



COMPANION ADDENDUM

The presence of capacity

Anchoring Human and Organisational Performance in PowerNet's delivered outcomes

A companion note to the FY26 case briefing that develops how HOP theory aligns with PowerNet's delivered results.

Client	PowerNet (New Zealand electricity distribution sector)
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Why this companion note

The companion briefing and an internal review confirm that PowerNet's deployment aligns with Human and Organisational Performance (HOP) theory. This short paper maps the principles to the outcomes PowerNet is delivering and does two things. First, it develops the HOP argument itself, because the alignment is more than a checklist match: it goes to how HOP frames and explains what safety is. Second, it anchors that argument in PowerNet's delivered outcomes, so the theory is evidenced by results.

The central claim is simple to state and consequential in practice. PowerNet has not run HOP as a programme. It has built, over ten years with Risk Mentor, the operating system that HOP theory describes, and the delivered outcomes are the proof that the system holds. The decade matters to the argument. Because the foundations were laid before much of Conklin's work reached its current, widely shared formulation, what reads as alignment with HOP is convergence, arrived at independently through field practice, rather than a framework adopted after the fact. HOP is best treated, in ExxonMobil's phrase, *"not as a program but as a group of strategies."* PowerNet's strategies are embedded in how work is planned, executed, observed and improved, and the evidence sits in production data, not in a binder. Implementing HOP practices is also a strategy cornerstone of the NZ Business Leaders Health and Safety Forum, of which PowerNet is a member, so the language will increasingly frame sector and board discussion.

Our understanding of the HOP approach

HOP, developed by Todd Conklin and now standard across high-hazard sectors including oil and gas, nuclear, aviation and electricity, rests on a single reframe. Safety is not the absence of error. Error is a normal feature of skilled human work, present in every competent operation every day. Safety is instead an emergent property of the wider system. As Conklin puts it, *"safety is the presence of capacity."* A safe operation is not one in which nothing goes wrong. It is one built with enough capacity to absorb the things that inevitably do.

This reframe is often described as the move from the Old View to the New View, and it parallels the shift from Safety-I, which counts and tries to eliminate failures, to Safety-II, which studies why work usually succeeds and builds more of that. The practical consequence is a change in where leaders look. The Old View looks down at the sharp end and asks who erred. The New View looks across the system and asks what conditions made the error likely, and what capacity would have caught it. The five principles below follow directly from that reframe, and each is anchored in something PowerNet has actually delivered.

Table 1 – The five HOP principles, developed and anchored in PowerNet’s delivered outcomes.

HOP principle	HOP theory explained	Anchored in PowerNet’s delivered outcome
Error is normal	People will err regardless of care, motivation or competence. Systems must be built to tolerate error, not to assume its absence. Designing for “be careful” is designing for failure.	Control application is built into Field Portal workflows as hold points, triggers and step-by-step prompts. Independent verification and minimum-approach-distance checks are designed in, not left to memory. As frontline personnel took up the workflows and made them part of how they work, injuries reduced, the outcome of error-tolerant design and of skilled people applying their professionalism within it, not of anyone simply being told to be more careful.
Blame fixes nothing	Human error is a symptom of system conditions, not a root cause. Asking “who” stops learning. Asking “how” and “why” surfaces the conditions that can be redesigned.	Drift reporting and the nudge, inform, escalate sequence are built to surface conditions, not individuals. The 2017 control validation applied the “if I am the person who can be harmed” test with 120-plus frontline staff, placing the workforce on the side of the system rather than as its target.
Learning is vital	A capable system learns continuously, from work that succeeds as much as from work that fails, closing the loop between work-as-done and work-as-planned.	After Action Review is a step inside the workflow, not a bolt-on. More than 3 million work-as-done data points have been catalogued. Cross-team learning and a quarterly Sustainability Group keep the loop turning, and ISO 45001 is maintained.
Context drives behaviour	Decisions that look wrong afterwards usually made sense in the moment, given the conditions. Design for the actual operating environment, not an idealised one.	Workflows are co-designed with field staff and configured for EDB realities: storm response, off-road travel, helicopters and live-line work. The Configured Digital Systems Model links 52 standards, 171 procedures, 24 manuals and guidelines, 16 plans and more than 1,500 external sector requirements to Field Portal workflows, so the operating context reaches the point of work rather than sitting in disconnected repositories.

HOP principle	HOP theory explained	Anchored in PowerNet's delivered outcome
How we respond matters	The capacity-building or capacity-destroying signal is sent by how leaders respond to events and to weak signals of drift. Response, not policy, sets the real culture.	The response is continuous, not occasional. Supervisor and manager dashboards turn the field data into drift signals and performance views, each one anchored on what actually happened in the work, and the nudge, inform, escalate sequence routes them to the right person many times every week. Response runs at every level: field staff hold real agency and are leaders in their own right, so how they act at the point of work shapes the culture as much as any senior decision, while senior leaders extend assurance over the same data.

