 Skyfri	Permit-to-Work System	Number:	SE-EHS-OCP-07
		Revision:	1.0
		Date:	19-05-2023

Permit to Work System

Revision History					
Version	Date of issue	Changes	Prepared by	Reviewed by	Approved by
1.0	19-05-2023	Earlier document released under Skyfri file naming conventions	Ramachandran. D	Trinath C	G S Venkatesh

1. Purpose

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PTW system is a formal written system used to control certain types of work which carries potential hazards. It is also a means of communication between site management, site supervisors and site team and those who carry out the work, including subcontracted work.

2. Objective

This procedure covers work activities which have foreseeable risks to people, assets, operation, and the environment at the site.

All non-routine work and high-risk routine work which is under the control of the permit-to-work system shall be carried out strictly in accordance with the requirements and conditions, though they are not necessarily exhaustive, of specific work permits.

The permit-to-work system should not be regarded as a way of avoiding the need to eliminate hazards and reduce risks. The issue of work permits does not, by itself, make a job safe or guarantee safety.

Safety can only be achieved by those preparing for the work and those carrying out work in accordance with the work procedure, methods, use of right tools, and use the right judgment for which they have been trained and made responsible.

Note: All personnel should be aware that the Permit to Work system is not an absolute safeguard in itself. It is the responsibility of each individual to be alert to hazardous situations that may arise during the operation.

3. Scope

This procedure shall be applied to all employees and contractors on sites where Skyfri Energy Pvt Ltd has operational control.

Routine activities where risks are low, hazards are known and are mitigated through SOP may not come under the purview of PTW requirements.

It is cautioned that permit-to-work is **NOT** permission to carry out a dangerous job.

4. Terminology

- PTW – Permit to Work
- HIRA – Hazard Identification & Risk Assessment
- SOP – Standard Operating Procedure

5. Definitions

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- 5.1 Permit-to-Work System:** PTW system is a formal written system used to control certain types of work which carries potential hazards. It is also a means of communication between site management, site supervisors and site team and those who carry out the work, including subcontracted work.
- 5.2 Permit Applicant:** The Permit Applicant is the person who applies for the permit-to-work. He is a competent O&M person or contractor supervisor who is in-charge of the work.
- 5.3 Permit Approver:** The Permit Approver is the respective Site In charge, Site Manager from Operations. He will give the final approval for the PTW.
- 5.4 Hazard Identification and Risk Assessment (HIRA):** A Hazard Identification and Risk Assessment (HIRA) It is a systematic risk assessment tool that can be used to. assess the risks of various hazards
- 5.5 Competent Person:** Competent Person is the authorized operations person or his delegated competent person who is competent to conduct isolation, clearing, and operation checks of the system/work area where work will be carried out.
- 5.6 Isolation List:** is a list of lock out points which must be attached to the PTW and handed over to the next shift if works are continuing into the next shift.
- 5.7 Electrical Work Permit:** A permit required for all works that require isolation of electrical services or installation of new services.
- 5.8 Work at Height Permit:** Working at Height Permit shall be required for working at a height of 1.8 meters and above on a temporary structure or on a fixed structure, Elevated working positions where the hazard of a fall exists and where there is no physical protection such as handrails.
Types of work covered include working on scaffolds, mechanical lifts, working on transmission towers and conductors, Near Excavated sites, inside confined spaces, working on roof, sloped roofs, areas where there are no overhead tie-off points, when working within 6 feet (1.8mt) from the edge of a flat roof etc.
- 5.9 General Work Permit:** It is work permit issued for all non-routine and low risk works which are not covered under any of the specific work permits described in this standard and which may create potential injuries.
- 5.10 Lifting work permit:** It is work permit issued for jobs involving use of mechanical load shifting equipment (and associated gear) to move, place or secure a load.
- 5.11 Confined space entry permit:** A confined space entry permit is required to allow personnel to enter a confined space such as a blade, trench, tank, vessel, etc

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5.12 Hot work permit: A hot work permit is required for work involving the use of a flame or other sources of ignition. Some examples include:

- Electrical welding and use of welding machine,
- Flame cutting,
- Grinding (producing sparks)

5.13 Excavation Permit: It is work permit issued for work that involves the digging of holes, pits, or trenches in the ground beyond one meter depth and which may place people at risk through collapse, falling or contact with existing services.

