Action Item 0.8 2.13, 2.14 & 2.15

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Technical Leader III

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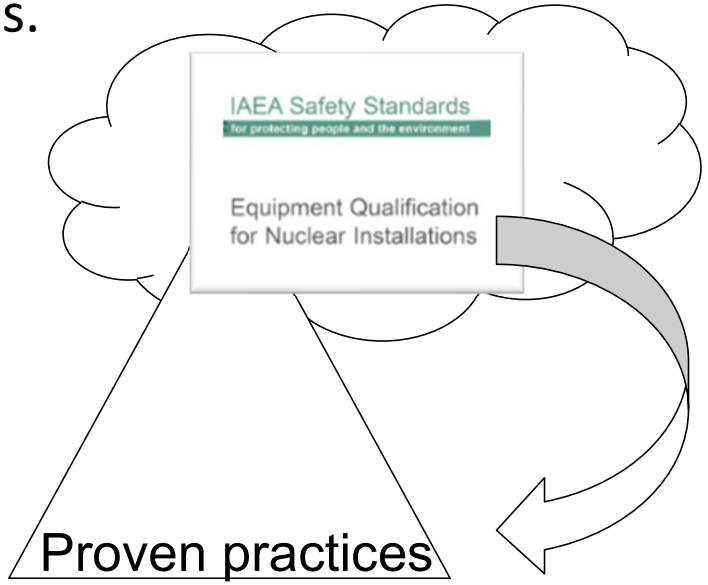
EQ survey

- Action item under IGALL to merge AMP221 / TLAA201, aligned with the SSG-69 structure
- Decision: conduct an international survey on EQ program implementation across multiple countries.



-Identify good practices

-Provide detailed guidance

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Main topics in the Survey.

- Scope of EQ
  - What utilities consider to be within EQ scope
  - Types of equipment included (electrical, I&C, mechanical interfaces, etc.)
  - Applicable standards and regulatory frameworks
  - National differences and regulatory expectations
- Program implementation
  - How EQ is applied and governed? How is qualification preserved and maintained over time?
- Program interfaces
  - Interaction with other plant programs (AMPs, maintenance, obsolescence, procurement)
- Commercial Grade Dedication (CGD)
  - Use of CGD in EQ context

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Current Status and due dates

- 2026-04-30 due date for survey reception
- 2026-05-15 2Q prepare a set of question asking additional information if applicable. The additional information request will be sent by Mr Petofi.
- 2026-05-30 due date for additional information reception.
- 2026-09-30 review of consolidated Draft.
- 2026-10 2nd IGALL meeting final discussion and draft for review of WG2.

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Action Item 2.28

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Action Item

- Consider replacing EQ/non-EQ information in the system column with system names or a uniform reference (e.g. “all”) in the AMR table.
- Decided actions:
  - Keep Env Qualified/non Env Qual.
  - Instead, the equipment specific AMP will be added to the EQ related document in column “AMP

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Table No.	IGALL No.	System	Struct...	Critical locati...	Mater...	Envir...	Ageing effect/degradation mechanism	Ageing mana... progr... (AMP)	Time limited ageing analy... (TLAA)	Design
201	13	Components environmentally qualified	Motor (AC)	Connection, wire	Polymer	Adverse localized environment	Reduced insulation resistance due to Radiolysis	AMP221 Equipment Qualification Preservation and Reas...per	TLAA201 Equipment Qualification of Electrical and I&C Equipment	PWR; CANDU/PHWR BWR

Skrip → entry template

AMP 214 ELECTRICAL INSULATION OF ROTATING ELECTRICAL MACHINES AND ACTUATORS (VERSION 2025)

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Action Item 2.21

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Action Item

- Analyse ageing effects and degradation mechanisms of polymers for components other than cables (e.g. splices and motors), check definitions in the Dynamic Register and crosscheck with WG1 and WG3 material definitions What utilities consider to be within EQ scope
  - Chose component
  - Check in IGALL Data Base

