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WESR Lockout Instruction Process

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1. Purpose

This add-on standardises the **format, content, review, validation and approval** of **Lockout Instructions (LI)** used under WESR. It ensures consistent, high-quality LIs that deliver a **clear Lockout Boundary**, step-by-step isolation, **zero-energy verification**, and safe restoration. Where this add-on is more stringent than baseline WESR, **this add-on prevails**. Stricter local law/site rules take precedence.

2. Governance & General Requirements

- **Use the WESR LI template** (see Section 10) or a locally translated version that preserves required fields and sequence.

- **Variations** are allowed for language/legal/customer needs provided required fields remain and intent is preserved.

- **Roles & independence:**
    - **Isolation Lead (IL)** develops or adapts the LI for the equipment/task.

    - **Isolation Verifier (IV)** performs an **independent four-eyes review** and **field validation** of the LI on an **operationally representative** unit. IL ≠ IV.

    - **Person in Charge of Electrical Installation (PCEI)** (or **D-PCEI** if delegated) **approves** the LI for site use and retains control of the installation during lockout/restore.

    - **PCWA** controls the work activity and ensures briefing/sign-on against the LI and associated Safety Documents.

- **Where a generic LI exists**, it may be used only when the equipment/options/variants match; otherwise create a **site-specific LI** using the template and review/approve per this process.

- **Storage & searchability:** LIs are kept in the site's controlled document system with standard naming (Annex A) and metadata to ensure they are easy to find by equipment/system.

3. Components of a Lockout Instruction (LI)

Each LI must contain, in order:

3.1 Header (Document Identification)

Left (Template/Repository info)
- **Template ID/Version** — reference to the WESR LI Template in use.
- **Document ID/Version** — site doc number & current issue.
- **Based-on (if applicable)** — ID of the source LI used as foundation.

Centre (Document Title)
- Format: `LI–<Equipment or System>–<Variant/Option>–<Boundary or Task>` (≤ 40 characters recommended).
Examples: `LI–Converter–Mk9–Boundary`, `LI–OTC Crane–Gate 3–Main Isolations`.

Right (Local Approval path)
- **Developed by:** initials/name (IL).
- **Reviewed by:** initials/name (IV).
- **Approved by:** name/role (PCEI or delegated approver).
- **Site Doc Name:** `<Site> – LI – <NNN>.<vv>` (e.g., `Horns Rev – LI – 005.00`).
- **Approval Date.**

3.2 Footer

- **Safety note:** “Use only the **latest approved** LI for this site. Verify validity before use.”
- **Page X of Y.**

3.3 Scope of the Lockout Instruction

- **Equipment:** exact type/variant/option set; add details that cannot fit in the title.
- **Prerequisite conditions:** states the **initial state** required for the LI to be valid (e.g., external generator status, turret/nacelle position, control voltage present/absent).
- **Lockout Boundary description:** the **physical de-energised area** the LI makes safe. This must be specific and checkable. For task-specific LIs, mark as **NOT APPLICABLE** and control by the task description.
- **Reference documents:** relevant drawings/schematics (single-lines, P&IDs, hydraulic), RAMS, procedures.
- **Comments:** concise guidance, notes, or pictures that aid correct execution.

Reviewer intent: Everything named inside the **Lockout Boundary** is to be verified **zero-energy** when the LI is established.

4. Purpose of LOTO (Task vs Boundary-Based)

- **Task-specific LI:** written for a defined job or set of jobs; includes **task description** and **locations** where work will occur; prerequisites and steps are tailored.

- **Boundary-based LI:** establishes a persistent Lockout Boundary allowing **multiple tasks** within that boundary; the PCWA confirms each task's locations fall **inside** the boundary.

- **Fields:** Task description; locations; (if applicable) service/work order ID; unit/asset ID. If not applicable, state **NOT APPLICABLE** (no prefilled IDs that could mislead).

5. Isolation Procedure (Structure & Content)

Rules: list the **isolation** and **restoration** as separate sequences. Each isolation point is a **separate step**.

For each isolation step include:
1) **Sequence number.**
2) **Isolation ID & description** — device unique ID and plain-language label.
3) **Location ID & description** — panel/cabinet/valve station/physical area.
4) **Energy type & magnitude** — e.g., `Electrical 480 VAC`, `Hydraulic 160 bar`, `Mechanical rotation`.
5) **Required position** — e.g., `LOCKED OPEN/CLOSED`, `LOCKED PINNED`, or **TAGGED** where locking is impossible (must be approved).
6) **Method to verify de-energisation** — e.g., **three-point test (test–measure–test)** for electrical; **visual no-rotation**; **pressure to safe level**, **no-start on command**.
7) **Location(s) for verification** — all points where zero-energy is to be confirmed.
8) **Method to dissipate stored energy** — e.g., discharge/bonding, bleed-down/venting, cooldown, gravity restraints; if none, record **N/A**.
9) **Isolation completed — initials/time** by the **Person in Charge of the LOTO** after lock applied and zero-energy verified.

