TOTAL GROUP

SAFETY & EQUIPMENT GUIDE

Utilities & Power PPE: How to Build a Field and Electrical-Ready Core

Practical equipment guidance for industrial teams.

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General information only. Confirm site-specific equipment decisions, applicable requirements, and manufacturer instructions before purchase or use.

Utilities and power teams need more than a long PPE list. A useful program starts with the equipment that supports recurring field work, then separates specialized electrical and life-safety equipment for review against the actual job. That approach helps procurement teams stock a dependable core without implying that one kit fits every line crew, substation task, outage response, or contractor scope.

For most field operations, the core conversation includes head and eye protection, work footwear, general hand protection, flame- or heat-resistant workwear, visibility, and the accessories that help workers inspect, store, and care for their equipment. Work involving energized exposure, climbing, live-line activity, arc-flash hazards, confined spaces, or rescue needs a different conversation. The qualified role, voltage or exposure assessment, written job plan, and work conditions matter before specialist equipment is selected.

This is a practical purchasing guide, not a substitute for a worksite hazard assessment, training, inspection program, engineering controls, or emergency planning.

Key Takeaways

- Build the visible inventory around recurring field needs, not around every possible utility task.
- Keep voltage-rated insulating equipment, arc-flash systems, live-line tools, climbing, and rescue equipment behind a task-specific review.
- Treat PPE as one part of hazard control; it does not replace isolation, barriers, planning, training, or other controls.

- Confirm intended use, worker role, inspection needs, and compatibility before adding specialized items to an issue list.

1 1. Start with the work, not the catalogue

The quickest way to overbuy, underprepare, or create confusion is to begin with a catalogue and work backward. Start instead with the jobs your crews actually perform. A utility organization may have field crews, meter technicians, substation personnel, vegetation-management contractors, warehouse staff, inspection teams, and emergency response support. Their conditions can overlap, but their exposures are not automatically the same.

A job-based discussion helps distinguish routine field needs from equipment that needs more information. For each work group, document where the work happens, whether workers are near mobile equipment or public traffic, the weather and terrain, the tools in use, the potential energy sources, and whether the task includes work at height, enclosed spaces, or known chemical exposures. Then ask what controls are already built into the work: isolation, guarding, barriers, work procedures, traffic controls, ventilation, or access planning.

This ordering matters because PPE is not the sole control. OSHA's general PPE guidance places selection within a hazard assessment process, and the broader hierarchy of controls puts elimination, substitution, engineering, and administrative controls ahead of PPE. OSHA's personal protective equipment guidance and the CCOHS hierarchy of controls both support a hazard-based approach rather than a one-size-fits-all equipment list.

For purchasing, use a two-part map: a field core for common work and a controlled specialist list released only when the job, trained role, exposure, and work plan support it. This makes it easier to explain why an item is available and who should review the choice.

2 2. Build a dependable field core for recurring work

A utilities field core should focus on categories that recur across normal outdoor and worksite activity. The research supporting this collection identifies head, eye, and basic impact protection; protective work footwear; general hand protection; flame- or heat-resistant workwear; visibility and field apparel; plus inspection, care, and storage accessories as primary categories. These categories are a starting point, not a universal issue list.

Head and eye protection deserve early attention because they are common elements of utility worksite PPE. OSHA's Electric Power eTool on personal protective equipment identifies basic industry PPE while making clear that other protections, including fall and respiratory protection, depend on the hazard and task. For procurement, that supports a manageable field offering and task review for specialist add-ons.

Workwear is another area where clear language helps. A field core can include flame- or heat-resistant workwear where the organization's work assessment calls for it, along with apparel that supports visibility and weather conditions. It should not turn into a blanket statement that every garment is appropriate for every electrical task or exposure. Separate the everyday workwear conversation from an arc-flash assessment and from the selection of electrical insulating equipment.

The Utilities & Power — Field & Electrical-Ready Core collection is organized around that distinction. It can be used as a browse point for recurring field categories, while specialized equipment is reviewed as part of a defined task and work system.

When a product example is useful during an internal discussion, keep it tied to the category rather than treating it as a recommendation for every crew. Examples in the collection include the Pioneer 331 shirt, Dynamic Safety Curve glasses, a Dynamic Safety two-point chin-strap pack, and the JB Goodhue

work boot listing. They are examples only; suitability, intended use, fit, and compatibility with the worker's assigned equipment must be confirmed before issue or use.

3 3. Put electrical insulating equipment behind a task gate

Electrical insulating protective equipment should not sit in the same default buying path as general work gloves or ordinary field apparel. OSHA treats this equipment as part of qualified electrical work, with attention to voltage rating, inspection, testing, storage, and the conditions of use. Its Insulating Protective Equipment guidance also addresses voltage-rated gloves, sleeves, protectors, blankets, covers, and line hose in that context.