The five principles set the philosophy. A set of supporting concepts turns the philosophy into design, and these too are present, in substance, in the deployment. They are now mainstream international practice, which matters because it means PowerNet's system speaks the language sector peers and regulators are moving towards.

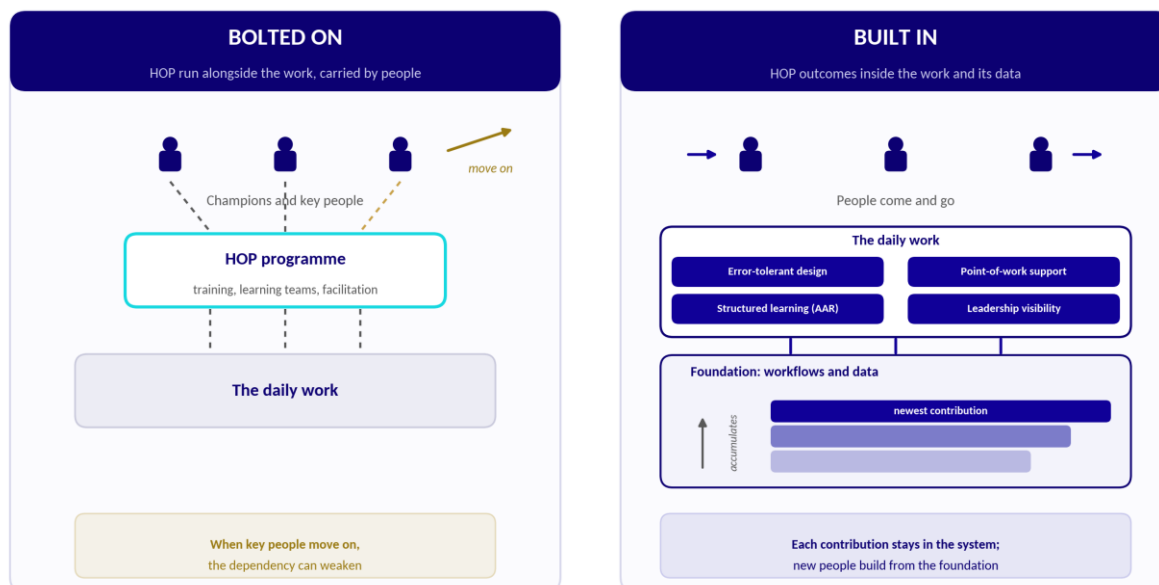
Table 2 – HOP supporting concepts, developed and anchored in PowerNet's delivered approach.

HOP supporting concept	What it adds	Anchored in PowerNet's delivered approach
New View, not Old View	Move from "people are the problem" to "people are the solution." Treat field staff as the primary source of insight about how the system really behaves.	Field staff co-designed the workflows and validated the controls, and continue to shape updates. The Field Portal is built around the frontline decision point, not the auditor's checklist.
Error-Prone Situations	Predict and design out the task, environmental and individual conditions in which error is most likely, rather than reacting after the fact.	Bow-tie failure-mode analyses for each of the 13 critical risks identify credible failure pathways, and workflow design positions interrupters and verifications where error is most likely. A standing Error-Prone Situation review rotating through the critical risks is being implemented.

HOP supporting concept	What it adds	Anchored in PowerNet's delivered approach
Safety-critical task analysis and independent verification	For tasks that must be right every time, identify the critical steps and require an independent check at those steps.	25-plus production workflows covering electrical isolation, minimum approach distances, working at heights, lifting, tree work and hazardous energies include explicit critical-step verifications.
After Action Review	A short, structured comparison of work-as-done with work-as-planned, immediately after higher-risk tasks, to capture what to improve.	Built into the workflow at supervisor and team-lead level, it runs immediately after the task and generates contextual data that feeds the governance and performance reporting platforms.
Work-as-done versus work-as-planned	The gap between the procedure and the reality is where both risk and learning live. A capable system makes the gap continuously visible.	Work as documented and work as done are linked directly through Field Portal workflows. Each task planning and execution log records the texture of the work: who was involved, the steps assigned to each person, training currency, plant and isolation control logs, location and timing, site conditions, and in-task changes such as a step re-routed on a diagnostic result. Across tens of thousands of logs this is more than 3 million structured data points, a continuous view of the gap rather than one reconstructed after an event.
Easier to get right, harder to get wrong	The design aspiration is to shift reliance away from procedural compliance and onto the work environment itself.	The reduction in injuries as field teams adopted the workflows is the operational signature of this design philosophy. The regulatory "decluttering" of compliance burden in the 2026 HSWA amendments is the same idea expressed in statutory language, and PowerNet is already where that direction is heading.

