Permit to Work Manual

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3.1	03/03/16	Release for final WCM Committee review

Obligations

The provisions in this manual apply to all sites.

FOREWORD

Operating our business safely is CS Energy's highest priority. We genuinely care about the health and safety of our employees and contractors who undertake maintenance and refurbishment task at our sites. We also recognise that completion of the tasks in a safe, timely and quality manner is the foundation for ensuring that CS Energy continues to generate electricity safely, reliably and economically.

To achieve this, we use the Permit to Work System (PTW) to provide all workers safe access to plant and equipment. The PTW System is considered our primary safety system and is used at all CS Energy's sites. The PTW System ensures a high level of control and minimisation of risk in areas that contain energy. CS Energy's PTW system has been developed to comply with the Generator's Permit to Work Code of Practice. This Manual outlines the key elements of this system such as roles and responsibilities, procedures, training, reporting and monitoring activities.

Copies of this company-wide manual are available at each CS Energy site. It is also included on the company's intranet, where additional supporting documentation, such as our hazard control procedures, isolation procedures, standard operating procedures, are also held.

I encourage you to familiarise yourself with this Manual. Only with the dedication of every person on every CS Energy site, can we achieve our goal of zero harm.

Martin Moore

Chief Executive

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1 INTRODUCTION

Purpose

The purpose of this Permit to Work Manual, (the Manual), is to provide structure and process on the **Permit to Work (PTW) System**. The objective of the PTW System is to:

- Control the access to plant and equipment
- Minimise the risk of injury to personnel
- Minimise the risk of damage to plant
- Comply with the Work Health & Safety and Electrical Safety Legislation
- Comply with the Queensland Electricity Generators Permit To Work Code of Practice.

CS Energy Life Savers

The Permit to Work system supports the CS Energy Life Savers:

1. No person shall direct anyone to break a life savers rule.
2. Only operate equipment for which you are trained, competent and authorised.
3. Only commence work after all appropriate permits to work are in place.
4. All necessary isolations must be in place and verified as effective according to your role, before work can commence.
5. Do not remove, bypass or modify a safety protection device without appropriate authorisation.
6. Do not work at heights without appropriate fall protection systems in place for people and objects.

Authorisations

The PTW Manual and associated procedures define specific authorisations and responsibilities to establish a standard and consistent process for all PTW activities.

Scope

The PTW Manual is applicable to all work being undertaken at CS Energy sites. It describes the provisions of the PTW process, framework of the PTW system and PTW suite of documents that support the system.

The PTW manual does not apply to:

- Plant that has been de-commissioned
- Plant that is not yet a CS Energy asset and CS Energy is not the Principal Contractor
- The CS Energy Emergency Response Teams or External Emergency Services during an emergency or crisis.
- Actions undertaken to make plant or personnel safe or as an immediate response to a critical incident.

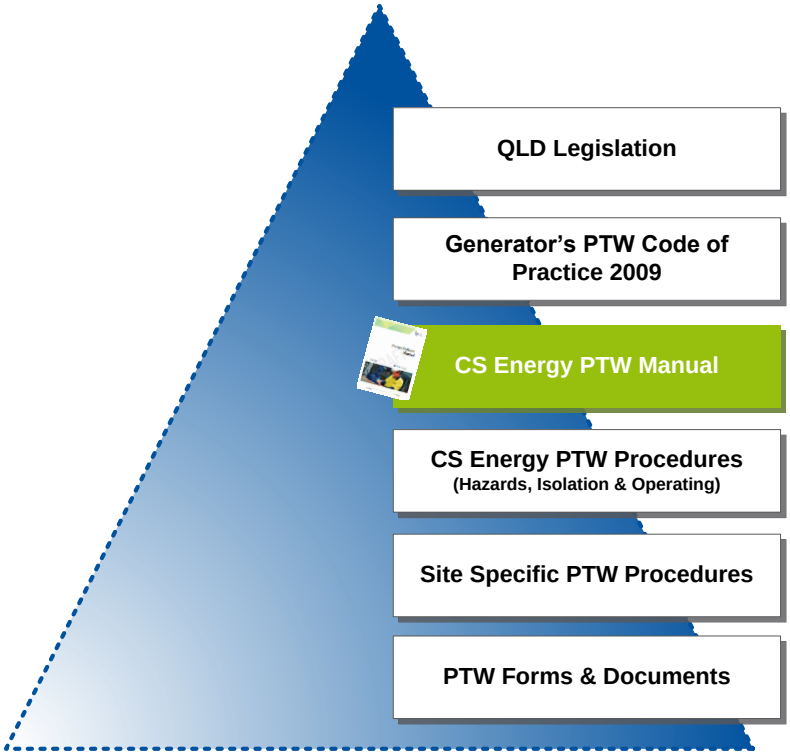

Figure 1 - PTW System Documentation Hierarchy

2 PTW DOCUMENT SUITE

PTW Document Suite

The PTW System uses a number of documents to provide direction and guidance of the process. Figure 2 displays the PTW Document Suite.

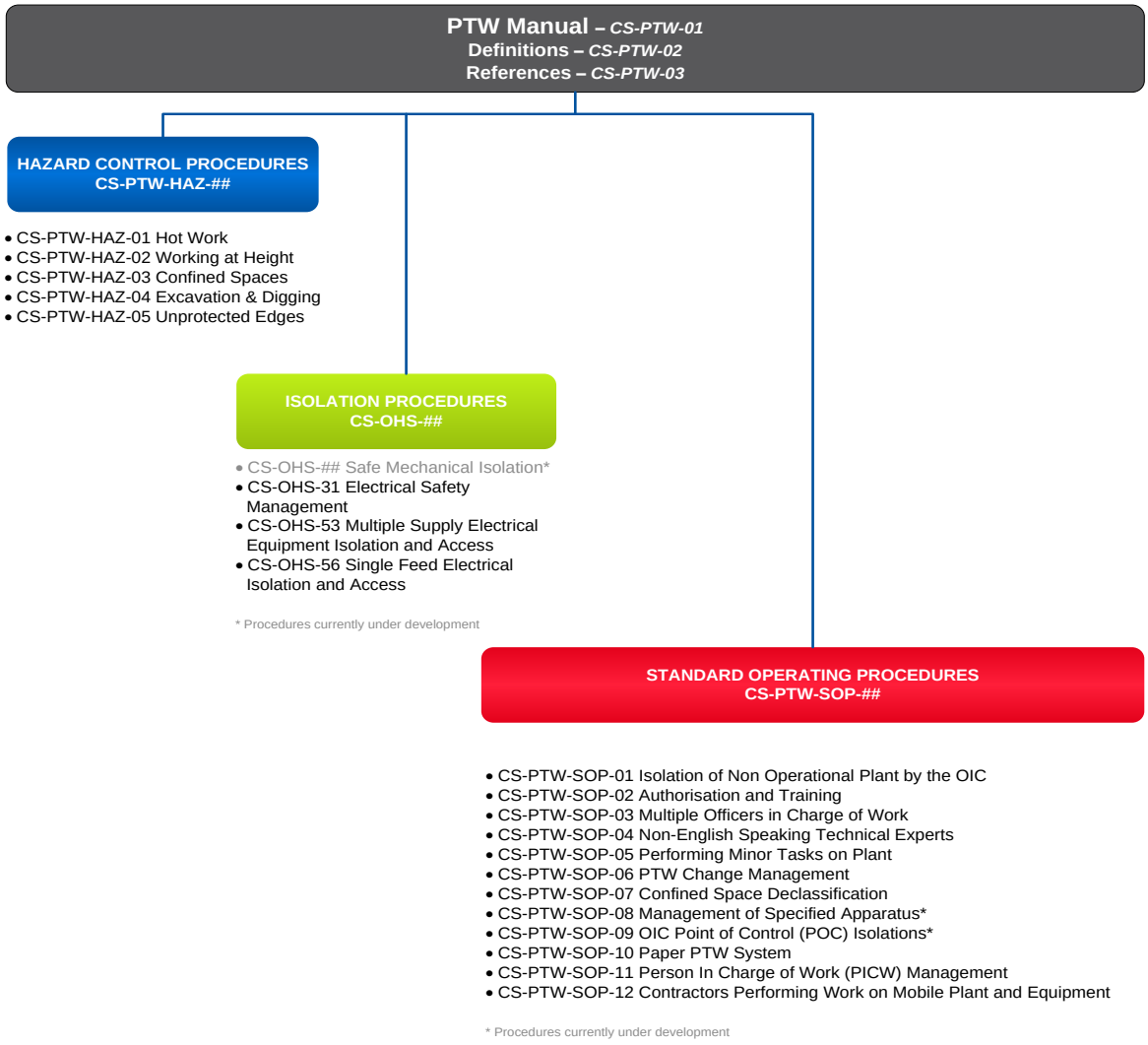

Figure 2 - PTW Document Suite

3 DEFINITIONS

Overview

The PTW Definitions document provides definitions for the PTW system. It is a stand-alone document referenced in the PTW Manual and supporting documents in the PTW Document Suite.

Refer to CS-PTW-02 - Permit to Work (PTW) Definitions.

4 REFERENCE DOCUMENTATION

Overview

The PTW Reference Documentation provides a list of critical documents used to build CS Energy's PTW system.

Refer to CS-PTW-03 - Permit to Work (PTW) Reference Documentation.

5 PTW PROCESS

External Processes

A number of processes external to the PTW process are to be completed before the application of the PTW can be requested. These processes are included in Figure 3 for reference only.

Nine Key Elements

The application of the PTW System incorporates 9 key elements to complete the process. The 9 elements are:

- Application for PTW (APTW)
- Drafting and Set/Preparing Work Clearance Document (WCD)
- Drafting and Set/Preparing Work Clearance Application (WCA)
- Plant Isolation
- PTW / Work Clearance Application (WCA) Issue
- Performing Work
- PTW Suspension (where required)
- PTW Surrender
- Restoration of Plant.

Key Roles & Responsibilities

Each element of the PTW system requires the key roles and responsibilities detailed in this manual to be effectively undertaken and applied to the PTW process. Figure 3 details the process flow and actions associated with the life cycle of a basic PTW.

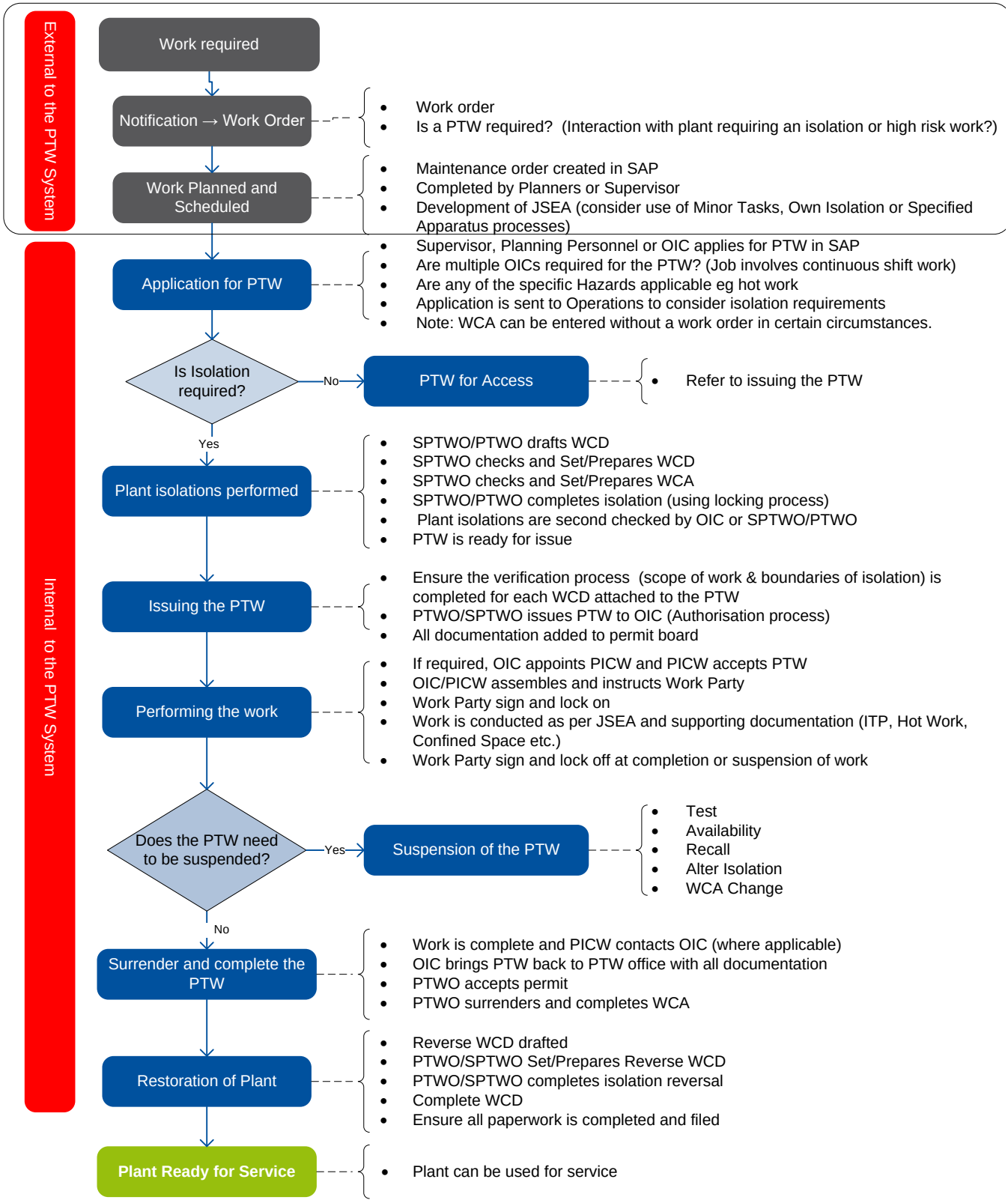

Figure 3 – Basic PTW Life Cycle

6 CORE PTW ROLES AND ROLE PURPOSE

Key Roles & Responsibilities

The responsibilities listed in this section are a high level overview. Please refer to Section 8 for a detailed list of responsibilities as required throughout the workflow.