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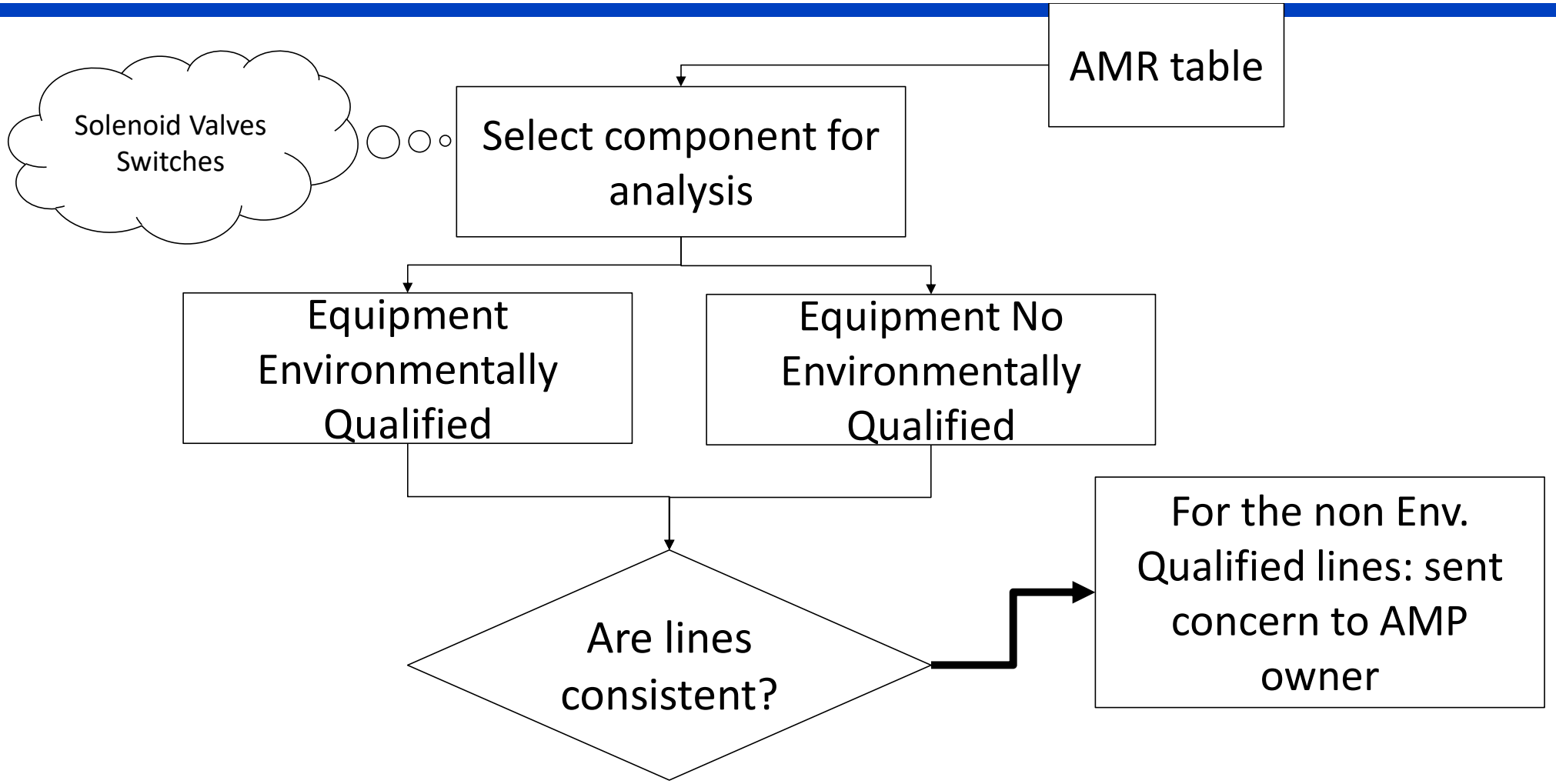

