Switching Process and Rules

Systems Operations Framework

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<td>Position: Switching Process Coordinator</td>
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* Must be the Process Owner and is the person assigned authority and responsibility for managing the whole process, end-to-end, which may extend across more than one division and/or functions, in order to deliver agreed business results.

** This person will have the power to grant the process owner the authority and responsibility to manage the process from end to end.

*** Frequency period is dependent upon circumstances—maximum is 2 years from last issue.

<table>
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<tr>
<td><strong>Manager Safety &amp; Health</strong></td>
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<td><strong>Regional Managers</strong></td>
<td>Operational Formal Leaders</td>
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<td><strong>Manager Generation</strong></td>
<td>Field Practices Coordinator</td>
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<td><strong>Technical Training Coordinator</strong></td>
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1. **INTRODUCTION**

Switching is a key operational activity within Horizon Power and is an integral part of the daily work of many employees and contractors so that our power stations and networks can be constructed, commissioned, operated, maintained or decommissioned in a safe and reliable manner. Horizon Power requires switching to be carried out carefully and to predetermined standards to ensure the safety of Horizon Power's personnel, contractors, the public and assets is not compromised.

1.1 **Purpose**

The purpose of this Switching Process and Rules document is to ensure that Horizon Power has the necessary systems and processes in place that provides for:

- the safety of our employees and contractors when accessing or operating the network;
- maintaining reliability of supply to our customers;
- protecting Horizon Power's assets; and
- complying with the Electricity (Network Safety) Regulations 2015 that require prescribed activities to be undertaken safely.

This document defines the structure, systems and processes that govern how Horizon Power manages operating its transmission, distribution and generation assets.

1.2 **Hierarchy**

The Switching Process and Rules document operates within the following document hierarchy:

- Regulations, being the Electricity (Network Safety) Regulations 2015.

- System Operations Framework – a high level document that provides:
  - the management structure
  - systems
  - processes
  - rules
  - requirements of Horizon Power employees and contractors when operating its’ systems

- Switching Process and Rules, which includes:
  - Switching Operator’s Training Manual – documents how switching on Horizon Power's assets is performed and critical performance aspects that must be complied with.
  - Switching Operator Authorisations, including HPCC Controllers, generation workers and network workers.
  - Technical Training Courseware that provides the basis for the training and switching fundamentals and rules to assist the operators to perform their switching safely.
  - Processes that govern how the switching function is performed.
- Generation Permit to Work Standard – provides the permitting standards for generation activities, including the Lock Out Tag Out process.
- Field Instruction Manual – provides the permitting standards for network activities, including the Lock Out Tag Out process.

The document structure is shown below:
2. PROCESSES

The core processes within the Switching Process and Rules are:

1. Switching Operator Authorisations / Reauthorisation
2. Switching Programme Writing and Execution
3. Network Management Patching Process
5. Reporting and Governance
6. Incident investigation

2.1 Switching Operator Authorisation / Reauthorisation

This process defines how Switching Operators are authorised to switch and how this competency is checked, measured and maintained. This process is described in Appendix A. CS10 # 5002913

2.2 Switching Program Writing and Execution

The PowerOn Fusion procedure contains details on the writing and execution of high voltage switching programs on Horizon Power’s networks using the PowerOn Fusion system. This procedure can be found in CS10# 3114846.

2.3 Network Management Patching Process

These procedures describe the process for how PowerOn Fusion is maintained in a live environment to represent in real time the high voltage electrical network in the field. CS10# 2815526 and CS10# 2816357.

2.4 Switching Operator’s Training Manual

The Switching Operator’s Training Manual is a comprehensive set of technical guidelines and instructions provided to Switching Operators to be used when writing or performing a switching program.

The Switching Process Coordinator will be responsible for management and updating of the Switching Operators Training Manual every three years.

All Switching Operators will be responsible for the submission of a Continuous Improvement Form where deficiencies are found or improvements have been identified.