6.1 Executive General Manager (EGM) Operations

The EGM Operations is the owner of the PTW system and is responsible for ensuring a consistent safe system is utilised across all CS Energy sites. The EGM Operations responsibilities are to:

- appoint a CS Energy PTW Administrator
- ensure the adequacy of resources to develop, implement, maintain and improve the PTW system
- represent the PTW system at the Executive level as required

6.2 CS Energy PTW Administrator

The CS Energy PTW Administrator is authorised by the EGM Operations to manage the CS Energy PTW system and to provide feedback on incidents, audits and issues. The CS Energy PTW Administrator's responsibilities are to:

- chair the CS Energy PTW committee
- review and respond to relevant or significant PTW incidents and ensure incidents and investigation outcomes are shared across the business
- review, update and maintain the content of the PTW Manual
- oversee and advise the site PTW Administrators in relation to specific PTW issues
- ensure Site PTW Annual Reviews are performed.

6.3 Power Station Manager (General Manager)

The Power Station Manager is responsible to:

- nominate the site PTW Administrator
- ensure compliance to the PTW System/Manual
- ensure adequate resources are available to operate and maintain the system at the site

These responsibilities may be delegated.

6.4 Site PTW Administrator

The Site PTW Administrator is responsible to:

- coordinate the site PTW Committee and participate in the CS Energy PTW Committee meetings
- communicate, implement and manage the PTW process
- ensure competency and authorisation of roles for the site PTW system
- ensure all site PTW incidents are investigated and recommendations are provided
- maintain a secure key control process for all locks, spare keys and the master key
- ensure Site PTW Quarterly Reviews are performed.

These responsibilities may be delegated..

6.5 Template Officer

The Template Officer is responsible to:

- perform all roles of the SPTWO
- assist the Site PTW Administrator to maintain a library of Isolation templates
- draft and Approve Isolation Templates
- participate in the processes of managing lost keys and locks
- maintain the SAP lock registers and isolation grid panel allocations

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6.6 Senior Permit to Work Officer (SPTWO)

The SPTWO is responsible to:

- perform all roles of the PTWO
- provide high level 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

- check and Set/Prepare WCD's & WCA's
- participate in site PTW audits

6.7 Permit to Work Officer (PTWO)

The PTWO is responsible to:

- draft WCD's and WCA's
- perform plant isolations
- when required, second check the isolation has been applied as detailed on the WCD
- report inconsistencies with plant identification
- ensure isolations are effective for the scope of the PTW
- process and issue the PTW
- consult with SPTWO and Officer in Charge as required
- set prepare WCD for restoration only
- restore the isolation to operational state or if not required, to a safe state.

6.8 Officer in Charge (OIC)

Note: For work where a contractor is performing and supervising the work, it may be more appropriate to separate the OIC duties associated with the plant and the permit from those associated with performing the work and managing the direct safety and progress of the Work Party (including the management of the JSEA). In these circumstances the Person in Charge of Work (PICW) process outlined below can be adopted and the OIC responsibilities highlighted in yellow are transferred to the PICW.

The OIC is responsible to:

- develop and/or review the Job Safety Environment Analysis (JSEA)
- verify the WCA matches the intended work scope
- verify WCD/s covers the items of plant and the intended scope of work
- second check the isolation has been applied as detailed on the WCD
- accept the issue of a PTW and manage both the PTW process and associated documentation
- implement all controls as per the JSEA prior to work commencing
- confirm Work Party is competent and authorised to perform the work activity
- coordinate the work activity as per the JSEA and specific job

procedures

- apply and manage Point of Control (POC) locks when required
- return PTW for alteration if the scope of work changes

Note: For PTWs where a PICW is nominated, the intent is the OIC shall remain as the PICW's contact point for the duration of the PTW. The OIC shall manage the permit and the relevant isolations while the PICW will manage the Work Party regarding their adherence to the permit, the JSEA and the work performed. While there is no obligation for the OIC to maintain a presence at the work area or on site, the OIC must:

- as a minimum and with the PICW, discuss the "work" at the commencement and completion of each shift of work.
- monitor the PICW's and Work Party's adherence to the PTW process and address any issues that may arise
- be contactable during periods of work and able to return to the site and "fit for duty" within one hour of being requested to do so.

6.9 Person in Charge of Work (PICW)

The PICW is responsible to:

- prepare the JSEA and implement all controls prior to work commencing
- accept the PICW Authorisation to Work form from OIC and manage the PTW board and documentation
- confirm Work Party is competent and authorised 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 the OIC to suspend the PTW if required.

6.10 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, advise OIC/PICW of any further hazards identified
- complete work in accordance with the JSEA, specific job procedures and instruction
- maintain communication with Work Party members and OIC/PICW

throughout the work

- during the work activity, maintain:
  - sign on/off requirements and
  - lock on/off requirements.
- inform the OIC or PICW if they are not competent to complete the work activity

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6.11 All Personnel

All personnel are responsible to:

- report any incident, hazard or near miss to their Supervisor
- not interfere with any locks, tags, signage or barricade tape
- adhere to the CS Energy Lifesavers (refer to CS-OHS-49 – Health and Safety Life Savers)
- raise any concerns or issues about the work with the OIC/PICW and be prepared to stop the work (challenge) if not resolved

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7 TASKS WITHIN THE PTW PROCESS

7.1 Task preceding the PTW Process

7.1.1 A Work Order

SAP System Work Order

The typical process of generating an application for a PTW is:

- A notification is raised detailing a task be performed or a fault that has been identified (i.e. a valve stem that has a steam leak).
- This notification is processed, work identified and a work order is generated.
- If a PTW is required to perform the work as detailed on the work order, an application for a PTW is submitted.
- This application shall contain all the relevant information required by the PTWO to generate a PTW and associated isolation (if required).

7.1.2 Creating a Work Order

Planning Personnel

The Planning Personnel are responsible to:

- nominate the work centre
- plan and schedule the work

7.2 Tasks within the PTW process

7.2.1 Application for PTW

Requirements

An application for a PTW is the notification to the Site PTW Co-ordinator or PTWO that a permit is required to perform work on plant or to manage a designated hazard.

Under normal work process flows, the application is created from a work order in SAP and submitted by the Planning Personnel, a Supervisor or the OIC nominated for the work; however, any SAP user with the appropriate authority to do so may submit the application. (i.e. Applications do not need to be submitted by the nominated OIC of the work.)

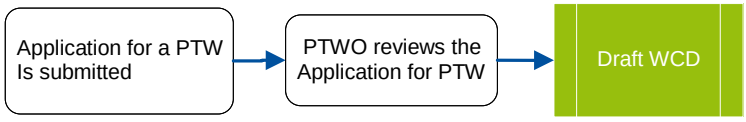

Figure 4 - Application for PTW

7.2.2 Submitting the Application for PTW

Responsibilities

The Planning Personnel / WCA Applicant / OIC are responsible to:

- ensure the work scope and plant to be worked on is clearly defined in the WCA
- add work order requirements to the WCA, including hazards and other relevant authorisations
- liaise with the OIC or OIC's Supervisor to confirm the issue time/return

time and tasks prior to submitting the Application for PTW

- liaise with the PTWO to confirm any operational requirements (e.g. plant availability)
- submitting the Application for a PTW

Note: Typically, the Applicant shall endeavour to provide a scope of work on the WCA that provides a general overview of such work.

While there is no requirement to detail "each and every" individual task, the information provided must allow the PTWO to undertake the drafting of the WCD with the certainty of ensuring all relevant isolations and actions are considered.

The PTWO may seek additional information from the Applicant if such is required. If such information is deemed as critical by the PTWO, the PTWO may request the Applicant amend the application.

PTWO Responsibilities

The PTWO is authorised to generate an Application for a PTW in an emergency, unusual situations or to assist with progressing the process after hours.

7.2.3 Review the Application for a PTW

PTWO Responsibilities

The PTWO is responsible to:

- review the Application for PTW details
- seek clarification from the applicant if there is any uncertainty associated with the work or the isolation required.
- consider the impacts of any operational requirements or ramification (consult with the Shift Supervisor in required)
- consult with the SPTWO or other personnel depending on the complexity of the isolations required or the processing of the PTW .

7.3 Draft WCD

Responsibilities

Drafting the WCD for the purposes of isolation requires a PTWO to draft and a SPTWO to Set/Prepare the WCD.

The WCD shall incorporate an isolation or set of isolations that suitably eliminates all energy sources and identified hazards allowing the work to progress. The PTWO shall also consider the restoration of the plant safely when work is complete.

Note: Isolation of plant that contains **multiple electrical supplies** 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.

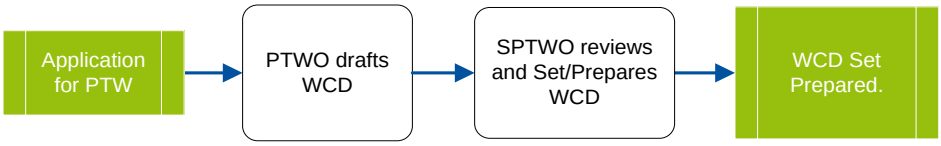

Figure 5 - Draft WCD

7.3.1 Drafting the WCD

PTWO Responsibilities

Drafting PTWO Responsibilities

- ensure the WCD header accurately reflects the plant isolated by this WCD.
- enter each major item of plant or system isolated by the WCD under the Plant Isolated heading.
- identify all isolation points for inclusion on the WCD, 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 for inclusion on the WCD
- draft the WCD by either:
  - selecting and utilising an appropriate WCD template,
  - reviewing, selecting and utilising a previously used operational WCD,
  - drafting a new WCD through a process that may include:
    - inspecting the plant,
    - examining plant drawings
    - reviewing manuals and training material
    - consulting with subject matter experts,
  - liaise with an external entity e.g. Transmission Entity where the isolation requires access to or isolation of external entity plant.
- consult with an SPTWO depending on the complexity

Note: **During the drafting of the WCD consideration must be given to:**

- Identify and include steps within the WCD to prove the isolation is effective eg:
  - Open drain valve/s.
  - Open vent valves..
  - Check that local pressure gauge drops to zero pressure
- Check that temperature of vessel has dropped.
- Any device, valve, vent etc that is operated to drain or vent the plant to prove the integrity of the isolation shall be:
  - Listed as an item on the WCD
  - Fitted with a lock and tag.
- If the isolation cannot be proven, the WCA Hazards shall be updated to ensure the OIC is aware that a risk assessment is required before proceeding with the work.
  - For example:
    "Pipe work could not be drained and may contain water at pressure"
    "Pipe work could not be flushed and may contain acid"
    "Heater temperature may be hotter than 40 deg C"

7.3.2 Review and 'Set/Prepare 'the WCD

SPTWO Responsibilities

The SPTWO is responsible to:

- consider special matters relating to the work, work environment, adjacent plant and any specific plant attributes
- consult with another SPTWO or subject matter expert depending on the complexity
- check and confirm the WCD/s are accurate for the scope of work detailed on the WCA and Set/Prepare WCD/s

7.4 Set/Prepare the WCA

SPTWO Responsibilities

The SPTWO is responsible to:

- check to ensure the linked WCD's cover the work scope nominated on the WCA and all relevant hazards are included
- set/prepare the WCA in SAP

Note: The WCA must be "set prepared" immediately after the WCD to ensure no changes are made to the scope of work after this point.

7.5 Isolating the Plant

PTWO/SPTWO Responsibilities

The PTWO/SPTWO must isolate the plant as specified in the WCD.

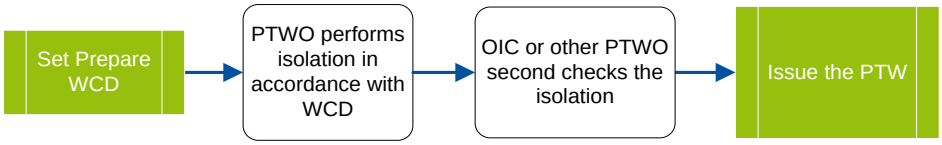

Figure 6 – Isolating the Plant

7.5.1 Plant Isolation

PTWO Responsibilities

The PTWO is responsible to:

- print out the WCD and Tags
- identify the location of the Isolation Storage Rack
- prepare locks and locking devices
- perform plant isolation as detailed on the WCD
- check/ensure the isolation adequacy/effectiveness (e.g. no passing, visual break, isolating device indication or double block and bleed etc)
- stop isolation process when the plant identification does not match the corresponding items in the WCD. When any plant label detail does not match or a label does not exist follow site process to ensure plant description and WCD match
- initial each isolation step on the WCD as it is completed
- electronically record the isolation steps completed in SAP
- place the Isolation Key/s and documentation at the Isolation Storage Rack

7.5.2 Second Check of the Isolations

OIC Responsibilities

The OIC is responsible to:

- inspect each item of the WCD and physically verify and record (by initialling each step) that each isolation step has been performed as detailed on the WCD. If required seek PTWO assistance to locate each isolation points. This activity shall be a distinct phase and “separated by time and space” from the preceding phase of performing the isolation.
- check/ensure the isolation adequacy/effectiveness (e.g. no passing, visual break, isolating device indication or double block and bleed etc)
- electronically record the completion of the second check
- 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. *(If possible, this person shall electronically record the completion of the second check. If not possible, then they shall sign the paper copy of the WCD and the OIC shall electronically record the completion of the second check.)*

Note:

Note 1.