6. Responsibilities

6.1 OMS Manager/Assistant Manager

OMS Manager/Assistant Manager is responsible for ensuring:

- Ensure that all personnel involved in the work have attended the required competency required by the procedure.
- The Permit to Work system is operated in accordance with this procedure.
- A thorough investigation is carried out for any accidents or incidents which may be attributable to a breakdown in the Permit to Work system or associated controls
- A self-regulatory review and/or audit of operation of the Permit to Work system is carried out on a regular basis.

6.2 Site In charge/Site Manager

Each Site In charge/Site Manager is responsible for:

- The safety of all personnel on the site and for the safe execution of all work carried out at the site.
- Ensuring that the personnel appointed under this procedure are competent to carry out the task for which they are authorized.
- Communicating the responsibilities of key participants within the Permit to Work and Isolations procedures, to those personnel under his direction.
- Auditing compliance with this procedure.
- Conduct LOTO to the system where applicable.
- Ensure site Inspection has been carried out together with permit-to-work applicant.
- Site check and assess all the control measures to ensure its effectiveness.
- Ensure that those who are appointed as Permit Receiver and Permit Issuers are certified and competent to undertake the role.
- Ensure no incompatible job is being carried out at the same time.
- Ensure continuous supervision, monitoring & Communication.

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6.3 Permit Approver, Site In charge or (Authorized by Site In charge/Manager/OMS Manager)

Is the person who signs a Work Permit and authorizes the work to start, Is responsible for:

- All the prescribed special conditions have been complied with.
- He shall ensure that all supporting documentation has been obtained and is properly completed before the Work Permit is signed.
- Assess and certify the work area safe where required by reviewing the HIRA/JSA.
- Ensure site Inspection has been carried out together with permit-to-work applicant.
- Ensure adequate resources available for safe execution of the work.
- Consult EHS to assist in the review of HIRA with comments, if any.
- Confirm that all hazards associated with the job have been identified, assessed, managed and all relevant parties have provided their inputs and agree with the precautions.
- Confirm that all operational preparations, including process clearance and isolations, de-energizing and de-pressurizing have been completed.
- Confirm that the job site is safe for the job to proceed.

6.4 Permit Applicant

Permit Applicant is responsible for ensuring:

- Apply PTW for work
- Familiar with the work method and risk involved.
- Ensure Equipment & Tools to be used are inspected & in good condition
- Ensure adequate resources available for safe execution i.e. PPE, Emergency Response, etc.
- Know the right kind of PPEs required, ensure correct use.
- Know the emergency situations likely to occur in the job / area and actions to be taken including evacuating the area.
- Deliver the Tool-Box-Talk (TBT) and discuss HIRA to the workers involved prior to commence the job and record the same.
- Knowledge about the procedure of the job.

6.5 Working Individuals

Working individuals are responsible for:

- Received and understood safety instructions during TBT on the job and they understand the hazards and the precautions that are to be taken.
- Shall not start any job without valid PTW and TBT.
- After work completion, the site and any equipment they are using is left in a safe condition

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- If in any doubt or if circumstances change, they must stop work and consult with their supervisor / Permit applicant.

6.6 Site EHS Officer/Executive (Where Applicable)

Site EHS Officer/Executive is responsible for:

- Enforcing & ensuring the implementation of Permit to Work System.
- Provide training to all concerned on Permit to Work System.
- Check the onsite compliances of prescribed special conditions mention in permit to work.
- Cancel the permit in case of non-compliances of the prescribed special conditions mention in permit to work.
- Keep a record of issued permits.

7. Procedure

7.1 General

- Permit approver to determine if the works to be carried out requires a PTW.
- For works that do not require PTW, applicant can proceed to execute the job after informing Site in charge and ensure HIRA has been carried out and communicated for the work.
- A separate Permit-to-Work should be raised for the same Scope of work but different activities.
- Separate permit to be raised for same work performed by different parties.

7.2 Issue of Work Permit

- Applicant shall raise the work permit in the PTW Form and provide all required details in the PTW form to take approval from permit Approver.
- Permit Applicant shall mention work description in detail, date, time, duration and also mention the list of equipment's along with description & Tag no's, which are to be isolated.
- Applicant will not start the job while permit is under approval but can do the preparatory job till permit gets approved from permit Approver.
- The Receiver shall ensure that the persons engaged are thoroughly briefed about the relevant SOP, HIRA/JSA and control measures.
- He will also ensure that relevant PPEs are provided.
- The permit Approver will check that all Hazardous energy sources which are to be isolated for providing safe work environment has been identified by applicant and are mentioned in the permit. If any additional isolation is required, Approver shall identify it.