- Transmission Switching Operator’s Training Manual CS10# 5010609
- Distribution Switching Operator’s Training Manual CS10# 5011675
- HPCC Controller Training CS10# 1398684

2.5 Reporting and Governance

The Governance section of this document describes the governance model employed and the reporting that is provided to the business.
2.6 Incident investigation

Switching incidents are investigated in accordance with the Safety and Health Management System – Incident Investigation Procedure OSH-4.2-1-02 CS10# 2838057.
3.  OPERATIONAL SYSTEMS

3.1  Communication

Switching programs must be written in a clear and legible manner and completed in accordance with Horizon Power’s official terminology and instructions.

Where verbal communication is required, it is essential that effective communication takes place between all personnel undertaking switching activities, including the Recipient in Charge (RIC), Switching Operator and the HPCC Controller.

The communications protocol is based on four principles, being:

- Clear – ensure what you say is easy to understand and not confusing;
- Concise – use proper and specific term;
- Confirm – information must be repeated by the receiver for confirmation; and
- Complete – all of the necessary information is communicated and closed out.

*Note: Conversations between Switching Operators, HPCC Controllers, Issuing Officers and Recipient in Charge are to be cordial and professional in nature.*

The communication between HPCC Controllers and Switching Operators must clearly identify both parties and must confirm the following:

- The switching program number being performed;
- The switching step being enacted;
- The name of the switching apparatus being operated;
- The relevant permit number;
- Any risks that either party has observed and believes the other party needs to be aware of.

Communication between the Switching Operator, Issuing Officer and the Recipient In Charge must clearly describe the isolation points, earth locations, safe work area, status of the electrical circuits, limits of responsibility and any identified risks within the allocated permit zone. The RIC must clearly confirm their understanding of the permit and its scope of work.

*Note: All communications to HPCC are recorded.*

3.2  Technology

Horizon Power uses the GE PowerOn Fusion Network Management System (NMS) software to manage its high voltage network switching operations. For network switching, Switching Operators are required to write and approve programs within this system. HPCC is to execute programs within PowerOn Fusion.

The low voltage network is managed in the regions by the Formal Leader using Horizon Power’s GIS system (Smallworld).

*Note: The Horizon Power SCADA replacement Project will be integrating the low voltage network into its future Network Management System.*
Generation programs are managed by the Asset Manager – Microgrids Generation outside of a SCADA system. The Asset Manager is to ensure switching program records are kept for auditing and evidence purposes.

Citect has been provided in the regions to allow remote operation of reclosers and substation apparatus by the Switching Operator, but only under instruction from HPCC.

### 3.2.1 PowerOn Fusion

Switching programs will be executed through PowerOn Fusion mobile. Where mobile tablet technology is available, it will be used by both HPCC and the Switching Operator to execute and communicate the instruction and completion of each step in the switching program.

If mobile tablet program delivery is unavailable, a paper copy of the program will be used in the field by the Switching Operator.

### 3.2.2 Virtual Clients

All planned switching programs will be written and approved via the PowerOn Fusion virtual client software. For the electrical networks, paper copies of switching programs will not be accepted by HPCC without prior approval from the System Operations Manager.
4. ROLES AND RESPONSIBILITIES

This section describes the roles and responsibilities of persons within Horizon Power when performing switching activities.

All workers are to adhere to the following when performing switching activities:

- OSH-1-1-03 Principle 1 – Leadership and Accountability  CS10 # 2610702
- OSH-3.1.2-1-01 Responsibilities and Accountabilities Procedure  CS10 # 3033236
- Horizon Power Safety Non-negotiables  CS10 # 2721189

4.1 Switching Operator

Horizon Power utilises workers to fulfil the role of Switching Operator across our service area. The Switching Operator is responsible for:

- Using the correct PPE for the switching task;
- Ensuring their switching authorisation is maintained and current at all times; with active switching to maintain skills;
- Ensuring switching is performed safely, within their competency and only within the levels that they are authorised for to ensure alignment with Horizon Power’s safety non negotiables;
- Adherence to the Horizon Power Switching Process and Rules along with associated procedures;
- Ensuring compliance to Horizon Power’s Electrical Safety Standards and Generation Permit to Work Standards whilst undertaking switching activities;
- Physical switching on the network or power station assets for reconfiguration, isolation and/or earthing;
- Ensuring, by undertaking inspection, that the apparatus being switched is in a safe condition to be switched;
- Ensuring, where practicable, that all switching operations are to be done remotely where the capability exists in preference to local switching. The remote operation of the switch is to be performed by an authorised switching operator with the appropriate switching level;
- Provide direct supervision of an In Training Switching Operator as required;
- Liaising with the Recipient in Charge (RIC) for the issuing and cancellation of work permits.