Stop the process and return to the PTWO if any discrepancies or errors are found (i.e. the plant identification label does not match the wording in the WCD, the status of the item of plant is not as detailed in the WCD)

Note 2.

A PTWO may perform this role.

Note 3.

Protocols for performing switching programs require both Switching Officers (or a Switching Officer and the Switching Officers assistant) to complete this activity concurrently, as per CS-OHS-53 - Multiple Supply Electrical Equipment Isolation and Access.

7.5.3 Already 'Second Checked by' another OIC/PTWO

OIC Responsibilities

The OIC receiving the permit is responsible to:

- verify the isolation boundaries are sufficient to allow the scope of work to be undertaken
- verify that all isolations have been "Second Checked" and recorded on the WCD

7.6 Issuing the PTW

Responsibilities

The isolations are completed, the WCD has been second checked.

The WCA has been set prepared and the Permit is ready to be issued to the OIC.

The OIC collects the PTW from the PTW office in preparation to commence the work.

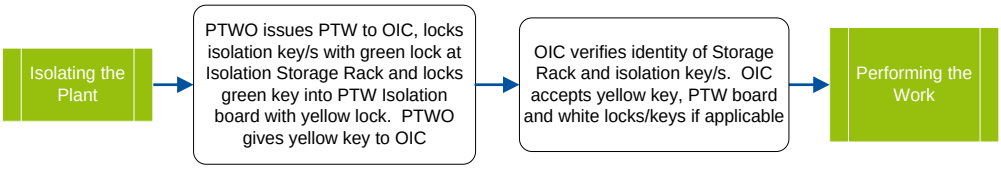

Figure 7 - Issuing the PTW

7.6.1 PTWO Issuing the PTW to the OIC

PTWO Responsibilities

The PTWO Responsibilities are to:

- print the PTW, WCD and associated documentation
- ensure that a relevant JSEA is presented
- check any approved Designated Hazard documents (e.g. permit to dig, live work checklist etc) are sighted prior to issuing the PTW
- present all the documentation to the OIC for final verification and approval by the OIC and the PTWO
- have a conversation with the OIC to ensure the verification process (i.e. scope of work, boundaries of isolation, & hazards) is conducted for each WCD attached to the PTW
- issue the PTW to the OIC ensuring the:
  - Grid Reference Storage Rack used is as assigned on the WCD
  - correct red key/s (as assigned on the WCD) are secured to the Grid Reference Storage Rack with green lock
  - correct white lock Point Of Control (POC) lock series and tags are issued to the OIC as specified on the POC WCD (as required)
  - correct green PTWO Key/s are placed in the PTW Board
  - yellow OIC Lock is fitted to the PTW board and the OIC given the Key
  - all required paperwork is signed and dated.
- OIC is made aware of any other permits that have been issued and may impact on the OIC's Work Party or work area.

OIC Responsibilities

The OIC is responsible to:

- present the relevant JSEA prior to being issued a PTW
- receiving all documentation from the PTWO/SPTWO for final

verification and approval

- accept the PTW from the PTWO/SPTWO ensuring the:
  - Grid Reference Storage Rack used is correct as assigned on the WCD
  - Red key/s as shown and assigned on the WCD are secured to the Storage Rack with green lock
  - Red Key/s are correct as assigned on the WCD
  - Green Key is secured in the PTW Board
  - Correct white Point Of Control (POC) lock series and tags match the POC WCD (as required).
- ensure the verification process (i.e. scope of work, boundaries of isolation) is conducted for each WCD attached to the PTW
- sign the WCA and accept the PTW Board with the yellow OIC Lock, locked on the PTW Board and accepts the Yellow Key
- only hold the number of active permits that can be safely and effectively managed taking into account; location, complexity and resourcing required to complete those PTW's

7.7 Performing the Work

OIC Responsibilities

The PTW has been issued to the OIC. Typically, the responsibility for the Management of the PTW now resides with the OIC. The OIC coordinates the Work Party to complete the work as specified on the PTW. These responsibilities significantly differ when a PICW is nominated.

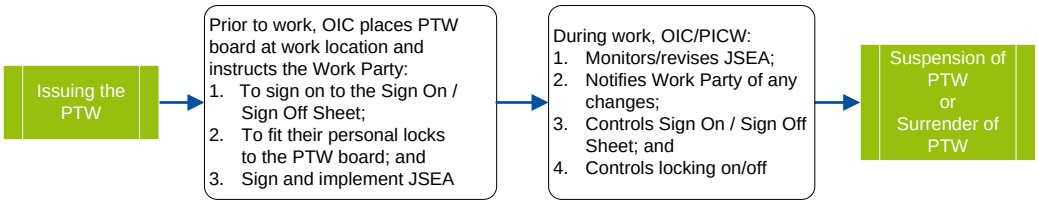

Figure 8 - Performing the Work

7.7.1 Prior to Commencing Work

Note: For work where a PICW is nominated, the OIC duties change significantly with the PICW now responsible for the work and managing the direct safety of the work team including the JSEA. In these circumstances, the Person in charge of work (PICW) process outlined below can be adopted and the OIC duties highlighted in yellow are transferred to the PICW.

OIC Responsibilities

The OIC is responsible to:

- remove the yellow OIC key from the yellow OIC lock (the key should not be left in the lock at any time while the permit is issued for work)
- deliver the PTW board and associated documentation to the PICW (when required)
- Issue the PICW Authorisation to Work if applicable.
- describe (and where relevant physically show) the scope of isolation and work area location to the authorised PICW when required
- ensure all hazards/forms and associated PTW documentation required for the PTW are relevant and up to date
- ensure the Work Party understands and complies with the JSEA for work activity, including the limits of the work area, the boundary of isolation, special precautions, hazards, controls, restrictions and expectations
- when preparing a confined space for work; Sign on and lock on to the PTW prior to applying the white POC locks to the nominated confined space entry points and ventilation points. The key/s to the white POC locks are to be placed in the PTW board before work commences.
- ensure and coordinate confined space air quality testing and the management of the entry/exit points (if required)
- place the PTW Board and associated documentation at a prominent and convenient location adjacent to the work area or an alternate location as nominated by the OIC and communicated to the Work Party.
- ensure controls have been implemented to eliminate and/or minimise risk of the hazards in the work area prior to work beginning, e.g. barricading
- monitor and control entry/exit requirements, where required
- when physically working on the permitted plant, sign on to the Work Party sign on/off sheet and apply their personal lock to PTW board
- instruct the Work Party Member/s to sign-on to the Work Party Sign-on/off Sheet and any other relevant paperwork eg. JSEA, confined space
- instruct the Work Party Member to fit their purple or blue Personal Lock to the PTW Board correctly.

PICW Responsibilities

Person in Charge of Work (PICW) Responsibilities

The following OIC duties are transferred to the nominated PICW and they are responsible to:

- Accept the PICW Work Authorisation form Work Party hence accepting the responsibility of the work and Work Party
- place the PTW Board and associated documentation at a prominent and convenient location adjacent to the work area or an alternate location as nominated by the OIC and communicated to the Work Party
- ensure the Work Party understands and complies with the JSEA for work activity, including the limits of the work area, special precautions, hazards, controls, restrictions and expectations
- ensure controls have been implemented to eliminate and/or minimise risk of the hazards in the work area prior to work beginning, e.g. barricading
- monitor and control entry/exit requirements, where required
- instruct the Work Party to sign-on to the Work Party Sign-on Sign-off Sheet and any other relevant paperwork e.g. JSEA, confined space
- instruct the Work Party to fit their purple or blue Personal Lock to the PTW Board correctly
- ensure and coordinate confined space air quality testing and the management of the entry/exit points (if required)
- when physically working on the permitted plant, sign on to the Work Party sign on/off sheet and apply their personal lock to the PTW board

---

Work Party Responsibilities

The Work Party is responsible to:

- attend the pre-start meeting to obtain a sound understanding of the PTW, JSEA for the work activity and work area, including the limits of the isolation, special precautions, special work procedures and hazards
- check all safety equipment is provided, maintained and used for the work
- verify Yellow OIC lock is attached to PTW Board
- ensure understanding of obligations when:
  - signing-on to the JSEA
  - signing-on to the Work Party Sign-on/off Sheet
  - signing-on to the Confined Space Sign-on/off Sheet (when required) and any other relevant documentation
  - attaching their purple or blue Personal Lock to the PTW Board

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7.7.2 During Work Activities

Note: For work where a PICW is nominated, the OIC duties change significantly with the PICW now responsible for the work and managing the direct safety of the work team including the JSEA. In these circumstances the Person in charge of work (PICW) process outlined below can be adopted and the OIC duties highlighted in yellow are transferred to the PICW.

OIC Responsibilities

The OIC responsibilities include**:**

- coordinate and monitor the controls identified in the JSEA
- revise the JSEA if new hazards are identified or introduced into the work area
- notify the Work Party of any changes to JSEA controls
- communicate with the Work Party throughout the work activity
- maintain the integrity of the sign on/off and lock on/off process of the Work Party
- maintain the status of the PTW Board and documentation
- manage POC process
- communicate with and be available to the PICW during the work activities
- return the PTW Board to the PTW Office when the PTW is ready to be suspended for test, availability, recall or alteration.

PICW Responsibilities

The PICW is responsible to:

- coordinate and monitor the controls identified in the JSEA
- revise the JSEA if new hazards are identified or introduced into the work area and liaise with the OIC to determine if there are any impacts on the boundaries of isolation
- notify the Work Party of any changes to JSEA controls
- communicate with Work Party and OIC throughout the work activity
- maintain the integrity of the sign on/off and lock on/off process of the Work Party
- maintain the status of the PTW Board and documentation
- communicate with OIC if change of scope of work
- on completion of work contact OIC and surrender the PICW authorisation Form.

Work Party Responsibilities

The Work Party is responsible to:

- communicate with the OIC/PICW and Work Party throughout the work activity
- follow OIC/PICW instructions for the work activity
- abide by controls identified in the JSEA (if the JSEA changes, the Work Party are to review and re-sign the JSEA)
- inform the OIC/PICW of new hazards identified or introduced into the work area
- maintain the sign on/off and lock on/off requirements during the work activity
- remove purple or blue Personal Lock and sign off, when:
  - leaving site each day
  - the individual's work has been completed
  - instructed by the OIC/PICW
- contact the OIC/PICW when joining a new Work Party to discuss the PTW documentation, JSEA and scope of work

7.7.3 Work not completed at the End of the Maintenance Shift

Incomplete Work

In the event that the work is not complete at the end of the shift, the following process must be completed.

OIC Responsibilities

The OIC is responsible to:

- ensure the Work Party has locked off and signed off the PTW or notify the PICW to Surrender the PICW Authorisation to Work form if applicable.
- return the work area to a safe and suitable condition, particularly if the plant is to be placed into service overnight.

The OIC should consider whether there is a requirement for the plant or equipment being used overnight or between shifts. The OIC shall discuss such with the PTWO and may need to Suspend the PTW to Availability if the plant is required for operation.

PICW Responsibilities

The PICW is responsible to:

- ensure the Work Party has locked off and signed off the PTW

- return the work area to safe and suitable condition
- surrender the PICW Authorisation to Work Form
- return the PTW board and associated documents to the OIC. inform the OIC of the job status

---

Work Party Member Responsibilities

The Work Party Member(s) are responsible to ensure they have locked off and signed off the PTW.

7.7.4 Transfer of a PTW to another OIC

General

Completing section 4 of the PTW facilitates the transfer of a PTW to another OIC is required (typically on an adhoc basis). It requires both the outgoing and incoming OICs to attend the PTW Office. The incoming OIC shall be issued the PTW showing their name as the OIC. This process should not be confused with a Multiple OIC PTW as used during an overhaul.

The listing of multiple OICs in the hazards tab of a WCA by itself does not remove the requirement to complete the PTW OIC transfer process

Note: For a Multiple OIC PTW, refer to Section 8.2

Responsibilities

To transfer the PTW to another OIC the following processes shall be undertaken.

PTWO Responsibilities

The PTWO is responsible to:

- accept all original documentation
- ensure the original PTW is endorsed as “Transfer OIC”
- electronically transfer the PTW to the new OIC
- issue the PTW to the new OIC
- refer to Section 16.2 if the current OIC is unavailable

Current OIC Responsibilities

The current OIC is responsible to:

- stop work and advise the Work Party of the need to transfer the permit
- Ensure the PICW completes their responsibilities if applicable.
- instruct the Work Party to sign off and lock off the PTW
- Return the PTW to the PTWO and notify the PTWO of the need to transfer the OIC
- Complete section 4 “Transfer of the PTW” ensuring to document any

specific instructions.

- hand over the yellow OIC Key, Lock and PTW Board to the PTWO until another OIC is ready to receive the PTW (at the PTW office)
- if practical, communicate all relevant handover information for that permit to the incoming OIC (or relevant maintenance supervisor in the absence of the new OIC)

PICW Responsibilities

The PICW is responsible to:

- ensure the Work Party has locked off and signed off the PTW
- return the work area to safe and suitable condition
- surrender the PICW Authorisation to Work Form
- return the PTW board and associated documents to the OIC and inform the OIC of the job status

---

New OIC Responsibilities

The new OIC is responsible to ensure they understand the PTW boundaries, job status and handover information prior to accepting the PTW .