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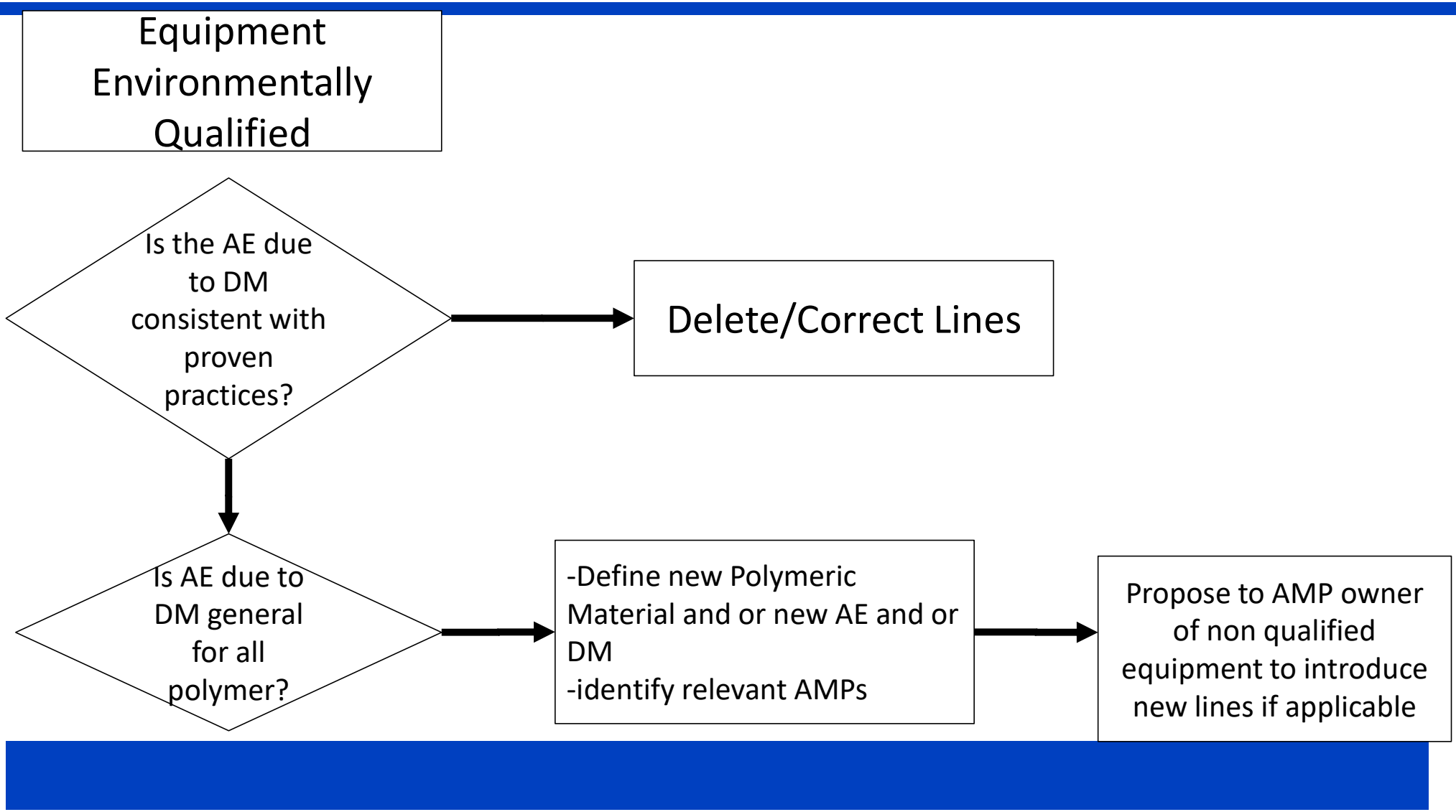

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Action Item 0.8

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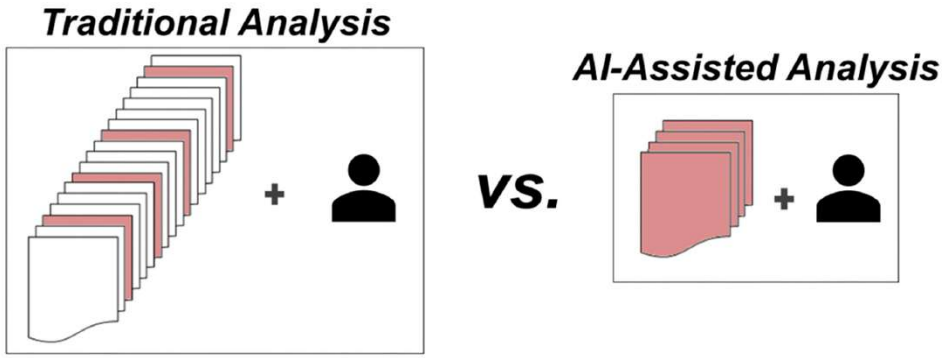
Use of AI for tracking and trending AM-related issues (NDT)

- NUREG/CR-7295 Human Factors in Nondestructive Examination discusses two examples where flaws have been missed in examination.

- The AI tool analyzes the entire data volume and flags suspicious regions for review by the human analyst, who makes the final determination about flagged conditions. Use of AI to do the initial analysis increases reliability by reducing the potential for human errors



USA AI Tool Developed by EPRI Significantly Cuts Analysis Time.