The following roles are performed by the Switching Operator at various stages when performing a switching activity.

4.1.1 Program Writer

The Switching Operator is to write switching programs that:

- Are within the switching levels that the Program Writer is authorised and deemed competent in;
- Are within the capabilities of the equipment being operated;
- Do not overload plant;
- Do not place the Switching Operator, another Switching Operator, or a member of the public at risk;
- Ensure remote switching of plant is performed in preference to local switching;
- Should the Program Writer be In Training, an Authorised Switching Operator must review the program and sign off as the Program Writer.

### 4.1.2 Program Approver

The Switching Operator that is approving the switching program needs to:

- Perform a cross check of the switching program as written by the Program Writer. *Note: The Program Approver cannot be the Program Writer;*
- Be authorised to switch for the levels required for the program they are checking;
- Be fully conversant with the switching program they are reviewing;
- Approve the switching program for submission to the Horizon Power Control Centre (HPCC);
- A Switching Operator that is In Training cannot approve a switching program.

*Note: No program is to be submitted to HPCC unless it has two Authorised Switching Operator sign offs, being a Program Writer and a Program Approver.*

### 4.2 Formal Leader

The Formal Leader is responsible for:

- Ensuring that all Switching Operators under their designated responsibility are competent and authorised;
- Providing each Switching Operator valid exposure to switching to keep their Switching Operators skills at a proficient level;
- Upon receiving recommendation to cancel/suspend a switching authorisation from the Switching Process Coordinator, remove the operator's authorisation.

### 4.3 Regional Manager / Manager Generation

The Regional Manager / Manager Generation is responsible for:

- Endorsing Switching Operator Authorisation applications to acknowledge their consent for Switching Operators to switch on their network/power station assets subject to passing the prerequisite technical and practical skills assessments and providing the budget allocation;
- Monitoring and addressing the performance of their Switching Operators;
- Ensuring any switching incidents are reported, fully investigated and the recommendations fully implemented.
4.4 HPCC Controller

The HPCC Controller is a designated Switching Operator with specific roles performed within the Horizon Power Control Centre. The Controller is responsible for overseeing switching activities on Horizon Power’s electrical networks including:

- Oversee delivery of switching programs on the network;
- Raising and writing fault jobs to address issues as they arise;
- Perform compatibility checks prior to the commencement of all switching programs to ensure no conflicting programs are occurring;
- Control the running of switching programs to ensure compatibility with prevailing network conditions;
- Performing remote control switching on devices capable of being remotely controlled;
- Cancelling programs or requesting permit cancellation, as required where:
  - Changes occur to the scope of the work;
  - An unplanned event affects the safety and health of Switching Operators, the work party or the public;
  - An unplanned event has an adverse impact on network security;
- Issuing and recording work permits to ensure all permits are recorded and responsible for compatibility of multiple work permits.

4.5 Switching Process Coordinator

The Switching Process Coordinator is responsible for:

- The end to end switching process involving Field Observation assessment and issuing of authorisations and restrictions of Switching Operators working on Horizon Power’s electrical networks;
- Provide on the job coaching and mentoring of Horizon Power authorised Switching Operators to ensure all switching activities are undertaken safely and in line with good industry practice;
- Management of documentation relevant to switching including:
  - Horizon Power Switching Process and Rules
  - Switching Operators Training Manual
  - Switchgear Instruction Manual;
- Championing of continuous improvement in all activities related to the process of switching;
- Ensuring all Horizon Power Switching Operators are competent and authorised;
- Performing as the Subject Matter Expert in switching incident investigations if required;
- Recommending the removal of a Switching Operator’s authorisation;
- Regularly reviewing the switching process for improvements;
- Audit the switching process to monitor compliance;
Monitor switching delivery across Horizon Power.