Issue the PICW Authorisation to Work form to the PICW if applicable.

7.8 The Suspension of a PTW

Responsibilities

The Permit may require a number of suspensions through its life cycle. A suspension ensures work does not continue on the plant until a test or change has occurred before the PTW can be re-issued for work or surrendered.

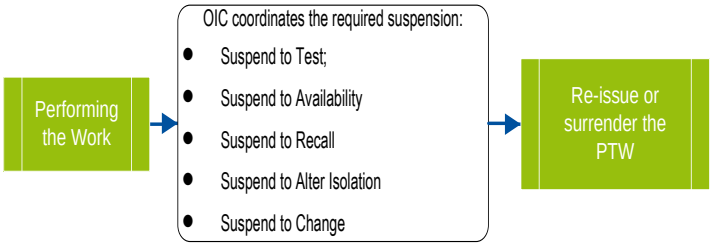

Figure 9 - Suspension of a PTW

7.8.1 General Responsibilities

PTWO Responsibilities

The PTWO is responsible to:

- accept the PTW endorsed for suspension

- receive the PTW Board and yellow key from the OIC
- discuss with the OIC the plant status, scope of the suspension and any specific requirements
- check for links between another PTW and the WCD
- electronically suspend the permit
- action the requested suspension
- hold all PTW forms and associated documentation associated with the suspension.

OIC Responsibilities

The OIC is responsible to:

- ensure the plant is in a safe condition to allow the next stage to progress
- inform the Work Party of the scope of the suspension
- ensure the PICW completes their responsibilities if applicable.
- instruct the Work Party to remove their Personal Locks and sign off
- Return the PTW board to the PTW Office and complete Section 6 of the PTW with the relevant suspension details (including re-isolation request details)
- discuss with the PTWO the plant status, scope of the suspension and any specific requirements
- remove Yellow OIC lock and hand the PTW board and OIC yellow lock and key to the PTWO

Work Party Responsibilities

The Work Party is responsible to:

- cease all work covered under this PTW
- remove their purple or blue Personal Lock and sign off the Work Party Sign-on/off Sheet

---

PICW Responsibilities

The PICW is responsible to:

- ensure the Work Party has locked off and signed off the PTW
- return the work area to safe and suitable condition
- surrender the PICW Authorisation to Work Form
- return the PTW board and associated documents to the OIC and inform the OIC of the job status

7.8.2 Suspend to Test

A PTW Suspend to Test allows an item of plant to be tested. (see note below)

Where several PTWs are utilising the same isolation points, or the same WCD, for the item of plant that is required to be tested, all these PTW's must be either Suspended to Recall or Surrendered, then the PTW (associated with the test) can be suspended to Test.

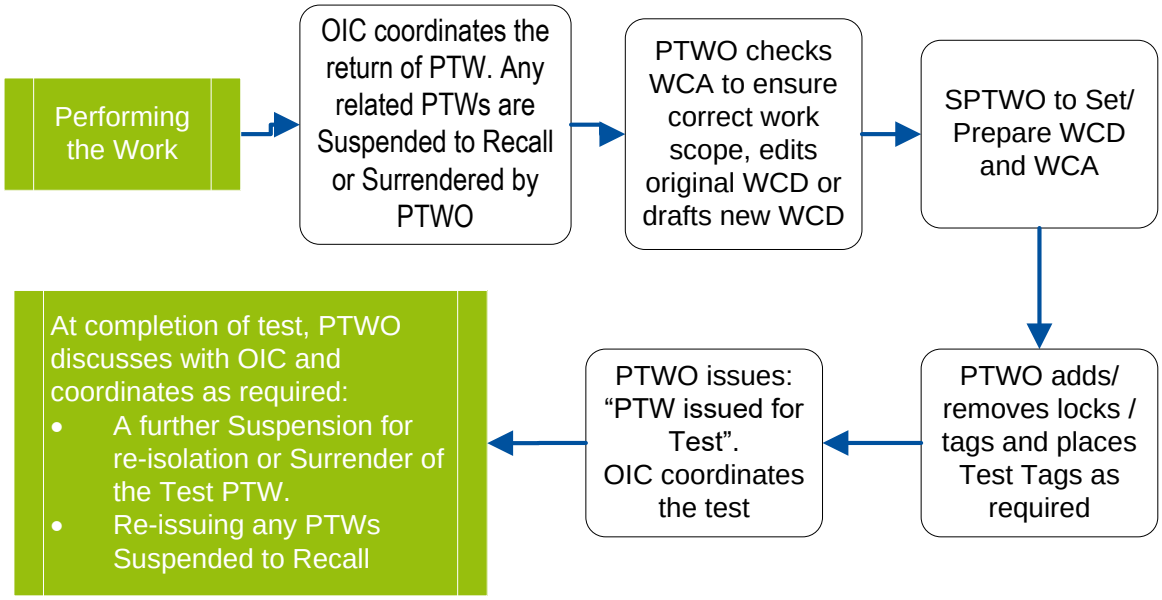

Figure 10 - Suspend to Test

PTWO Responsibilities

The PTWO is responsible to:

- communicate with the OIC who is requesting a suspension to test
- suspend any related PTWs to Recall or Surrendered (i.e. any that use the same WCD)
- check WCA to ensure correct work scope
- edit the original WCD/WCA with new work scope or draft a second test WCD to allow the test to proceed
- coordinate a SPTWO to Set/Prepare the WCD
- print WCD and Tags
- obtain additional locks if required
- obtain the red Isolation Key from the Isolation Storage Rack
- perform the operations required (refer to Section 7.5 - Isolating the Plant) & place Test Tags - **Note:** a Test Tag and red Isolation Lock are

never placed together

- issue the PTW endorsed “Issued for Test” (refer to Section 7.6 - Issuing the PTW).

OIC Responsibilities

The OIC is responsible to:

- ensure the PICW completes their responsibilities if applicable
- request test and communicate requirements with the PTWO
- confirm with PTWO that the isolation is suitable for the test to proceed
- second check new isolation or test points and record on the WCD
- accept the PTW endorsed “Issued for Test”
- perform the test
- coordinate test runs and request any person within the Work Party or shift personnel to operate the plant as part of the test
- decide if the PTW is to be Surrendered, Suspended or Re-Isolated at the completion of the test.

PICW Responsibilities

The PICW is responsible to:

- ensure the Work Party has locked off and signed off the PTW
- return the work area to safe and suitable condition
- surrender the PICW Authorisation to Work Form
- return the PTW board and associated documents to the OIC and inform the OIC of the job status

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Note:

Minor work (with a controlled low risk) required to facilitate the actual testing is allowed under a test PTW. Minor adjustments may be permitted under the scope of testing where the controlled risk is managed to low risk level. Any additional work outside the testing scope will require the suspension of the test permit and re-issue of a PTW for Work. .

7.8.3 Suspend to Availability

Responsibilities

By agreement of the PTWO and OIC, a PTW may be suspended to Availability. This allows the plant to be available for service if required, in accordance with specific instructions by the OIC. These instructions

shall be documented on the PTW.

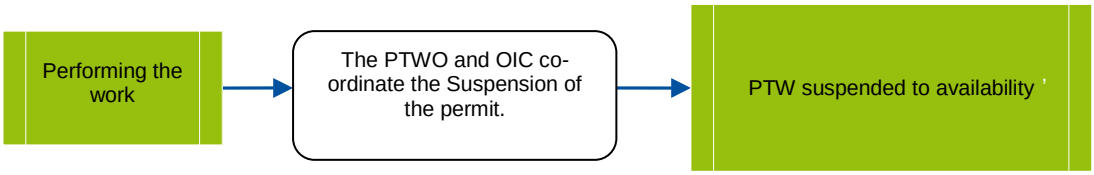

Figure 11 - Suspend to Availability

PTWO Responsibilities

The PTWO is responsible to:

- liaise and agree with the OIC on plant status
- coordinate the return of the PTW Suspended to Availability
- restore the plant by reversing the isolation if requested by the Shift Supervisor.
- re-isolate the plant as requested by the OIC's specific instructions
- issue the PTW endorsed "Issued for Work"

OIC Responsibilities

The OIC is responsible to:

- instruct the Work Party to remove their Personal Locks and sign off
- ensure the PICW completes their responsibilities if applicable
- ensure the plant is in a safe condition to allow the plant to run if required
- Return the PTW board to the PTW Office and complete Section 6 of the PTW with any specific requirements
- discuss the plant status with the PTWO
- remove Yellow OIC lock and hand the PTW board and OIC lock and key to the PTWO
- Reissuing of PTW- ensure the verification process (i.e. scope of work, boundaries of isolation) is conducted for each WCD attached to the PTW
- accept the PTW Board with the yellow OIC Lock, locked on the PTW Board and accept the Yellow Key

PICW Responsibilities

The PICW is responsible to:

- ensure the Work Party has locked off and signed off the PTW
- return the work area to safe and suitable condition
- surrender the PICW Authorisation to Work Form
- return the PTW board and associated documents to the OIC and inform the OIC of the job status

7.8.4 Suspend to Recall

PTWO Responsibilities

At the direction of the PTWO, a PTW can be Suspended to Recall, usually to allow a test run of plant requested by another OIC. Inherent in this suspension process is the eventual re-issue of the PTW under the same conditions prior to it being suspended.

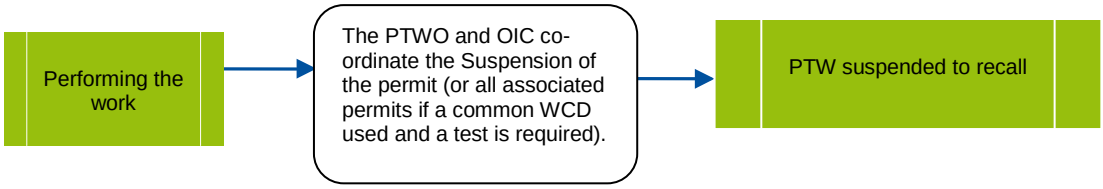

Figure 12 Suspend to Recall

PTWO Responsibilities

The PTWO is responsible to:

- liaise and agree with the OIC on plant status
- coordinate the return of the PTW Suspended to Recall
- restore the plant by reversing the isolation, if required
- re-isolate the plant as requested by the OIC's specific instructions
- issue the PTW endorsed "Issued for Work"

OIC Responsibilities

The OIC is responsible to:

- instruct the Work Party to remove their personal locks and sign off
- ensure the PICW completes their responsibilities if applicable
- ensure the plant is in a safe condition to allow the Recall to be performed
- return the PTW board to the PTW Office and complete Section 6 of the PTW with any specific requirements
- discuss the plant status with the PTWO
- remove Yellow OIC lock and hand the PTW board and OIC lock and key to the PTWO

PICW Responsibilities

The PICW is responsible to:

- ensure the Work Party has locked off and signed off the PTW
- return the work area to safe and suitable condition
- surrender the PICW Authorisation to Work Form
- return the PTW board and associated documents to the OIC and inform the OIC of the job status

---

7.8.5 Suspend to Alter Isolation

Responsibilities

At the request of an OIC or PTWO, a Permit can be Suspended to Alter Isolation. This allows for altering (adding, restoring or changing) isolation points on the WCD or altering the Permit to reflect any changes to the work scope.

Note: In the event that the WCD is altered, all Parties involved in the alterations are only responsible for those isolations added, restored or changed.

The integrity and application of the original isolations not affected by any alterations remain accountable to the original Parties involved in the issue of the PTW. (*e.g. As a result of altering the WCD, two isolation points are restored and one additional isolation point is added; The PTWOs and Second Checker are responsible for this one isolation added, not the integrity of the original isolation point*s).

This does not remove the responsibility of any PTWO (*or any person on site*) acting accordingly if a potential hazard or possible PTW breach is identified at any time.

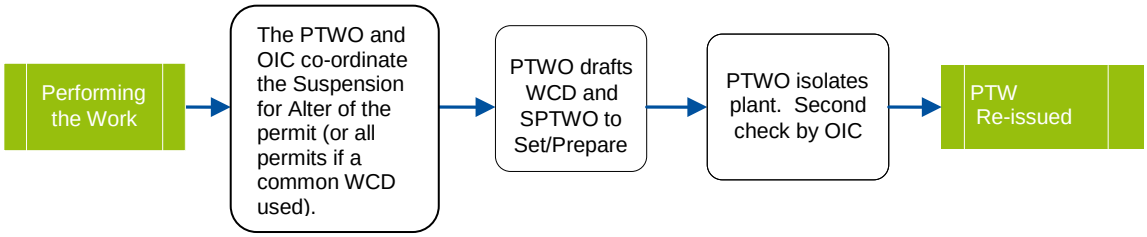

Figure 12 - Suspend to Alter Isolation

PTWO Responsibilities

The PTWO is responsible to:

- liaise and agree with the OIC on plant status/scope

- coordinate the return of the PTW Suspended to Alter Isolation
- adjust scope to reflect revised isolation (if required)
- coordinate other PTWs utilising the same WCD/Point to be Suspended to Alter Isolation (if required)
- edit the original WCD/WCA and/or draft any other WCDs required
- print the WCD and tags
- obtain additional locks (if required)
- obtain the red Isolation Key from the Isolation Storage Rack (if required)
- perform the isolation
- issue the PTW endorsed 'Issued for Work'

OIC Responsibilities

OIC Responsibilities

- instruct the Work Party to remove their Personal Locks and sign off
- ensure the PICW completes their responsibilities if applicable
- return yellow OIC lock, key and PTW board to the PTW Office and complete Section 6 of the PTW with any specific requirements
- discuss the plant status with the PTWO
- after the PTW has been altered verify that all isolation added have been second checked and recorded on the WCD. (The OIC may be required to perform this Second Check).
- review the JSEA to ensure boundaries of isolation still covers work to be undertaken
- ensure the verification process (i.e. scope of work, boundaries of isolation) is conducted for each WCD attached to the PTW
- accept the PTW Board with the yellow OIC Lock, locked on the PTW Board and accept the Yellow Key
- advise Work Party of alterations to the JSEA, PTW, scope of work and isolation boundaries.

