission Entity plant • draft OIC Point of Control (POC) sheet that manages white POC lock and tags • consult with the SPTWO or other personnel depending on the complexity of the work activity
SPTWO (Check set / prepare)	The SPTWO is responsible to: • check and confirm the isolation sheet is accurate for scope of work and mark it 'set/prepared' in SAP
Safety Barrier	Suitable barriers or earthed metal shields installed between the person and the conductors or electrical articles.
Safety Observer - Electrical	In relation to the observing of the performance of electrical work, means a person: • who is competent to help with the electrical work • who is competent to rescue the person performing the electrical work and to provide resuscitation • whose competency in relation to resuscitation has been assessed in the last 6 months
Shall	Indicates that a statement is mandatory
Should	Indicates a recommendation
Single Supply	Each piece of equipment (functional location at lowest level) can be energised from only 1 source (e.g. 415V motor with a heater shall be considers as have 2 single feeds) NOTE: 3 phase circuits with 3 individual fused shall be considered as 1 source of supply.
SPTWO (Senior PTW Officer)	A SPTWO coordinates the day-to-day requirements of the PTW System.
Supervise (electrical work)	Means supervise the way the electrical work is performed. Supervision of electrical work entails instructions in the way electrical work is to be completed. Any person supervising electrical work must hold an Electrical Work Licence or be an Electrical Engineer.
System	All electrical lines and apparatus used in transmission, sub-transmission and distribution of electrical energy.

Term	Definition
Test Tag	A notice in the form of a blue tag that: • is fixed to points of control for running a test or introducing a hazardous energy source • provides warning and information to persons involved in plant isolation, access, inspection, maintenance and repair • identifies a step number corresponding to the associated PTW issued for Test • signifies that the point of control is not to be interfered with or operated under any circumstances unless authorisation is given by the OIC • must only be hung or removed by a PTWO 
Untrained person (electrical part)	Means a person who is not an authorised person or an instructed person for the electrical part.
Work Clearance Application (Application for PTW)	An electronically generated form specifying the plant item and scope of work.
Work Group / Work party	All persons who perform specific work activities as coordinated by an OIC.
WCD	Work clearance document that provides the identification and operations to be performed in carrying out plant isolation. Commonly known as an isolation/restoration sheet.

7 REFERENCES

Reference No	Reference Title	Author
Link to Act	Electrical Safety Act 2002 (Qld)	Qld Govt
Link to Regulation	Electrical Safety Regulation 2013 (Qld)	Qld Govt
Link to CoP	Electrical Safety Code of Practice – Working Near Exposed Live Parts 2010 (Qld)	Qld Govt
Link to CoP	Electrical Safety Code of Practice – Electrical Work 2010 (Qld)	Qld Govt
Link to CoP	Electrical Safety Code of Practice – Risk Management 2010 (Qld)	Qld Govt
Link to CoP	Electrical Safety Code of Practice – Works 2010 (Qld)	Qld Govt
"K/D/10/3377"	Kogan Authorised Roles	CS Energy
"F/15/2732"	Callide Authorised Roles	CS Energy
"F/15/2733"	Wivenhoe Authorised Roles	CS Energy
"B/D/11/30957"	CS-OHS-31 - Electrical Safety Management	CS Energy
"B/D/12/11085"	Procedure - CS-OHS-36 – Barricades and Signage	CS Energy
"B/D/13/13831"	Procedure - CS-PTW-SOP-01 - Isolation of Electrical Circuits by the Officer in Charge of Work	CS Energy

Reference No	Reference Title	Author
"B/D/11/19583"	Procedure - CS-PTW-SOP-02 - Training and Authorisation of Roles in the PTW System	CS Energy
"B/D/11/30960"	Procedure - CS-OHS-34 - Selection, Maintenance and Use of Electrical Safety Equipment and PPE	CS Energy
"B/D/11/36153"	Form - S1885 – Live Electrical Work Checklist Form	CS Energy
"B/D/11/19582"	Permit to Work Manual	CS Energy
"B/D/10/21585"	Form - S1878 - Job Safety and Environmental Analysis (JSEA) Template	CS Energy
"B/D/12/7104"	Form - S1976 – Working Earth Register	CS Energy

8 RECORDS MANAGEMENT

In order to maintain continual improvement, suitability, safety and effectiveness of the organisation, registered documents will be reviewed on a two yearly basis, or where it has been identified that there are changes in technology, legislation, standards, regulations or where experience identifies the need for alteration to the content. Registered documents should also be reviewed following an incident, change management process, modification or where directed as part of a risk assessment process.

CS Energy must ensure that records are retained according to accountability, legal, administrative, financial, commercial and operational requirements and expectations. In compliance with records retention and disposal, all documentation created in relation to CS Energy business must be retained in line with minimum retention periods as detailed in legal retention and disposal schedules.