4.6 System Operations Manager

The System Operations Manager is responsible for:

- Final approval for authorisation of Switching Operators on Horizon Power networks;
- Provision of monthly reports to the Executive and Management teams;
- Reviewing the Switching Process and implementing improvements as required;
- Ensuring only authorised Switching Operators perform switching programs on Horizon Power's assets;
- Ensuring that the number of planned switching programs per shift do not exceed HPCC's capacity to fulfil its role.
5. GOVERNANCE

5.1 Management Review

The Switching Process and Rules will follow the continual improvement using the ADRI methodology of:

5.1.1 Approach

The Switching Process and Rules establishes and implements a fit for purpose switching management system by:

- Introducing new technical training courseware and authorisations process;
- Introducing new Switching Process and Rules and associated manuals;
- Increasing reporting and visibility throughout the business;
- Introducing a new isolation approach when accessing the network;
- Increasing the coaching/mentoring of all Switching Operators;
- Introducing field audits of Switching Operators;
- Improving the switching level authorisation system.

5.1.2 Deploy

The Switching Process and Rules is deployed through the introduction of a specific role, being the Switching Process Coordinator. All Switching Operators are trained and authorised to fulfil their duties within this process.

All Switching Operators are trained by a Registered Training Organisation (RTO) and are subject to a theory and practical assessment prior to being deemed competent and therefore duly authorised to switch on Horizon Power’s assets.
5.1.3 Review

The Switching Process Coordinator will provide reports that provide oversight of the switching function within Horizon Power.

Monthly reports will be provided to the Executive and Management teams that will include lead and lag indicators such as:

- Number of switching programs performed for the period;
- Details and available investigation reports of any switching incidents that may have occurred during the period;
- Number of audits undertaken for the month;
- Number of new authorisations granted for the month, and the number cancelled;
- Detailed reports to the Formal Leaders on the outcome of any field observations.

5.1.4 Improve

Continual improvement in the updating of the Switching Process and Rules will be undertaken based on the performance of switching on Horizon Power’s assets.

To facilitate continuous improvement all persons involved with switching activities will be responsible for the submission of a Continuous Improvement Form where deficiencies are found or improvements have been identified.

The Switching Process Coordinator will be responsible for implementation of improvements to the process and engaging with the relevant stakeholders.

5.2 Compliance and Auditing

Compliance to the Switching Process and Rules is the responsibility of all Switching Operators. Some roles within Horizon Power have additional requirements. These are:

Switching Process Coordinator:

- Responsible for the end to end switching process involving assessment and authorisation of Switching Operators working on Horizon Power electrical networks;
- Provide on the job coaching and mentoring of Horizon Power authorised Switching Operators;
- Ensuring all Horizon Power switching activities are undertaken safely and in line with good industry practices;
- To champion continuous improvement in all activities related to the process of switching;
- Completing on the job audits of switching operations being performed to ensure compliance.

Formal Leaders:
• Ensuring switching activities are only undertaken by authorised Switching Operators at their level of authorisation;

• Ensuring that principles contained in the related Permit to Work Standards are followed at all times;

• Ensuring Switching Operators undertake all the required tasks/duties and maintain their competency and authorisation.

5.3 Investigations

Switching is considered to be a high risk activity. As such, any switching incident is to be investigated in accordance with the Incident Management procedure detailed within The Zone.

Any incident reported in Cintellate as being switching related will be assessed by the Switching Process Coordinator. If the risk is assessed as High by the Switching Process Coordinator the incident investigation will be tasked to a person within the business who is independent of the work group/location of where the incident occurred.

The purpose of investigations is to:

• Determine a root cause of the event and provide a regulatory response when required to a switching incident within the prescribed time frames.

• Ensure that a learning outcome is provided to all stakeholders in the business to improve the performance of switching activities and prevent further incidents.

• Identify whether the incident occurred due to Switching Operator / HPCC Controller error or was caused by switching processes and procedures.

Any Switching Operator involved in a switching incident will have their authorisation reviewed based on the risk rating of the incident. For clarity, HPCC Controllers will have their authorisation reviewed with an initial assessment made to determine their contribution to the incident and whether their authorisation is to be suspended pending formal investigation.