PICW Responsibilities

The PICW is responsible to:

- ensure the Work Party has locked off and signed off the PTW
- return the work area to safe and suitable condition
- surrender the PICW Authorisation to Work Form

return the PTW board and associated documents to the OIC and inform the OIC of the job status

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7.8.6 Suspend to Change

Permit Changes

A Permit can be Suspended to Change to enable the date and OIC name (for transfer purposes) to be altered to suit work requirements. This change does not require a Set/Prepare step by a SPTWO.

If a hazard is changed, a SPTWO is required to Set/Prepare the WCA as this additional hazard may alter the original integrity of the PTW..

7.9 Surrender of the PTW

When all work is complete, the Work Party has signed off and locked off, the permit can be surrendered. The Work Party must be aware that no further work is permitted and they must remain clear of the plant.

Surrendering the PTW

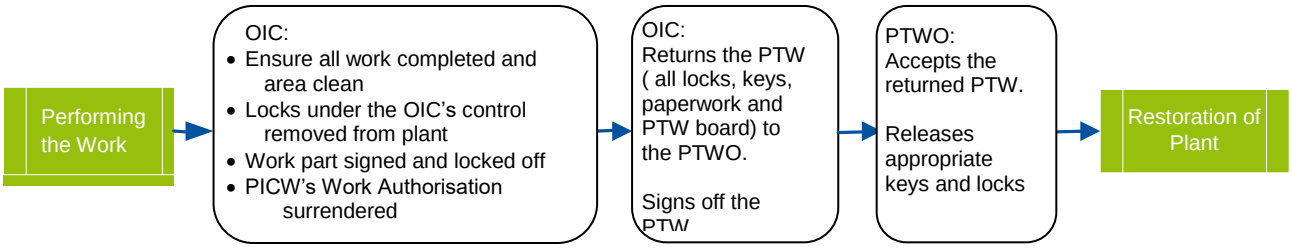

Figure 13 - Surrender of the PTW

7.9.1 Manage Confined Spaces

General OIC Responsibilities

The OIC is responsible to:

- Ensure all documentation is checked and signed
- complete internal inspection with an independent third party
- manage the box-up of confined spaces, including removal of POC locks and tags
- ensure the PICW completes their responsibilities if applicable

7.9.2 Work Activities Complete

OIC Responsibilities

The OIC is responsible to:

- inform the Work Party of the intention to surrender the PTW
- ensure the PICW completes their responsibilities if applicable
- confirm the Work Party have completed the work and vacated the plant area
- confirm all tools, equipment, barricades, signs, etc. have been removed from the plant area
- ensure all Work Party members have removed their purple or blue Personal Locks and signed off the Work Party Sign On/Off Sheet
- ensure plant is in a serviceable condition
- receive the PTW from the PICW (when PICW is utilised)
- ensure the POC lock process has been completed as per procedure
- Complete all relevant paper work associated to the PTW

PICW Responsibilities

The PICW (when utilised) is responsible to:

- inform the Work Party of the intention to surrender the PTW
- confirm the Work Party have completed the work and vacated the plant area
- confirm all tools, equipment, barricades, signs, etc. have been removed from the plant area
- ensure the plant is in a serviceable condition
- ensure all Work Party members have removed their purple or blue Personal Locks and signed off the Work Party Sign On/Off Sheet
- Surrender the PICW Authorisation to Work form
- return the PTW Board and all associated documentation to the OIC

Work Party Responsibilities

- cease all work covered under this PTW
- remove their purple or blue Personal Lock and sign off

7.9.3 Surrendering the PTW

OIC Responsibilities

The OIC is responsible to:

- surrender POC locks and tags (as required)
- record and sign return to service instructions on the original and office copy of the WCA in Section 7 of the PTW and discuss these comments with relevant PTWO verbally when returning the PTW

- be aware of any electrical work performed and:
  - verify that the Electrical Safety Certificate (Form S1975) has been completed and appropriately endorsed.
  - notify the PTWO that the work performed required the issue of a Electrical Safety Certificate (Form S1975) and that the Electrical Testing was successful.
    - Such shall be noted in section 7 of the PTW. A copy of the test certificate may also be attached to the PTW.
- surrender the yellow lock, key and PTW board with all associated documentation to the PTW Office ensuring all paperwork is accounted for.

PTWO Responsibilities

The PTWO accepting the PTW is responsible to:

- accept the PTW endorsed for surrender
- discuss any specific plant operating requirements with the OIC
- accept the POC locks and keys
- receive the PTW Board from the OIC and remove the green PTWO key
- check that the PTW and associated documentation has been completed and accounted for and
- electronically surrender and complete the PTW in SAP

7.10 Restoration of the Plant

Linked PTW's

Check that the WCD from the surrendered PTW is not linked to another PTW. If not, the isolation can be reversed and the plant restored to service.

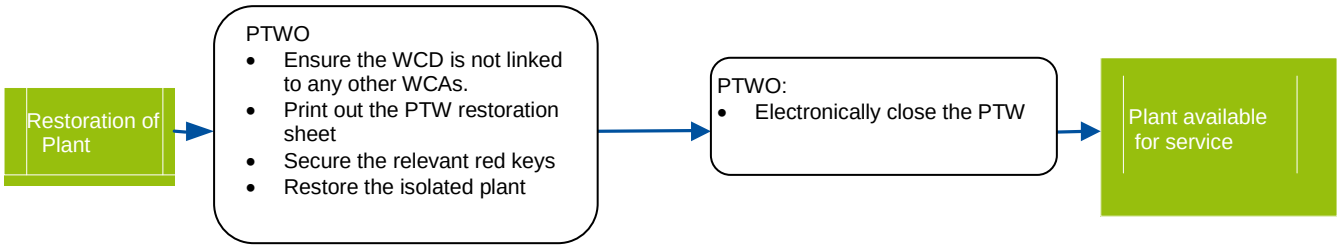

Figure 14 - Restoration of Plant

7.10.1 Restoration Sheet

PTWO Responsibilities

The PTWO is responsible to:

- check for linking between another PTW and the WCD
- Set prepare the WCD for restoration
- print out the Restoration Sheet

7.10.2 Restore Plant

PTWO Responsibilities

The PTWO is responsible to:

- Remove the green lock
- obtain the red Isolation key from the Isolation Storage Rack
- obtain the restoration sheet, reverse each item of the isolation, initialling each step on the Restoration Sheet as completed
- electronically complete the WCD

Note: Restoring an Isolation Point common to two or more WCDs:

In the event that an isolation point has, at least, two-separate WCD danger tags and locks attached to it, the PTWO shall:

- Remove only the tag and lock as detailed on the restoration sheet being followed.
- Not disturb the other tags and locks
- Not attempt to perform the actual restoration operation (*i.e. Open the valve if the isolated position was closed!*)
- Deem the restoration item completed by removing only the relevant tag and lock (i.e. initial the restoration sheet as completed, electronically endorse the restoration sheet)
- The PTWO who removes the “last lock and tag” shall perform the actual restoration operation (i.e. *Open the valve if the isolated position was closed!*)

7.10.3 Complete PTW

PTWO Responsibilities

The PTWO is responsible to:

- discard any tags collected during the restoration process
- complete section 9 of the WCA “processing checklist for PTWO”
- file the PTW and associated documentation
- return the locks & key/s to the correct storage location

8 SPECIAL PURPOSE ISOLATIONS AND PROCESSES

8.1 Isolation of non Operational Plant by the OIC

Own Isolation is the process of allowing an OIC authorised by the site PTW Administrator, to conduct their own isolation. Own isolations shall be limited to non-operational plant, requiring single point isolations applied by the OIC

.

Refer to CS-PTW-SOP-01 - Isolation of non Operational Plant by the OIC for further direction.

8.2 Multiple OIC PTW

Where a PTW requires continuation of work across day and night shifts, the PTW will need multiple OICs to complete the PTW activities. An appropriate handover is to take place during the transfer of OIC responsibilities at the change of shift.

Refer to CS-PTW-SOP-03 – Multiple Officers in Charge (OIC) of Work

8.3 Using Non-English Speaking Technical Experts under the PTW System

Where a job requires the use of a non-English speaking technical expert, specific provisions are permitted to ensure a site contact is appointed to accompany the expert and fulfil their role under the PTW

Refer to CS-PTW-SOP-04 – Non-English Speaking Technical Experts procedure for further Direction**.**

8.4 Performing Minor Tasks on Plant

Defines the actions and responsibilities in relation to performing minor tasks that have a **low** controlled risk rating as assessed using a 2x2 Task Risk Analysis or a JSEA. A restriction on using this procedure is that any identified controls:

- Do not require a formal isolation (PTW)
- Are managed by the person undertaking the work.

Such tasks include:

- Fault finding;
- Control circuit testing;
- General greasing;
- Condition monitoring; and
- General cleaning (including coal spills, minor lagging work and work on operational plant).
- Minor maintenance of non operational items of plant (i.e. replace a general purpose water hose nozzle)

Refer to CS-PTW-SOP-05 Performing Minor Tasks On Plant procedure for further Direction.

This process **only** applies to mechanical and extra low voltage electrical work where voltage levels are below 50V AC or 120V DC.

This process is **not** to be used for any work that involves High Risk Hazards (see Section 10) as defined in the PTW suite e.g. hot work, confined spaces, live electrical work.

Work must be completed in the current maintenance shift

Not to be used for work involving simulations within the control system

8.5 Management of Specified Apparatus

The Specified Apparatus process allows an Authorised Person (authorised by the site PTW Administrator), to apply isolations and complete work on a specified apparatus. This process

applies to specified operational and non-operational plant and provides a controlled PTW process that allows OICs to isolate and maintain specific items of plant. The restrictions on utilising this procedure are:

- A maximum of five isolation points.
- The Work Party must not be greater than three (including the OIC)
- Only plant approved and listed in the Specified Apparatus Register is applicable.

Where the above restrictions are too restrictive, a full PTW is required.

.

Refer to CS-PTW-SOP-08 – Management of Specified Apparatus procedure and site specific procedures for further direction

8.6 Point of Control (POC)

The Point of Control (POC) process allows an Officer in Charge of Work (OIC) to control a nominated isolation point or points of a WCD.

The POC locking process utilises White Locks and is used for two purposes within the PTW system.

- The first is associated with securing confined space access and ventilation points (refer to CS-PTW-HAZ-03 – Working in Confined Spaces).
- The second purpose is to control isolation points when undertaking work.

Refer to CS-PTW-SOP- 09 OIC Point Of Control (POC) Isolations procedure for further direction

8.7 Person In Charge of Work (PICW) Management

Documents the additional responsibilities and of all persons involved in the management of a permit utilising a Person In Charge Of Work (PICW).

Work performed by the PICW under this procedure may be:

The work stipulated on the PTW during normal block of work utilising one PICW or

The work stipulated on the PTW during a normal block of work utilising many PICWs or

One of many work tasks stipulated on a PTW by multiple PICWs (as required to allow an extended and continuous period of work).

Typically, this is to allow a continuation of work over 24 hours.

Refer to CS-PTW-SOP- 11 Person In Charge Of Work (PICW) Management procedure for further direction

8.8 Contractors Performing Work on Mobile plant and Equipment

Provides the process associated with performing “Low controlled risk” maintenance work (as agreed by the site contact) on mobile plant and equipment that is located on a CS Energy Site and utilises a Contractor’s or external entity’s Safe Work Method Statement (SWMS) or Work Safe System (WSS). This procedure is applicable to both CS Energy or a Contractor’s plant and equipment where the work will occur on CS Energy property or under CS Energy control.

Note that any work deemed at a higher controlled risk than “Medium” will require a full PTW)

Refer to CS-PTW-SOP- 12 Contractors Performing Work on Mobile Plant and Equipment procedure for further direction

8.9 Access PTW

An Access PTW allows work on operational or non-operational plant that does not require an isolation to secure the energies. The Access PTW provides a structured process and controls to complete the work. The Access PTW has the same status as a normal PTW.

Note:

- If the 2x2 TRA identifies the inherent risk of the task as being Low, Section 8.1 - Performing Minor Tasks on Plant can be considered in lieu of an Access permit.
- Access permits are valid for one month. An extension of this period shall require the Site PTW Administrator's approval.

8.10 Electrical Isolation with Multiple Supplies

Approved Switching Sheet

Where the isolation process for a PTW involves multiple sources of supply HV and/or LV), an approved switching sheet shall be utilised to manage the electrical isolations. The switching sheet shall be written by an authorised and competent Switching Sheet Writer and Switching Sheet Approver, and the switching performed by an authorised and competent Switching Officer and Switching Officer Assistant.

Refer to CS-OHS-53 - Multiple Supply Electrical Equipment Isolation and Access and site specific procedures for further direction.