After the last isolation block, include the line **"NO FURTHER ISOLATION STEPS."**

Reviewer field validation: check device identification/labels; feasibility of the position; that a **hasp/lock** can be applied; and that **position cannot change** while locked.

6. Person in Charge of LOTO — Establish/Transfer/Clear

- **LOTO Established by:** name/company at start; **signature & time** once Lockout Boundary is verified zero-energy.

- **LOTO Transfer:** when responsibility changes, record transfer entries (name, company, date/time, signature).

- **Clearing the LOTO:** upon completion, record **signature/name/company/date/time** confirming removal of locks/tags and safe condition.

Verification tip: for electrical boundaries, in addition to an approved tester, a **non-contact voltage indicator** may assist boundary checks (does not replace the required method).

7. Partial Re-Energisation for Testing

Use only where required for **diagnostics/testing**. Controls: - Identify exactly **which isolations** will be restored and for **what purpose** (reference a **TEP/SfT** where primary precautions vary).
- **Clear personnel**, remove **personal locks** from affected points, establish barriers/supervision, and confirm communications.
- After test, **re-isolate**, **dissipate energy**, **verify zero-energy**, and **re-apply locks/tags** before resuming work.
- Record each partial removal/re-application with **isolation ID, name/initials, date/time**.

8. Restoration Procedure

- Provide a **step-by-step restoration sequence** that references the **same isolation IDs** as the isolation procedure (often a **different order**).

- For each step: **Isolation ID**, **restore position** (e.g., CLOSED/OPEN/UNPINNED), and **restoration completed** (initials/time).

- Before restoring each point, the Person in Charge of the LOTO confirms **it is safe** to re-energise (people clear, tools removed, guards in place, temporary devices removed or accounted for).

9. Review, Validation & Site Approval

- **Reviewer competence:** Only personnel competent for the equipment/energy type (as **IV**) may review and field-validate LIs.
- **Field validation:** The IV validates the LI **on an operationally representative unit** following the steps, including verification and stored-energy controls; capture photos of locks/tags and device IDs.
- **Defects & improvements:** Document deviations/suggestions within the review pack; resolve before site approval.
- **Approval: PCEI** (or delegated approver) issues the approval for **site use**; approval metadata and effective date recorded in the header.
- **Records:** retain the **review pack** (comments, photos, revisions) with the controlled LI for traceability; the **approved LI** is a clean document without tracked changes.

10. Template & Document Control

- Use **WESR Lockout Instruction Template (LI-HE-001)** or local translation that preserves sequence/fields.
- All LIs stored in the site's controlled repository with **standard naming** (Annex A).
- **Supersession:** issue number, effective date, and change note in **Version History** (Annex E).
- **Linkage:** Cross-reference associated forms: **ILOR (Isolation & Lockout Record)**, **GLSS (Group Lock Sign-On Sheet)**, **RISK-W**, **TEP**, and relevant **PTW/SfT**.

Annexes

Annex A — Naming & Metadata Standard

- **Title:** `LI-<Equipment/System>-<Variant/Option>-<Boundary|Task>`
- **Site Doc Name:** `<Site> – LI – <NNN>.<vv>` (e.g., `Alpha – LI – 012.03`).

- **Tags/Metadata:** equipment family, location, energy types, revision, language.

Annex B — Examples (Illustrative)

- `LI-Converter-Mk9-Boundary`
- `LI-Yaw System-MkX-Task: Gearbox Exchange`
- `LI-OTC Crane-Gate 3-Main Isolations`

Annex C — Reviewer (IV) Checklist

- Device IDs unique & visible; locations clear.
- Isolation positions feasible; hasp/lock fit; position secure under lock.
- Verification method suitable (e.g., **three-point test** for electrical); verification **locations complete**.
- Stored-energy method safe and effective; residual hazards controlled.
- **Lockout Boundary** description comprehensive and testable.
- Photos of each applied lock/tag and device ID captured.
- **"NO FURTHER ISOLATION STEPS"** present after last step.
- Restoration sequence present; isolation IDs match.
- Transfer/clear fields included.
- Document is clear for an **Instructed** person following PCWA briefing.

Annex D — Roles RACI (Summary)

- **Develop LI:** IL (R), IV (C), PCEI (A), PCWA (C), PREI (I).
- **Review & field-validate:** IV (R), IL (C), PCEI (A), PCWA (I).
- **Approve for site use:** PCEI (A), D-PCEI (R if delegated), PREI (I).
- **Use during work:** PCWA (R for team control), IL (R for LOTO execution), LU (R for own lock), IV (C), PCEI (I).

- **Update/supersede LI:** IL (R), IV (C), PCEI (A), PREI (I).

Annex E — Version History (Template)

Version	Date	Description of Changes
v1.0.0	TBD	Initial issue WESR