When assessing the risk of an incident, the following may be used to determine the risk rating:

• High – An incident involving a safety breach. e.g. Applying earths to live network, unauthorised switching, energises wrong section of the network, issuing EAP with live network in permit zone.

• Medium – An incident involving reliability of customer supply. e.g. Causing avoidable loss of customer supply.

• Low – A potential incident caused by administrative or procedural error. e.g. Program writing error identified before switching commences.

**Note:** The final incident rating will be determined following investigation of the incident.
Any disciplinary action against the Switching Operator should take into account the following:

- Severity of the incident.
- Type of incident (Reliability, Safety, Administrative).
- Number of switching programs performed.
- Any previous incidents.

The outcome in regards to switching authorisations will be as per the following matrix. The Formal Leader is to ensure the Fair and Just principles are applied when determining if any disciplinary action is required, but this does not extend to the table below. In addition, Switching Operators that have had their authorisation suspended or revoked may have their competency wage levels adjusted (if applicable) accordingly in consultation with Human Resources.

<table>
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<td>No action</td>
<td>No action</td>
<td>Switching level restriction applied</td>
<td>Switching Authority suspended</td>
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<tr>
<td>2</td>
<td>No action</td>
<td>No action</td>
<td>Switching Authority suspended</td>
<td>Switching Authority revoked</td>
</tr>
<tr>
<td>3</td>
<td>Resit practical/theory assessment</td>
<td>Switching Authority revoked</td>
<td></td>
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<td>4</td>
<td>Switching level restriction applied</td>
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<td></td>
</tr>
<tr>
<td>5</td>
<td>Switching Authority suspended</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>6</td>
<td>Switching Authority revoked</td>
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** Deliberate/negligent acts will result in the switching authority being revoked immediately.
6. SWITCHING OPERATOR AUTHORISATIONS

To ensure Switching Operators are competent in their task, Horizon Power has 7 levels of switching authorisation and a further 2 restrictions within each level. Switching Operators are authorised for specific level(s) and can only switch within the level(s) they have been deemed competent in. The levels are not hierarchical and are explained in detail below.

6.1 Switching Operator Levels

Horizon Power’s Switching Operator levels are:

<table>
<thead>
<tr>
<th>Level</th>
<th>Description</th>
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<tbody>
<tr>
<td>Level 1</td>
<td>Fault Response Switching</td>
</tr>
<tr>
<td>Level 2</td>
<td>Distribution Switching</td>
</tr>
<tr>
<td>Level 3</td>
<td>Substation Switching</td>
</tr>
<tr>
<td>Level 4</td>
<td>Transmission Switching</td>
</tr>
<tr>
<td>Level 5</td>
<td>Protection Secondary Systems</td>
</tr>
<tr>
<td>Level 6.1</td>
<td>LV Generation Switching</td>
</tr>
<tr>
<td>Level 6.2</td>
<td>HV Generation Switching</td>
</tr>
<tr>
<td>Level 7</td>
<td>Control Centre</td>
</tr>
</tbody>
</table>

6.1.1 Level 1 Fault Response Switching

Fault Response Switching Level (Switching Level 1) allows isolation only switching of de-energised apparatus on Horizon Power’s network (includes LV and HV overhead and underground network).

Isolation only switching will be carried out only for the purpose of making the site safe and will be performed under direct instruction from an authorised Horizon Power Switching Operator or HPCC Controller.

Local switching operations will only be undertaken when the apparatus is proven to be de-energised.

6.1.2 Level 2 Distribution Switching

Distribution Switching Level (Switching Level 2) allows switching operations on all primary distribution circuits (includes LV and HV overhead and underground equipment) on Horizon Power’s network, and includes the enabling/disabling of the auto reclose and sensitive earth fault (SEF) functionality on the substation feeder circuit protection, but excludes operation of the feeder circuit breaker earth switch.
6.1.3 Level 3 Substation Switching

Substation Switching Level (Switching Level 3) allows switching operations on all primary circuits located in Horizon Power’s substations up to and including 33kV equipment. For clarity, this does not include transmission equipment.