8.11 High Voltage Isolation (single feed) for electrical work

Competent PTWO/SPTWO

Single feed isolations will be completed using a WCD with the isolations performed by a trained and competent PTWO/SPTWO.

All high voltage electrical isolations shall comply with CS-OHS-31 - Electrical Safety Management procedure.

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9 CS ENERGY / TRANSMISSION ENTITY INTERFACE

QLD Electricity Entity

This section has the same intent as Section 12, Generation/ Transmission/ Distribution Customer Interface of the Queensland Electricity Entity Procedures for Safe Access to HV Electrical Apparatus (SAHVEA), May 2012, written by PowerLink Qld.

9.1 General Requirements

Requirements

- only CS Energy's PTW system and the High Voltage Isolation and Access Procedures (SAHVEA) may be used to isolate plant at a CS Energy / Transmission Entity interface
- all personnel involved in isolating plant at a CS Energy / Transmission Entity interface are to be trained and authorised in both CS Energy's PTW system and the SAHVEA system
- power station sites may develop specific procedures to address interface requirements with other stakeholders such as distribution entities and organisations involved in construction works

9.2 Initiator of Isolation

Responsibilities

The Initiator of Isolation is responsible to:

- determine which isolation system to use:
  - if the Transmission Entity requires work to be performed, the SAHVEA system is to be used or
  - if CS Energy requires work to be performed, the PTW system is to be used
- prepare or coordinate the preparation of Switching Sheets:
  - Switching Sheets involving the operation of Transmission Entity plant require State Control Approval (SCA) numbers and shall be prepared and/or checked by Transmission Entity personnel prior to implementation
  - Switching Sheets involving the operation of CS Energy plant shall be prepared and/or checked by CS Energy personnel prior to implementation
- coordinate CS Energy and/or Transmission Entity personnel as required to perform the switching

9.3 CS Energy Responsibilities

Responsibilities CS Energy is responsible for:

- the writing and/or checking of Switching Sheets required for CS Energy plant
- switching CS Energy plant as directed by the Initiator of Isolation
- nominating a contact person for the coordination of the Switching Sheets between CS Energy and the Transmission Entity
- establishing a system to inform the Transmission Entity and/or Network Operations Contingency Assessment contact person of any changes.

9.4 Transmission Entity

Responsibilities Transmission entity is responsible for:

- writing and/or checking Switching Sheets required for Transmission Entity plant
- nominating a contact person for the coordination of the Switching Sheets between CS Energy and the Transmission Entity
- establishing a system to inform the CS Energy contact person of any changes

9.5 Network Operations Contingency Assessment

Responsibilities The Network Operations Contingency Assessment is responsible for:

- providing State Control (SCA) numbers for Switching Sheets involving Transmission Entity Plant
- switching Transmission Entity plant as directed by the Initiator of the Isolation
- nominating a contact person for the coordination of the Switching Sheets between CS Energy and the Transmission Entity and
- establishing a system to inform the CS Energy contact person of any changes

Note:

Interface with entities (other than transmission) will be managed through site specific procedures.

10 HAZARD CONTROL PROCEDURES

High Risk Activities

There are a number of high risk activities identified by CS Energy that require specific controls to manage the work. The provisions below identify the mandatory requirements of each Hazard Control Procedures located in the PTW Document Suite:

Document No	Hazard Control Procedure	Procedure Requirements
CS-PTW-HAZ-01 "B/D/11/19573"	Hot Work	S0010 Hot Work Control Checklist
CS-PTW-HAZ-02 "B/D/11/19581"	Working at Heights	S1972 Working at Heights Control Checklist
CS-PTW-HAZ-03 "B/D/11/39828"	Confined Spaces	S1891 Part 1: Confined Space Risk Assessment S1889 Part 2: Confined Space Rescue and Retrieval Plan S1890 Part 3: Confined Space Atmospheric Monitoring Sheet S1833: Part 4 Confined Space Entry - Sign On / Sign Off Sheet
CS-PTW-HAZ-04 "B/D/11/19576"	Digging, Excavation and Building Penetrations	S1877 Digging, Excavation and Building Penetrations Control Checklist
CS-PTW-HAZ-05 "B/D/12/1361"	Unprotected Edges	S1973 Unprotected Edges Control Checklist
CS-OHS-31 "B/D/11/30957"	Live Electrical Work Electrical Safety Management	S1885 Live Electrical Work Checklist

11 MANAGEMENT OF PTW INCIDENTS

Incident Definition

Within the PTW system, an incident is defined as any deviation from the approved process, as defined by the PTW Manual and associated procedures, which occurs after the issuing of a permit.

CS Energy Incident Management Procedure

All incidents are subject to CS-IM-01 – CS Energy's Incident Management procedure. Following the incident investigation outcomes, the investigation team will make recommendations to the PTW Administrator in relation to root cause, system improvements.

CS Energy PTW Administrator Responsibilities

The PTW Administrator is responsible for reviewing and responding to relevant or significant PTW incidents.

Site PTW Administrator Responsibilities

The Site PTW Administrator is responsible to:

- appoint an investigation leader where appropriate
- ensure all site PTW incidents are investigated and recommendations are provided to the appropriate level of the business

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12 GOVERNANCE

12.1 CS Energy PTW Committee Structure

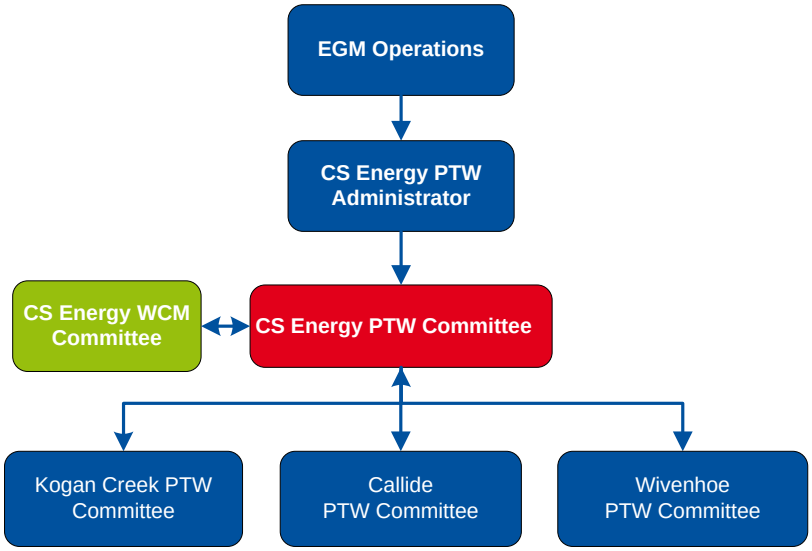


Figure 20 - CS Energy PTW Committee Structures

12.2 Core Committee Responsibilities for the PTW System

12.2.1 CS Energy PTW Committee

CS Energy PTW Committee Members

The CS Energy PTW Committee is made up of the following constituents:

- CS Energy PTW Administrator
- Site PTW Administrators
- Health and Safety Representative
- Technical expertise as deemed appropriate
- WCM Committee Representative.

CS Energy PTW Committee Duties

The committee shall:

- form an advisory body to the CS Energy PTW Administrator on such matters as:
  - process modifications to the PTW System
  - introduction of new processes to the PTW System
  - modifications to the Work Clearance Management System.

- review and table all site incidents and actions taken, and make recommendations to the CS Energy PTW Administrator
- present all site PTW procedures for consultation prior to CS Energy PTW Administrator authorisation
- review the minutes of the WCM committee and Site PTW committees making recommendations as required
- Meet monthly and maintain a minuted record of all meetings and decisions

WCM Committee

The WCM Committee is made up of:

- WCM Chairperson
- SAP Technical Support Person
- WCM Committee members (nominated site representatives for each site)

WCM Committee Duties

The committee shall:

- develop, modify and improve the SAP PTW system under the direction of the CS Energy PTW Administrator
- work closely with the SAP and IT experts providing input and testing support for all proposed changes
- Meet at least quarterly and maintain a minuted record of all meetings and decisions

12.2.2 Site PTW Committee

Site PTW Committee

The Site PTW Committee is made up of the following constituents:

- PTW Administrator
- SPTWOs (Senior Permit to Work Officer)
- PTWOs (Permit to Work Officer)
- Maintenance personnel e.g. Supervisors and OICs (Officer in Charge)
- Site Health and Safety Representative.

Site PTW Committee Duties

The committee shall:

- develop site-specific PTW procedures using the guidelines of the PTW Manual as required for approval by the Site PTW Administrator and authorisation of the CS Energy PTW Administrator
- monitor weekly PTW reviews and critical control audits

- review findings of incidents and auditing and make recommendations for improvement to the Site PTW Administrator
- meet monthly and maintain a minuted record of all meetings and decisions

12.3 Auditing

Weekly Review

The CS Energy PTW System audit process will consist of:

- A weekly (one per shift cycle) review of one active or completed permit, by each shift team. These reviews will consist of a thorough check of all documentation for the permit. The review findings will be tabled at the monthly Site PTW Committee meeting.

Quarterly Review

Quarterly reviews by the site PTW Administrator are designed to ensure adherence to the PTW system and procedures. These reviews will consist of 3 critical control audits (plant energy) and a desk top review of 6 completed PTWs. The quarterly review findings will be tabled at the CS Energy PTW committee meeting in January, April, July and October of each year.

Annual Review

An annual review of the PTW system at each Power Station will be conducted each April by the CS Energy PTW Committee. This review is to consist of an appraisal of feedback gained from each Power Station along with trends derived from the quarterly reviews over the previous 12 months.

Changes to Documents

Any change or amendment to the PTW Suite of Documents is to be reviewed and approved by the CS Energy PTW Committee. Approved changes will be made to the controlled copy of the PTW Suite of Documents with a description and explanation where necessary. Refer to CS-PTW-SOP-06 "B/D/12/10395"– Change Management in PTW System.

13 TRAINING AND COMPETENCY

13.1 Induction

Compulsory Induction

Every person that enters a CS Energy site shall attend a general site induction. This induction will provide an awareness of the PTW system. Completion of the Site Worker induction will authorise the person as a Work Party member to conduct work under a PTW.

Work interacting with specific hazards may require specialised roles to safely

conduct the activities. Further training and assessed competence is required for these circumstances e.g. confined space management.

13.2 Authorised PTW Roles

Site PTW Administrator

The site PTW Administrator is responsible for:

- maintaining a training and competency system as specified in CS-PTW-SOP-02 - Training and Authorisation of Persons in the PTW System.
- authorising personnel in the following PTW roles:
  - OIC
  - PICW
  - PTWO
  - SPTWO
  - Template Officer
  - Switching roles
  - OIC/PTWO Restricted

The training and authorisation procedure documents :

- specific roles, courses and training documentation
- approved trainers for each package
- prerequisite requirements for each PTW role.
- the period of authorisation (maximum 3 years)
- requirements for document management of training records

14 LOSS OF ELECTRONIC PTW SYSTEM

SAP Versus Paper Based PTW System

CS Energy's PTW System is operated and maintained using SAP software. However, in the event of the loss of SAP or other critical system or service, a contingency plan shall be maintained at each site in line with CS Energy crisis and/or emergency plans. The objective of the contingency plan is to ensure safe operation. The principles of the system shall apply using a manual/paper-based PTW System.

Refer to CS-PTW-SOP-10– Paper PTW System

15 RECORDS

Compliance

Keeping records of the PTW process undertaken for a job demonstrates compliance with the Work Health and Safety Act 2011 in controlling risks in the workplace. It also maximises the effectiveness of the process and assists when undertaking subsequent risk assessments and system reviews.

Keeping records for the PTW System provides CS Energy the ability to:

- demonstrate that the process was conducted properly (e.g. to provide evidence)
- comply with legislative requirements

Records Retention

All PTW records shall be:

- stored and maintained in such a way that they are readily retrievable and protected against damage, deterioration or loss following CS Energy's approved archiving process
- the length of retention and disposal of records shall be defined in the CS Energy Records and Disposal Schedules, refer to Records Management department for more information

16 MANAGEMENT OF KEYS AND LOCKS

16.1 Lock and Key Register

PTW Administrator Responsibilities

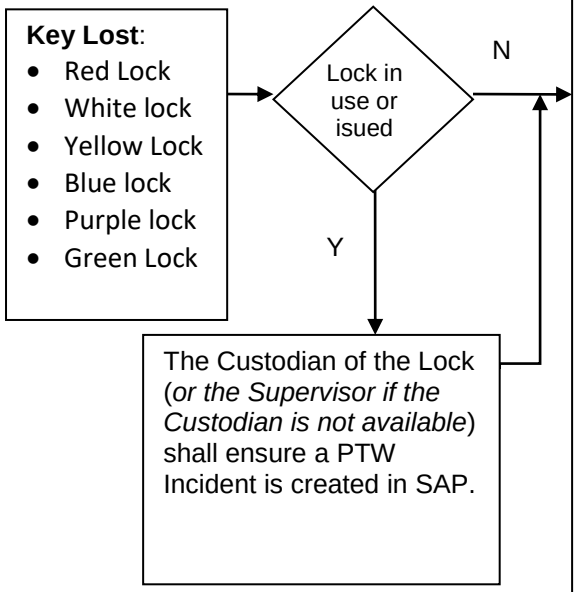
The PTW Administrator is responsible to:

- maintain a lock and key register, containing the following information:
  - lock and key codes for blue/purple Personal Locks, including who they are issued to
- maintain control and security of the master key and spare keys for all lock series on site
- maintain a process where all contractors who complete work on site following an outage period or following specific work activities, hand in their blue Personal Locks
- maintain a process where locks will only be made available to personnel that have had appropriate training

16.2 Key and Lock Control

This section also incorporates the *OIC or Work Party Member being unavailability* and the *failure of locks*.