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- Permit approver shall ensure that all isolations, LOTO where required are completed, HIRA/JSA available for the work activity and then issue the permit.
- Permit approver shall retain the record and copy of the permits issued.
- Applicant should conduct TBT to the team and explain the HIRA/JSA and control measures and actions to be taken during emergency.
- Applicant together with the Permit Holder and EHS officer (If Applicable) shall jointly inspect the area of work to confirm that all preparation work is completed.
- Permit approver shall make sure TBT and HIRA conducted to the execution team by the permit applicant.
- Permit shall be displayed at the work site.
- Applicant shall ensure that the control measures stated in the Permit/HIRA/JSA are continuously maintained throughout the execution of the job.
- Permit shall remain valid for the duration of maximum one shift.

7.3 Types of Permit to Work

In the Permit to Work System tasks are allocated to one of the following categories:

7.3.1 General Work Permit: Where the work involved is non routine and perceived to be of low risk as per HIRA/JSA conducted, the general work permit shall be taken.

Refer SE-OMS-PTW-01

7.3.2 Hot Work Permit: This permit is used for tasks involving the use of a naked flame or ignition source or any activity which can cause spark including:

- Welding / flame cutting
- Electrical induction pre-heating / stress relieving
- Chipping
- Grinding

Refer SE-EHS-PTW-04

7.3.3 Electrical Work Permit: All work, whether routine or non-routine, that require isolation of electrical services or installation of new services, an electrical work permit shall be taken.

Electrical works must be carried out under the control of this permit as they stand for high-risk tasks. These tasks can be;

- Work on isolated / live electrical equipment.
- During Conductor tapping.
- Working near overhead/underground electrical line.
- Working on switch yard/transformer yard.
- Working on Solar Panels/Inverters
- Cleaning of Solar Panels

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Refer SE-EHS-PTW-02

7.3.4 Excavation Work Permit

The permit covers works listed below;

- Excavations
- Trenches
- An Excavation permit shall be used where any excavation is planned, at any site.

Refer SE-EHS-PTW-05

7.3.5 Work at Height Permit

Work at Height Permit shall be required for working at a height of 1.8 meters and above on a temporary structure or on a fixed structure

Refer SE-EHS-PTW-03

7.3.6 Confined space work permit

A Confined Space Permit shall be raised when it is necessary for personnel to enter confined spaces.

Confined space means any enclosed or partially enclosed space or trench having restricted access or egress, a potential for a hazardous atmosphere and which due to its nature may form a trap and become a life-threatening environment.

Such spaces are usually not designed or intended for human occupancy. They include large tanks, pits, holes, manholes, etc.

They also include any space in which dangerous contaminants can accumulate and ventilation is restricted e.g. excavations, trenches (normally deeper than 1.2 meters or 4 feet), sumps, draw pits and culverts and any other poorly ventilated areas

Refer SE-EHS-PTW-06

7.3.7 Lifting Work Permit

It is work permit issued for jobs involving use of mechanical load shifting equipment (and associated gear) to move, place or secure a load.

Refer SE-EHS-PTW-07

A HIRA must be completed and made available before carrying out any of the above works.

7.4 Job completion

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Upon job completion before cancellation of the PTW, the permit applicant shall make sure that

- All persons working with him have been withdrawn from the work site.
- All tools, gears, loose materials and rubbish have been removed.
- The work site left tidy and in safe working condition.
- On completion of the work, the Permit approver/Site in charge to certify completion prior to commencing testing of equipment.
- If equipment test is concluded successfully the equipment is deemed safe and ready to be normalized.
- All cancelled permits, HIRA attached, Isolation record, license shall be filed and kept as records.

7.5 Cancellation of Permit

A valid work permit shall be cancelled during the execution of the job if any of the below situations:

- Failure to adhere to any safety practices and requirements as per Skyfri or Clients/Customer safety standard requirements.
- Non commencement of the work for which permit is taken.
- Permit approver is not satisfied with the arrangement made regarding safety.
- In case of emergency.
- Adverse weather condition.

7.6 Permit Approver Authorization

- Permit issuers shall be formally authorized through a notification by the site in-charge/OMS Manager/Business Head/and communicated to all concerned.