That distinction has practical implications for a buyer. Before sourcing electrical insulating equipment, bring together the qualified worker or electrical lead, the work owner, and the person responsible for the hazard review. Confirm the type of task, the electrical exposure, the equipment already in the work system, the inspection and storage process, and the training or authorization expected for the role. A purchase request without those details may not give the reviewer enough information to select the right equipment or maintain it properly.

Use the same gate for live-line tools, insulated access equipment, testers, barriers, covers, lockout/tagout equipment, and verification tools. These products may be part of a well-planned job, but they are not interchangeable with one another and should not be presented as a complete energized-work package. The same applies to leather protectors and sleeves: they belong in a specific electrical protective system, not a general-purpose glove order.

A controlled request form can capture the crew and role, task, exposure information, existing equipment, inspection status, and approving reviewer. It keeps the selection tied to the work instead of to a product description.

4 4. Keep arc-flash decisions separate from everyday workwear

Flame-resistant workwear and arc-flash PPE are related topics, but they should not be treated as the same purchasing decision. The collection research identifies flame- or heat-resistant workwear as part of the core field conversation, while arc-flash systems remain conditional. That division reflects the fact that arc-flash selection depends on the work and the assessment method used.

CCOHS explains that arc-flash PPE selection is based on an incident-energy analysis or a PPE-category method. Its arc-flash guidance also frames arc flash as a hazard that needs evaluation and control, not simply apparel selection. In plain terms, a buyer should not infer an arc-flash application from a garment name or a general product category.

For an operations or HSE leader, the useful questions are operational. Has the task been assessed? Is work de-energized where possible? Is the assigned role defined? Are other controls, inspection, and replacement part of the plan? Those questions belong ahead of a purchasing decision.

Putting those questions ahead of a purchasing decision protects both crews and the integrity of your program. It also prevents an ordinary workwear order from being described as a complete electrical protection solution. Where a field garment is being considered, verify its intended use against the employer's assessment and the applicable product information. Where arc-flash PPE is under review, keep the documented assessment, role, and job plan with the selection record.

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5 5. Treat inspection, care, and readiness as purchasing categories

For utilities and power work, inspection, care, storage, and replacement planning belong in the same conversation as the original purchase. This is especially important where equipment has electrical protective, climbing, fall, rescue, or other life-safety functions.

OSHA's electrical insulating equipment guidance specifically connects use with inspection, testing, and storage considerations. For procurement, an item may need a place in the program beyond the purchase order. Teams should know who receives it, where it is stored, how damage is reported, who removes it from service when needed, and how replacements are authorized. The details should match the equipment type and the organization's procedures.

For routine field PPE, a practical system may be as simple as a fit and issue record, clear storage locations, supervisor checks, and a way for workers to raise a concern. For specialist equipment, the process may need more defined controls, such as assigned ownership, inspection records, storage conditions, and trained reviewers. Do not assume that one process works for every item.

The same planning applies to seasonal and mobile-worksite needs. Weather, terrain, work near traffic, remote locations, vegetation management, and vehicle access can change the field PPE mix. They can also change how equipment is carried, protected, and replaced. Review these conditions before adding items to a standard issue list, and revisit them when the work scope changes.

A good purchasing framework therefore has two outcomes: crews can access the categories they use regularly, and specialist equipment stays connected to the work plan that justifies it. That balance is more useful than a large default kit because it supports disciplined decisions across field, electrical, and emergency work.

6 Frequently Asked Questions

6.1 What PPE categories belong in a utilities field core?

The research for this collection identifies head, eye, and basic impact protection; work footwear; general hand protection; flame- or heat-resistant workwear; visibility and field-work apparel; and inspection, care, and storage accessories as primary categories. The exact issue list should still reflect the crew's tasks, the worksite, and the organization's hazard assessment.

6.2 Are voltage-rated gloves and arc-flash PPE standard field items?

Not by default. OSHA treats insulating protective equipment as qualified-work, voltage-rating, inspection, testing, storage, and use dependent. CCOHS explains that arc-flash PPE selection depends on an incident-energy analysis or a PPE-category method. Review both categories against the defined work, trained role, and job plan rather than adding them to a general field order.

6.3 Can a product page confirm suitability for a utility task?

A product page can help identify an available item and its manufacturer information, but it does not replace the task review. Confirm intended use, fit, inspection requirements, compatibility with the rest of the equipment system, and the worker's role before the item is issued or used. Product selection should support the work plan, not stand in for it.

Discuss your requirements

If you are building or refreshing a utilities PPE program, Total Group can help you organize a field core around your crews' work and identify the information needed before specialist categories are reviewed. Bring your task descriptions, current issue list, and site considerations to the discussion so the next steps stay practical and grounded in the work.

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7 References

- OSHA: Electric Power eTool — Personal Protective Equipment
- OSHA: Electric Power eTool — Insulating Protective Equipment
- Canadian Centre for Occupational Health and Safety: Arc Flash
- OSHA: Personal Protective Equipment
- Canadian Centre for Occupational Health and Safety: Hierarchy of Controls

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