The management and control of locks and keys is a fundamental safeguard within the PTW system. As a result there are a number of prescriptive processes that shall be followed to ensure the integrity of both the locks and keys and hence the PTW system.



"KEY LOST" OPTIONS TO SELECT

Option 1: Use the second key (regardless if the lock is in use or not)

PTWO: Request the Site PTW Administrator's approval to utilise the second key, and if approved, supply this key for use.

Note: If the Second Key is utilised, ensure its return to the key box once used

Template Officer: Consider ordering a new lock
If second key not available, see option 3.

Option 2: Remove the lock from the system (lock not in use)

PTWO: Consider destroying the lock or removing the lock from service until a new key is obtained

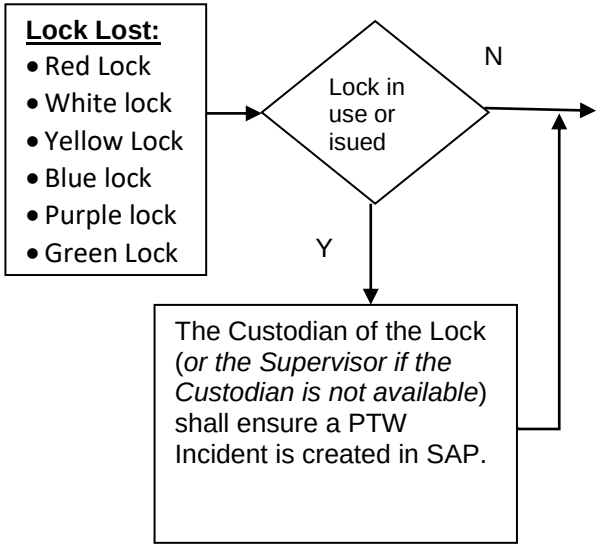
Template Officer: Remove the lock or series from the relevant lock register. Consider ordering a new lock.

Option 3: Use of the Master key (lock in use)

PTWO: Request the approval from the Site PTW Administrator to remove the lock or lock series by use of the Master Key. Consider, once the lock is removed, destroying the lock/s or removing the lock from service until a new key is obtained.

Template Officer: Remove the lock or series from the relevant lock register. Consider ordering a new lock.

PTWO: Issue or arrange for issue of a new lock and key if required.



"LOCK LOST" OPTIONS TO SELECT

Option 1: Red or White Lock Allocated to a WCD

PTWO: Consider if there are unused locks in the series, if so utilise an unused lock. Consider setting the WCD and WCA to draft and altering the lock.series.

Template Officer: Remove the lock or series from the relevant lock register. Consider ordering a new lock.

Option 2: Red or White Lock not Allocated to a WCD

Template Officer: Single locks: Remove the lock from the relevant lock register. Consider ordering a new lock.
Series locks: Remove the series from the relevant lock register. Consider ordering a new lock. Note that it is acceptable to edit the number of locks in a lock series. (i.e. originally series may have had ten locks, could be edited to nine and remain in service as a nine lock series.)

Option 3: Personal Locks

Lock Custodian: Seek advice from your supervisor on the site process to obtain a replacement lock.

Option 4: Yellow or Green Locks

Lock Custodian: Seek a replacement lock from the PTWO.

PTWO: Consider setting the WCD and WCA to draft and altering the lock number.

Template Officer: Remove the lock from the relevant lock register. Consider ordering a new lock.

The OIC or Work party Member is not available to remove their lock.

- Red Lock
- White lock
- Yellow Lock
- Blue lock
- Purple lock

→ The Custodian of the Lock (*or the Supervisor if the Custodian is not available*) shall ensure a PTW Incident is created in SAP.

→

OIC or WORK PARTY MEMBER NOT AVAILABLE OPTION

Option 1: All Locks

OIC is unavailable

OIC's Supervisor or Manager: Attempt to recall the OIC to site.
If the OIC is not able to return to site: The OIC's Supervisor or Manager accepts the role as the OIC on the paper copies of the PTW Form. If this person is not an Authorised OIC, the first action is to ensure no work commences until the PTW is transferred to an Authorised OIC.

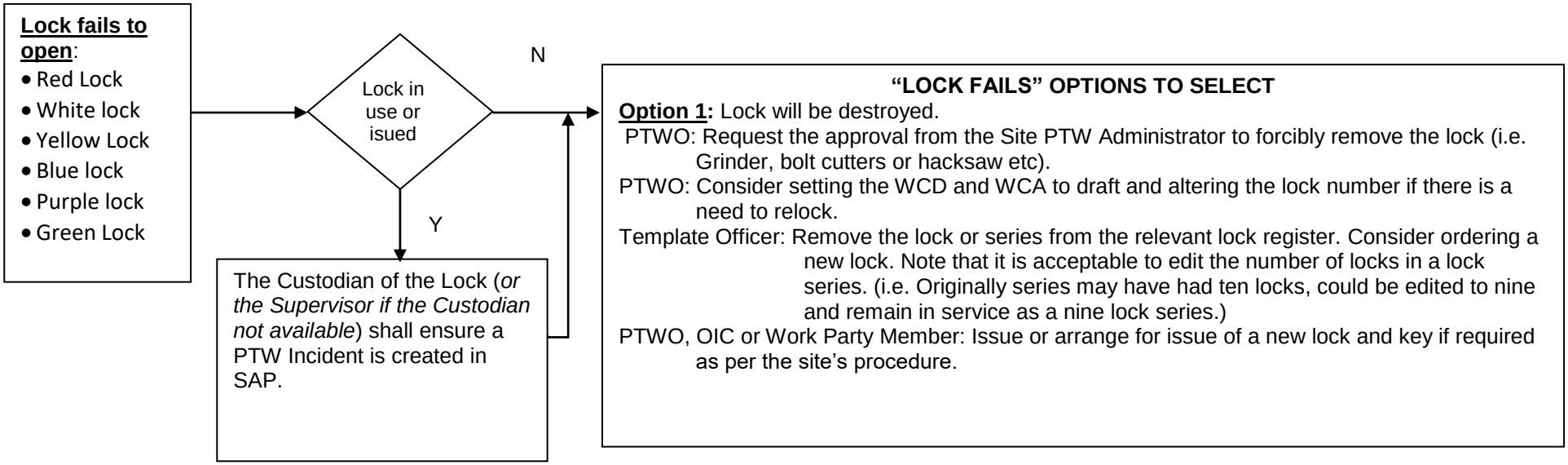
Work Party Member is unavailable

OICs: Attempt to recall the Work Party member to site.
If the work party member is not available and it is safe to do so, the OIC removes the lock (and marks the relevant space on the sign on /off sheet as "Work Party Member unavailable".

Note1: If the key is not available, follow the options as detailed for the "Key Lost".
SPTWO: Notify the Security Hut and request that:

1. The OIC's or Work Party member's site access permissive be suspended (*and shall remain suspended until notified otherwise by the SPTW*).
2. They inform the OIC or Work Party member that the suspension is due to some aspect of a PTW they were associated with was changed.
3. They inform the OIC or Work Party member to contact their Supervisor for additional information and to arrange the release of the site access suspension.

PTWO: Consider setting the WCD and WCA to draft and altering the lock number if other locks are to be utilised (i.e. Allow return of the second key)


Lock fails to open:
• Red Lock
• White lock
• Yellow Lock
• Blue lock
• Purple lock
• Green Lock
Lock in use or isued
N
Y
The Custodian of the Lock (*or the Supervisor if the Custodian not available*) shall ensure a PTW Incident is created in SAP.
"LOCK FAILS" OPTIONS TO SELECT
Option 1: Lock will be destroyed.
PTWO: Request the approval from the Site PTW Administrator to forcibly remove the lock (i.e. Grinder, bolt cutters or hacksaw etc).
PTWO: Consider setting the WCD and WCA to draft and altering the lock number if there is a need to relock.
Template Officer: Remove the lock or series from the relevant lock register. Consider ordering a new lock. Note that it is acceptable to edit the number of locks in a lock series. (i.e. Originally series may have had ten locks, could be edited to nine and remain in service as a nine lock series.)
PTWO, OIC or Work Party Member: Issue or arrange for issue of a new lock and key if required as per the site's procedure.

17 ATTACHMENTS

Attachment 1 – Basic Locking Process

Attachment 2 – Lock and Key Characteristics

Attachment 3 – Lock and Key Identification

Attachment 4 – Example Danger Tag, Test Tag and POC Tag

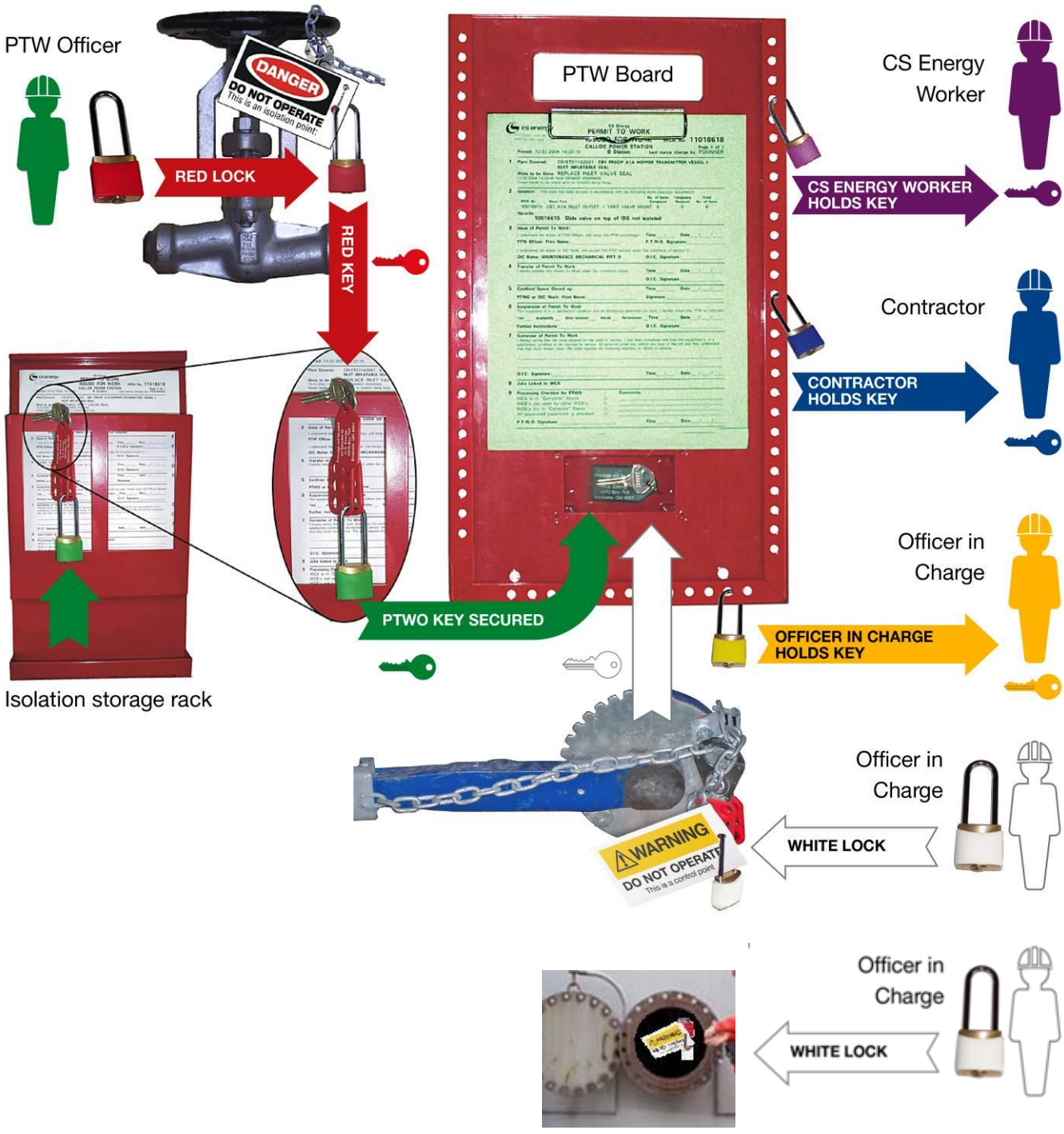
Attachment 5 – Example PTW (WCA) – Issued for Work

Attachment 6 – Example of Work Clearance Document (WCD)

Attachment 7 – Example Work Party Sign On/Off Sheet

17.1 Attachment 1 – Basic Locking Process

The process below depicts the standard human-lock interface at each phase of the PTW System.



17.2 Attachment 2 - Lock and Key Characteristics

17.2.1 Preceding Notes for Attachment #2.

CS Energy utilises a number of locks across CSE sites.

Yellow, Green, Blue and Purple locks are uniquely keyed (i.e. one key fits one lock)

White and Red locks are available as either an individual lock with a unique key or one lock of a series of locks (up to 50 locks) that are operated by one key unique to this series.

Each Site PTW Administrator is the custodian of a master key capable of opening any lock at their site.

A secured “spare key lock box” containing a spare key for each lock and series is maintained at each site. The Site PTW Administrator manages access to this lock box.