6.1.4 Level 4 Transmission Switching

Transmission Switching Level (Switching Level 4) allows switching operations on all primary circuits (includes primary apparatus and related secondary apparatus) located within a zone substation, terminal station and transmission lines on Horizon Power’s Pilbara Grid network.

Note: A person holding a Level 4 switching qualification is deemed to hold a Level 3.

6.1.5 Level 5 Protection Secondary Systems

Protection Secondary Systems (Switching Level 5) allows isolation of protection schemes and their interfaces on Horizon Power assets which may be located within a substation, terminal station or generation facility. This level does not provide for the switching of primary assets.

6.1.6 Level 6.1 LV Generation Switching

Generation Switching Level (Switching Level 6.1) allows switching operations on all circuits associated with power station generators and auxiliary equipment in Horizon Power owned power stations where the generator terminal voltage is less than 1000V.

This level allows the Switching Operator to operate the feeder circuit breakers under instruction from HPCC or a competent Switching Operator.

6.1.7 Level 6.2 HV Generation Switching

Generation Switching Level (Switching Level 6.2) allows switching operations on all circuits associated with power station generators and auxiliary equipment in Horizon Power owned power stations where the generator terminal voltage is greater than 1000V.

This level allows the Switching Operator to operate the feeder circuit breakers under instruction from HPCC or a competent Switching Operator.

6.1.8 Level 7 Control Centre

Control Centre (Switching Level 7) allows remote switching of primary equipment from HPCC. Switching will be undertaken as required for normal power system operation and also to facilitate safe access to Horizon Power’s networks.

This level is also responsible for the coordination of network switching activities and electronically recording of network work permits.
6.2 Switching Level Restrictions

The normal Switching Operator authorisation level will be that of an Authorised Switching Operator. However, two levels of restriction being In Training and Restricted exist to provide a pathway to becoming an Authorised Switching Operator.

6.2.1 In Training Switching Operator

An In Training Switching Operator is obligated to complete the technical training requirements and have this restriction lifted as soon as possible after attending the technical training course. A prolonged In Training restriction places a resource impediment on the local resource area and dilutes the theoretical knowledge gained in the training.

The In Training switching restriction provides for a mentored and supervised pathway for future switching level progression. The In Training Switching Operator must only perform switching activities under supervision and when a competent Authorised Switching Operator is present. An In Training Switching Operator can write a switching program, but this will need to be reviewed by an Authorised Switching Operator and approved by another separate Authorised Switching Operator.

Switching Operators who have an In Training restriction cannot supervise a trainee in switching activities.

6.2.2 Restricted Switching Operator

The Restricted restriction for a Switching Operator is designed to cater for those scenarios where the opportunity for program writing is limited or Horizon Power’s resources are such that the role is only required to execute a switching program and not write one.

A Restricted restriction applies to a Switching Operator who has not provided sufficient evidence of program writing skills to be deemed competent in fulfilling the complete requirements of an Authorised Switching Operator but has successfully passed the ‘Field Observation’ and is deemed competent to execute a switching program.
A Restricted restriction does not have a time limit however the Restricted Switching Operator should use every opportunity to write switching programs in order to develop their program writing skills and collect evidence for progression to being an Authorised Switching Operator.

6.2.3 Switching Restriction Pathway

To become an Authorised Switching Operator, an individual will go through the following steps:

- Successful completion of the Technical Training Course for the required switching level, at which point they will be placed with the ‘T’ restriction for that level (eg 2T, 4T).
- Undertake switching under direct supervision by an Authorised Switching Operator and write switching programs for review and approval by Authorised Switching Operators.
- Pass a Field Observation undertaken by the Switching Process Coordinator. Once this is successfully completed, the individual will have their ‘T’ restriction removed and replaced with the ‘R’ restriction. Upon receipt of the ‘R’ restriction, the individual will be allowed to execute a switching program without supervision. The ‘R’ restriction does not allow for the individual to approve switching programs. In addition, the individual may be required to receive detailed switching instructions from an Authorised Switching Operator or HPCC Controller.
- Once a Switching Operator has compiled enough program writing evidence, they will submit the programs to the Switching Process Coordinator for review. If the Switching Process Coordinator believes the programs are to the required standard, the Switching Operator will have their ‘R’ restriction lifted and will be an Authorised Switching Operator.