Built in, not bolted on

Figure 1 – Two routes to HOP outcomes: bolted on, or built in.



There are two honest routes to a high-capacity operation. One is to adopt HOP deliberately, as many capable organisations have, investing in training, learning teams, facilitation and a sustained change effort. That work is real, and the organisations that have done it deserve respect for the commitment it takes.

The other route is to build the same outcomes into the operating platform itself, so that error-tolerant design, point-of-work decision support, structured learning and leadership visibility are simply how the work is done. PowerNet’s deployment is the second route, and the distinctive value of the RM platforms is that they build the capacity in rather than requiring it to be carried by a programme running alongside the work. Both are legitimate roads to the same destination; what differs is what carries the capacity once the initial effort is over.

PowerNet did not set out to implement HOP. Working with Risk Mentor, it set out to answer two practical questions: what frontline staff need to make reliably good decisions, and how to detect and correct drift before something goes wrong. Designing the platform around those questions produced, in substance, what HOP describes. Because the foundations were laid before HOP entered mainstream sector vocabulary, the result is convergence rather than adoption, the same destination reached by a different road.

The clearest sign that the capacity is built in, not bolted on, is the way it accumulates. Over the decade Risk Mentor has supported PowerNet, the people in the roles that usually carry a safety effort, across operations, health and safety, human resources and the field, have changed and been renewed many times over. In a model that depends on champions and the energy of particular leaders, that movement is where gains tend to stall or quietly unwind. Here it has done the opposite. Each person's contribution is built into the workflows, the data and the way work is planned and executed, so it stays in the system when they move on, and those who arrive next build from that foundation rather than starting again. Capacity here is cumulative, holding what has been learned and compounding it. That is itself a HOP claim: capacity is a property of the system, not of the individuals who hold the roles in any given year.

Capacity is measurable: reading the outcomes as HOP evidence

Read through the HOP lens, PowerNet's outcomes are something more specific than safety statistics: the operational signature of capacity. Three points draw that out.

- **Capacity shows up first in serious-harm prevention.** The system concentrates on the small set of critical risks that can kill or seriously injure, and capacity is the ability to keep those risks controlled every time the work is done. As frontline personnel took up the workflows and made them part of their craft, injuries reduced, evidence that the professionals doing the work, supported by an error-tolerant system, are the ones who deliver the outcome. That is also exactly where the 2026 critical-risk focus in HSWA sections 22A and 25B points.
- **The data asset is capacity made visible.** More than 3 million work-as-done data points mean the organisation can actually see how work behaves, which is the precondition for the New View. Because the business systems the work draws on, from training records to fleet details and contractor prequalification, are reconciled to agreed points of truth, that view rests on one trusted picture rather than several competing ones. Most operations cannot answer the question "what does work-as-done look like here?" with data. PowerNet can, and does so continuously.
- **The self-found dashboard gap is the purest demonstration.** A capable system surfaces its own weak signals and acts on them before an incident or an external auditor forces the issue. The April 2026 finding was identified internally, the underlying data was already structured, and the response fixed the right thing in the right way. That is "how we respond matters" delivered, not described.

Why this anchoring matters for governance

HOP is the operating philosophy that joins three things PowerNet’s officers already carry. The legal duties under HSWA section 36 and section 44, and the new sections 22A and 25B. The IoD and WorkSafe governance principles, particularly “Learn and develop” and “Trust and verify.” And the Gibson requirement for entrenched systemic processes and personal knowledge of work-as-done. Each of these, stated in capacity language, is a HOP claim. The Gibson principle that policies and procedures alone are insufficient, and that entrenched systemic processes are required, is a HOP claim in legal language.

The practical implication for the board is that PowerNet can evidence capacity, not merely compliance, and capacity is the harder and more defensible thing to demonstrate. That makes the HOP alignment a due-diligence asset, not only a safety one.

There is also a forward point worth holding. A system rich enough in structured work-as-done data to demonstrate capacity is the same system that is ready to be leveraged for analytics and, in time, AI. The capacity that makes the operation safe is the capacity that makes it improvable. That is the throughline from this note to the leading-practice data and decision-making position set out in the main review: PowerNet has, quietly and over a decade, built the error-tolerant operating system that HOP theory describes, in substance before HOP named it, and the same foundation now positions it for what comes next.

About this note. This is a companion to the FY26 case briefing, From Built to Run By It. It develops Human and Organisational Performance theory and anchors it in PowerNet’s delivered outcomes. Figures are drawn from that briefing and PowerNet’s reported production results. Prepared by Risk Mentor New Zealand.