Attachment 2 – Table of Lock and Key Characteristics

Lock & Key	Intended User / Use	Characteristics
	Green **PTWO**	**Prevents access to the key of a series of red Isolation locks** • Locks and their keys to be stored at the issue point • One key per lock • Lock to be fixed to Isolation Storage Rack to control access to Red Isolation Key • Key to be placed in the PTW Board during PTW issue
	Yellow **OIC**	**Prevents access to the green and/or white key** • Locks and their keys to be stored within issue point • One key per lock • Lock to be fixed to PTW Board upon accepting the PTW • Key to be held by the OIC
	Purple **CS Energy Personnel**	**Prevents access to the green and/or white key** • Personal Lock and key is the property of a CS Energy employee • Each lock is issued and recorded by CS Energy • One key per lock • Lock to be fixed to PTW Board when the person has 'signed on' to a PTW, Key to be held by the CS Energy individual •
	Blue **Contracted Personnel**	**Prevents access to the green and/or white key** • Personal Lock and key is the property of a contracted employee • Each lock is issued and recorded by CS Energy • One key per lock • Lock to be fixed to PTW Board when the person has 'signed on' to a PTW , Key to be held by the individual •
	Red **Isolation Lock**	**Hung on Isolation Points to prevent their status from being altered** • Series of locks and their key to be stored at issue point • One key per series of red locks • A lock series may consist of varying quantities • Key to be secured on Isolation Storage Rack by Green lock following isolation
	White **Point of Control Lock (POC)**	**Two uses within the system:** ***1.*** **Provides OIC control to nominated PTW isolation points *on* the plant (e.g. Air Heater rotation)** ***2.*** **To secure confined space entry or ventilation points** • One key per lock or series of white locks • A lock series may consist of varying quantities • Hung on a point that is controlled by the OIC of the job • Key is to be placed within the PTW board after the white lock is applied

17.3 Attachment 3 - Lock and Key Identification

Each lock is uniquely identified. The following identifies the key and lock stamping system found on each lock in the PTW System.

Key Stamping Detail (All Keys):

CR0001

Site	Body Colour	Key Code
C - Callide	0 – Site Master Key	
K - Kogan Creek	B - Blue	
W - Wivenhoe	R - Red	
	Y - Yellow	
	P - Purple	
	G - Green	
	W - White	

Lock Stamping Detail (All Locks):

CR0001

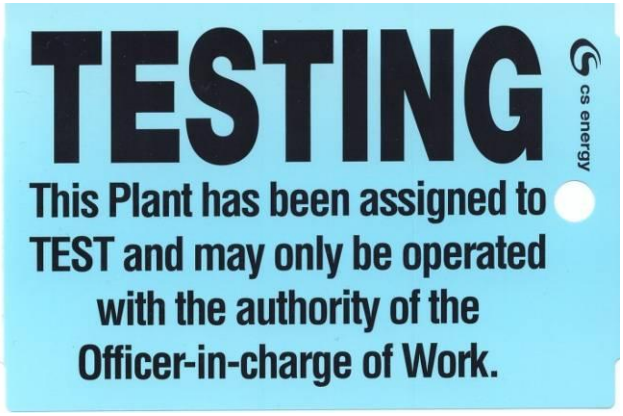
Site	Colour Code	Key Code
C - Callide	B - Blue	
K - Kogan Creek	R - Red	
W - Wivenhoe	Y - Yellow	
	P - Purple	
	G - Green	
	W - White	

In Addition, Red and White Locks have the following stamping:

001/100

Lock Number	Total Number of Locks in Series

17.4 Attachment 4 - Example Danger Tag, Test Tag and POC Tag



Attachment 5 - Example PTW (WCA) – Issued for Work (2 pages)

CS Energy

PERMIT TO WORK
ISSUED FOR WORK

WCA No: 44029400

KOGAN CREEK POWER STATION P/L Page 1 of 2

Printed: 28.10.2014 09:29:08 **A Station** **Prepared by:** KAL SADARAM

1 **Plant Covered:** KA10EBC22 UNIT 1 COAL PLANT SECONDARY CRUSHER 2 SYSTEM

Work to be Done:
REPLACE WEAR PLATES AND TILES (LT).
require both streams to be isolated due to hot work but require two seperate WCD's in case of PTW returned for coaling on one stream (this will mean hot work will have to be completed)

confined space door
Top south side crusher door
eac 82 head chute

Return Date: 03.11.2014 19:00:00

2 **Isolation:** This plant has been Isolated in Accordance with the following Work Clearance Document/s.

WCD No 40025400 Green Lock Series KG0031
Short Text REPLACE WEAR PLATES AND TILES (LT)
Grid Reference PTW Office 9 Red/White Lock Series KR0413, KW0361

Hazards:
44029400 Hot Work
Confined Space Entry Sign On Sign off
Part 2: Confined Space Rescue Plan
Part 3: Atmospheric Testing
Part 1: Confined Space Risk Assessment

3 **Issue of Permit To Work:**
I understand the duties of PTW Officer, and Issue this PTW accordingly:
Issuing PTW Officer: _____ **P.T.W.O. Signature:** _____
Time____:____ **Date**____/____/____

I understand the duties of OIC Work, and accept this PTW isolated under the conditions of section 2:
OIC Name: MECHANICAL TRADESPERSON - GEOFF MALONEYO.I.C.
Signature: _____

4 **Transfer of Permit To Work:**
I hereby transfer this Permit To Work under the conditions stated: **Time**____:____ **Date**____/____/____
O.I.C. Signature: _____
Reason

5 **Confined Space Closed up:** **Time**____:____ **Date**____/____/____
OIC Work: Print Name: _____ **Signature:** _____

6 **Suspension of Permit To Work:**
This equipment is in a satisfactory condition and all Workgroup personnel are clear, I hereby return this PTW as indicated:
Test __ **Availability** __ **Alter Isolation** __ **Recall** __ **Time**____:____ **Date**____/____/____
Further instructions: _____
O.I.C. Signature:

* ISSUED FOR WORK *

CS Energy

PERMIT TO WORK

ISSUED FOR WORK WCA No: 44029400

KOGAN CREEK POWER STATION P/L Page 2 of 2

Printed: 28.10.2014 09:29:08 **A Station** **Prepared by:** KAL SADARAM

7 Surrender of Permit To Work

I hereby certify that the work detailed on the plant in Section 1 has been completed and that the equipment is in a satisfactory condition to be returned to service. All personel under my control are clear of the job and they understand that they must remain clear. The plant requires the following attention on return to service.

_____

_____

O.I.C. Signature:_____ **Time**____:____ **Date**____/_____/_____

8 Jobs Linked to WCA

9 Processing Checklist for PTWO **Comments**

WCA is in "Complete" Status	_____
WCD's not used for other WCA's	_____
WCD's are in "Complete" Status	_____
All associated paperwork is attached	_____
All OIC Comments have been considered	_____

P.T.W.O. Signature:_____ **Time**____:____ **Date**____/_____/_____

ISSUED FOR WORK

17.6 Attachment 6 - Example of Work Clearance Document (WCD) (3 pages)

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WORK CLEARANCE TEMPLATE
DRAFT
KOGAN CREEK POWER STATION P/L
A Station

WCD No: 94000511
Page 1 of 3

Printed: 28.10.2014 09:24:45

Plant Isolated: KA10EAC51 — **UNIT 1 COAL PLANT TRIPPER CONVEYOR 1 SYSTEM**

Work to be Done: DT KA1 EAC41/ 51 CLEANING / MECHANICAL MAINTENANCE

Grid Reference:

Special Requirements:

```
This WCD Template covers mechanical work on

KA10EAC41 UNIT 1 COAL PLANT BUNKER FEED CONVEYOR 1 SYSTEM
KA10EAC51 UNIT 1 COAL PLANT TRIPPER CONVEYOR 1 SYSTEM

THIS TEMPLATE DOES NOT INCLUDE
COAL SAMPLER.

For Confined Space entry the following WCD Templates are required.

94004800 KA1 STREAM 1 POC LOCKS.
```

Lock Series:

Lock and Tag information:

Number of Red Locks: 8

Number of White Locks: 0

Tag Information:

Tagging Sequence->	Total No. of Danger Tags: 8	Total No. of Test Tags: 0	Total No. of Poc Tags: 0
Un-Tagging Sequence ->	Total No. of Danger Tags: 0	Total No. of Test Tags: 0	Total No. of Poc Tags: 0

Item Information

Initial Tag Status ITG	Tags Printed but not hung PTAG	Ready for 2nd Check 2 CHK	Checked CHKD	Restored EUG	Temporary Restored ETUG	Total No. of Items
9	0	0	0	0	0	9

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WORK CLEARANCE TEMPLATE DRAFT

KOGAN CREEK POWER STATION P/L

A Station

WCD No: 94000511

Printed: 28.10.2014 09:24:45

WORK CLEARANCE TEMPLATE Steps

Item No.	Location	Description	Operation	Tag Qty	Template Only	Template Only
10	CONTROL ROOM	KA10EAC 41 / 51 / TRIPPER CAR	> INFORM CONTROL ROOM THAT YOU REQUIRE THIS PLANT OUT OF SERVICE FOR ISOLATION	PNL	To be Done _____	Checked by _____
20	COAL HANDLING SWITCHROOM 10BJG01	UNIT 1 COAL PLANT BUNKER FEED CONVEYOR 1 DRIVE CIRCUIT BREAKER KA10EAC41AF001-Q01	> ISOLATOR TO OFF > LOCK & TAG CB	DTL 1	To be Done _____	Checked by _____
30	COAL HANDLING SWITCHROOM 10BJG07.BA001	UNIT 1 COAL PLANT BUNKER FEED CONV 1 BRAKEMOTOR CIRCUIT BREAKER KA10EAC41AU001-Q01	> ISOLATOR TO OFF > RACK OUT CB > LOCK & TAG CB	DTL 1	To be Done _____	Checked by _____
40	COAL HANDLING SWITCHROOM 10BJG04.EB	UNIT 1 COAL PLANT TRIPPER CONVEYOR 1 DRIVE CIRCUIT BREAKER KA10EAC51AF001-Q01	> ISOLATOR TO OFF > RACK OUT CB > LOCK & TAG CB	DTL 1	To be Done _____	Checked by _____
50	COAL HANDLING SWITCHROOM 10BJG07.BA003	UNIT 1 COAL PLANT TRIPPER CONV 1 TRIPPER CAR CIRCUIT BREAKER KA10EAC51AF002-Q01	> ISOLATOR TO OFF > RACK OUT CB > LOCK & TAG CB	DTL 1	To be Done _____	Checked by _____
60	COAL HANDLING SWITCHROOM 10BJG07.BA002	UNIT 1 COAL PLANT TRIPPER CONV 1 BRAKEMOTOR CIRCUIT BREAKER KA10EAC51AU001-Q01	> ISOLATOR TO OFF > RACK OUT CB > LOCK & TAG CB	DTL 1	To be Done _____	Checked by _____
70	COAL HANDLING SWITCHROOM 10BJG04.BA002	UNIT 1 COAL PLANT TRIPPER CONV 1 DUST COLLECTION UNIT AIR COMP CIRCUIT BREAKER KA10EAC51GH002-Q01	> ISOLATOR TO OFF > RACK OUT CB > LOCK & TAG CB	DTL 1	To be Done _____	Checked by _____
80	COAL HANDLING SWITCHROOM 10BJG04.BA001	UNIT 1 COAL PLANT TRIPPER CONV 1 DUST COLLECTION UNIT FAN CIRCUIT BREAKER KA10EAC51GH001-Q01	> ISOLATOR TO OFF > RACK OUT CB > LOCK & TAG CB	DTL 1	To be Done _____	Checked by _____

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WORK CLEARANCE TEMPLATE DRAFT

KOGAN CREEK POWER STATION P/L

A Station

WCD No: 94000511

Page 3 of 3

Printed: 28.10.2014 09:24:45

WORK CLEARANCE TEMPLATE Steps

Item No.	Location	Description	Operation	Tag Qty	Template Only	Template Only
90	EAC51 TRIPPER CAR PLATFORM	(NO KKS) UNIT 1 COAL PLANT TRIPPER CONVEYOR 1 DUST COLLECTION UNIT AIR COMP DRAIN VLV	> OPEN DRAIN > PROVE DEPRESSURISED > LOCK & TAG HANDLE	DTL 1	To be Done _____	Checked by _____
	End of TEMPLATE Steps					

17.7 Attachment 7 - Example Work Party Sign On/Off Sheet

Work Party: Sign-On Sign-Off Sheet

Permit to Work WCA #: 44029400 Sheet # 1
Officer in Charge OIC : MECHANICAL TRADESPERSON - GEOFF MALONEY
ITEM OF PLANT : UNIT 1 COAL PLANT SECONDARY CRUSHER 2 SYSTEM

WORK TO BE PERFORMED :
REPLACE WEAR PLATES AND TILES (LT).

Person in Charge of Work
I understand and accept the scope of work and the conditions stipulated on the PTW and by OIC. I also acknowledge that I am accepting responsibility to supervise the Work party and their adherance to the conditions and controls as described to them by the OIC/PICW. _____ (Please print name) _____ (Please sign name) (You will also need to sign on below)

WORK PARTY Sign on/Sign off check sheet

By **"Signing on"** below you acknowledge that you have a clear understanding of:

- The conditions detailed on the PTW
- The scope of work
- The limits of the isolation
- The physical limits of access and associated risks and hazards
- The controls detailed on the JSEA

By **"Signing off"** below, each member must be aware that access to the plant is now prohibited and that the plant must be considered as in service.

WORK PARTY SIGN ON				WORK PARTY SIGN OFF		
Print Name	Signature	Time	Date	Signature	Time	Date