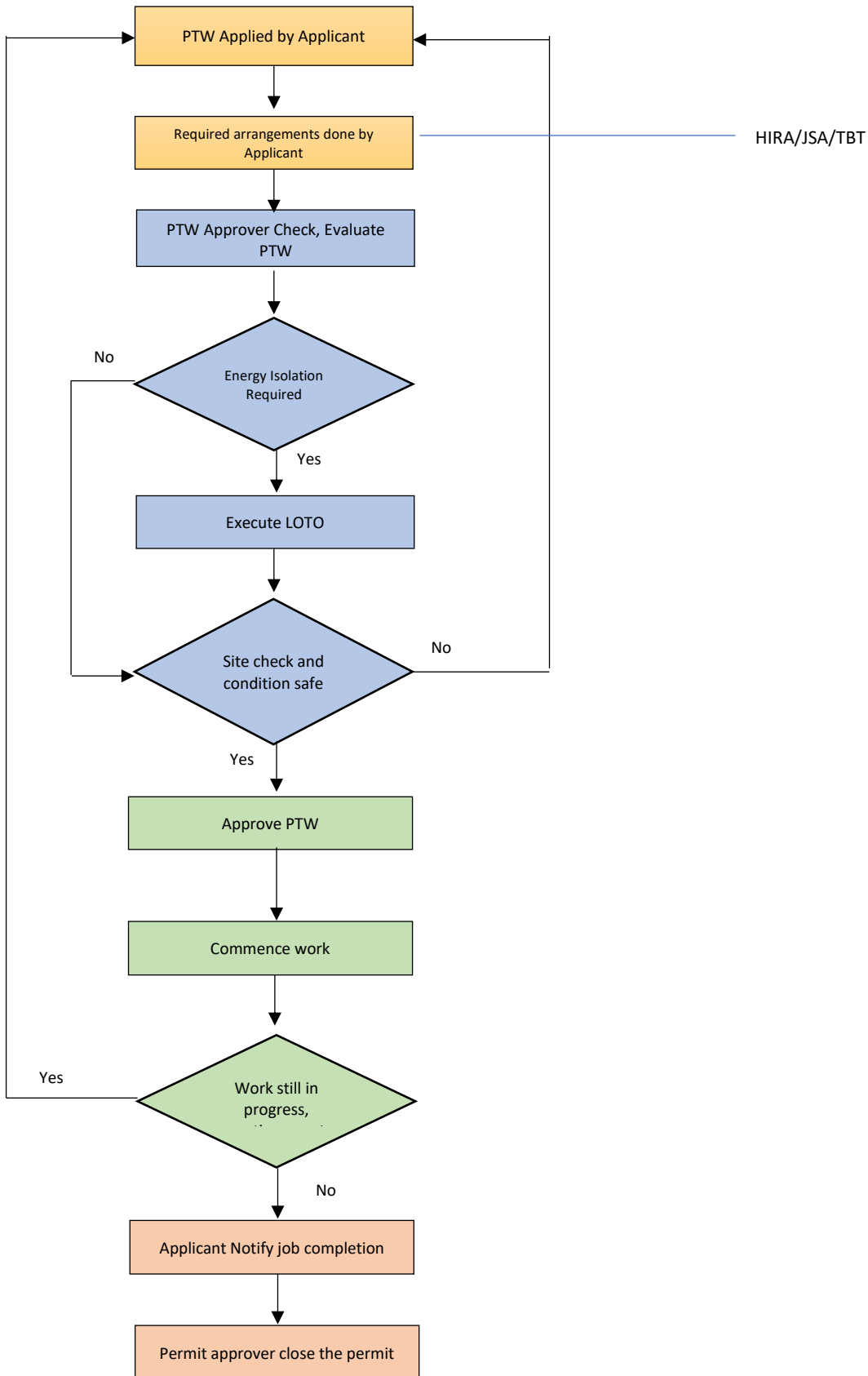
8. Record Keeping

Upon completion of job all permits shall be returned together with all attachment to Permit Approver for closure.


All closed permit to be filed in by Permit approver together with following record where applicable at least for 3 years.

- Toolbox Talk Record
- Isolation List
- HIRA/JSA where applicable

9. Permit-to-Work Flow chart



10. Records

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PTW Form

SE-OMS-PTW-01 – General Permit to work

SE-EHS-PTW-02 – Electrical work permit

SE-EHS-PTW-02A – LOTO Register

SE-EHS-PTW-03 – Work at Height permit

SE-EHS-PTW-04 – Hot work permit

SE-EHS-PTW-05 – Excavation work permit

SE-EHS-PTW-06 – Confined space work permit

SE-EHS-PTW-07 – Lifting work permit