Vattenfall Implements First-Ever Qualified AI/ML Ultrasonic Inspection

AI-Assisted Analysis of Reactor Vessel Upper Head Penetration Ultrasonic Inspections

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Other research

- 3002030935 Large language models (LLMs) Good Practice Guide for Setting Up Large Language Models summarizes best practices for LLM projects, targeting project managers and IT/OT staff. It outlines a four-step iterative workflow and illustrates the approach through a practical use case.

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- Common Condition-Based Maintenance (CBM) Analysis Platform Demonstration Existing plant historian systems can be leveraged to assist in applying condition-based maintenance principles to proactively monitor and diagnose equipment issues, enhancing plant reliability with minimal additional investment. It highlights the capabilities of historian software in **developing a dynamic dashboard** for component health monitoring using rules-based methods.

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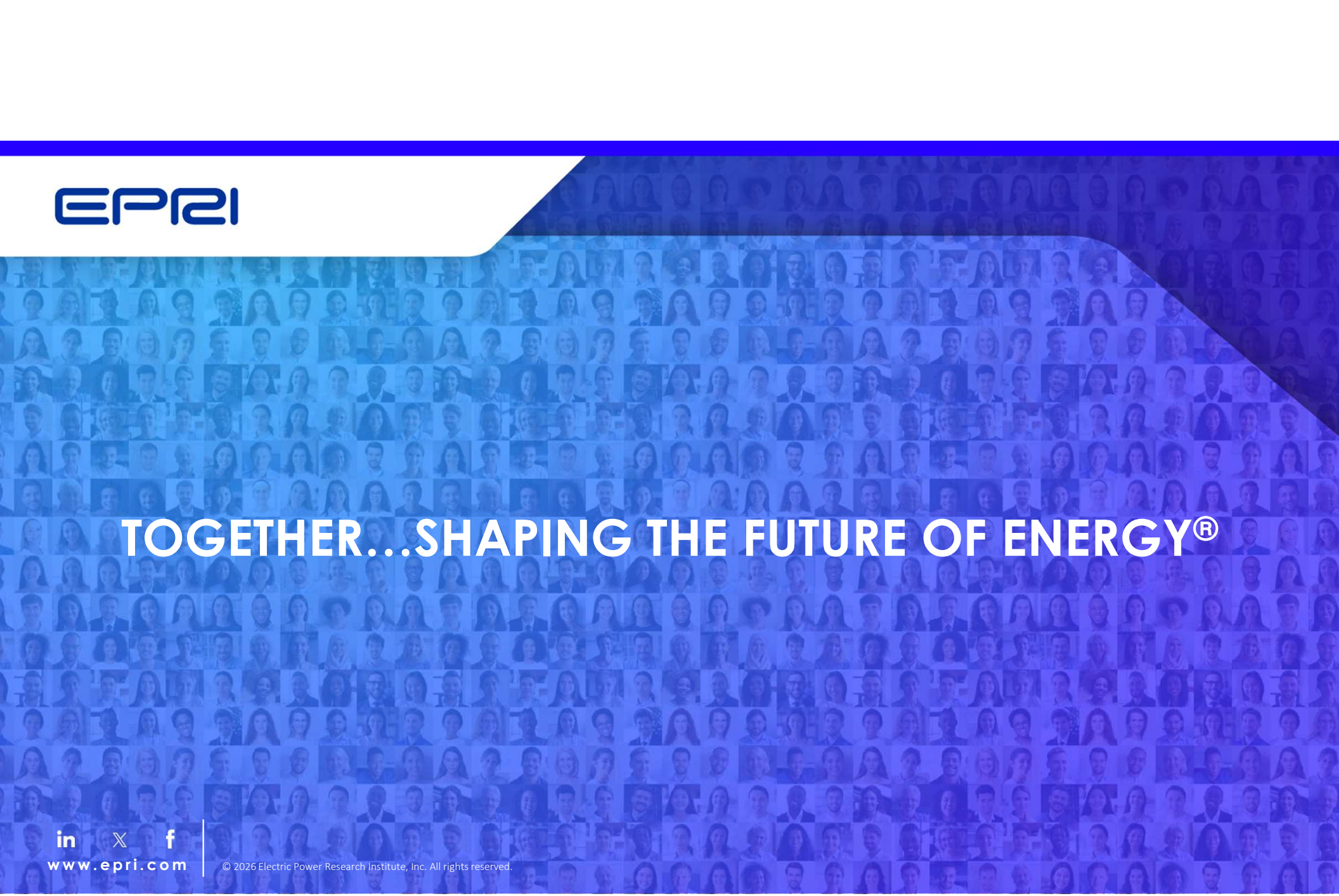

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