6.3 Training and Authorisation

Switching operations will only be undertaken by authorised Switching Operators and only at their level of authorisation and any restriction. Personnel are authorised once successfully completing the training and the subsequent theoretical and field observations provided by Horizon Power. All technical training courses will be delivered through a Registered Training Organisation (RTO).

Appendix B contains the authorisation process for new Switching Operators with no previous experience.

All switching authorisations that are issued will be recorded in Horizon Power’s Training and Learning Management System (VETtrak).

6.4 Recognition of Prior Switching Experience

Where a new Switching Operator requires initial authorisation by Horizon Power and can demonstrate prior switching experience at a similar or higher level than the level of authorisation being requested, a process for the recognition of prior switching experience may be considered.

An initial assessment of the candidate’s experience will be undertaken by their Formal Leader who will be responsible for verification of the prior switching experience, using the assistance of the Technical Training Coordinator.
A Switching Authority Request by the Formal Leader will be submitted to the Training Coordinator and the formal process outlined in Appendix B will be undertaken.

### 6.5 Reauthorisations

Switching authorisations are valid for two years. Reauthorisations will follow the process outlined in Appendix A.

Switching Operators are required to keep records in the form of switching programs and permits issued in order to prove their competency. Prior to the expiry of their authorisation, the Switching Operator is required to submit a Switching Authority Request to their Formal Leader for approval.

If the Switching Operator authorisation has expired / lapsed and there is insufficient evidence of switching being performed in the previous 12 months or have had their Switching Authority revoked, the Switching Operator will be ineligible to follow the normal reauthorisation process and will then follow the process for a New Switching Operator outlined in Appendix B.

An Authorised Switching Operator that has not written enough programs prior to their authorisation lapping but can demonstrate that they have performed sufficient switching programs will have their subsequent authorisation level reduced to Restricted.

Their Wages Competency Level may be adjusted accordingly.

### 6.6 Approval Process

To become an Authorised Switching Operator, the Switching Operator needs to:

- New Switching Operators - successfully complete the technical training course and subsequent competency assessments;
- Reauthorisation - complete the theory assessment and demonstrate current skills through regular switching activity, a minimum level being the completion of 6 switching programs per year per level, with 3 programs being performed in the last 6 months where possible;
- Provide evidence of permits being issued;
- Successfully complete the Field Observation and be signed off by the Switching Process Coordinator;
- Be granted authorisation to switch on Horizon Power's assets by the Systems Operations Manager.
7. REFERENCES

Legal References:  
- Electricity (Network Safety) Regulations 2015
- Occupational Safety and Health Act 1984
- Occupational Safety and Health Regulations 1996

Standards & Guidelines:  
- AS5577-2013 Electricity network safety management systems
- Worksafe 2014 Guideline for the Safe management of high voltage electrical installation
- ENA NENS 03 - 2006 National Guidelines for Safe Access to Electrical and Mechanical Apparatus
- ENA NENS 04 - 2006 National Guidelines for Safe Approach Distances to Electrical Apparatus
- ENA NENS 09 - 2004 National Guidelines for the Selection, Use and Maintenance of Personal Protective Equipment for Electrical Hazards

Related Policies & Other Documents:  
- Safety and Health Management System
- Network Permit to Work Standards
- Generation Permit to Work Standards
- Field Instruction 6.6 Switching Authorisation CS10 # 2087969
- Field Instruction 6.22 Switching Activities CS10 # 2501027
- Generation Instruction 4 Switching Authorisation CS10 # 2098007
- Transmission Substation Field Instructions 2.16 Switching Activities CS10 # 2652042
- Request for Training Form CS10 # 1830662
- Switching Operator Authorisation Register CS10 # 1920155
- OSH-1-1-12 Principle 10 – Training and Competencies CS10 # 2631017
- OSH-3.2-1-01 Safety and Health Training Procedure CS10 # 3229961
APPENDIX A — FLOW DIAGRAM: REAUTHORISATION (EVERY TWO YEARS)
APPENDIX B — FLOW DIAGRAM: NEW SWITCHING OPERATORS

[Flow diagram showing the process for new switching operators]