



Burlington Electric Department (BED)

Management and Business Process Audit

Final Audit Report

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1 Executive Summary

1.1 Purpose of the Audit

This report presents the findings and recommendations of the independent management and business process audit of Burlington Electric Department (BED) performed by ARC Business Solutions Inc. The audit was commissioned by the Vermont Department of Public Service (Department or DPS) pursuant to Vermont Public Utility Commission (Commission or PUC) Order of October 22, 2025, in the Commission Investigation Case No. 25-2607-INV.

The audit was commissioned following the Commission's letter of July 31, 2025 (in Case No. 25-1584-INV), which documented a persistent pattern of regulatory failures¹ across BED's dual functions as a Distribution Utility (DU) and Energy Efficiency Utility (EEU). The DPS responded on August 29, 2025, recommending a focused management audit of BED's key business practices.

1.2 Overall Conclusion

We performed an assessment across four compliance domains (A – Regulatory Quality Controls, B – Operational Management Controls, C – Financial Quality Controls, and D – Cross-Functional Management Systems), paired with a deeper root-cause synthesis anchored in Domain A. That synthesis resolves into six root causes across four categories — People, Process, Governance, and Culture — that recur across the domains rather than being confined to any one of them. Under People: single-person dependency and thin cross-training. Under Process: undocumented, inconsistently reviewed Standard Operating Procedures (SOPs) and the absence of a written internal regulatory filing authorization and DPS communication policy. Under Governance: regulatory functions that operate in silos not yet integrated into a single compliance management system, with DPS serving as the de facto backstop for error detection. Under Culture: a reactive posture that defers escalation and disclosure until problems surface externally. The clearest illustration is foundational: the Commission's March 2022 directives (Case No 21-1500-PET)² were never institutionalized under a named accountable owner. They were not implemented, and matters have continued to reach DPS and the Commission through similar gaps since. We found that BED has established baseline operations and active cross-functional coordination — most notably a newly instituted weekly regulatory working group — but continues to carry these systemic, historical gaps in documentation, independent verification, and policy enforcement. Management has taken real, credible steps over the past year, including a new Principal Counsel and Compliance Officer function, a GM/senior-management review layer, and a rebuilt REC process. However, several incidents occurred after those steps were put in place. This indicates the corrective actions are beneficial but not yet sufficient, addressing symptoms faster than they close the underlying People, Process, and Governance gaps that produced them. The applicable standard is not perfection: the appropriate standard is reliability proportionate to risk, with

¹ Refer to Appendix 12.1 for a full list of investigated dockets

² In March 2022, the Commission completed its overall performance assessment of BED as an EEU (Case No. 21-1500-PET) and issued five directives requiring: (1) robust pre-filing review processes; (2) compliance checks for Commission orders; (3) Quality controls for filing accuracy; (4) timely self-reporting of issues; and (5) all in place before the next demand resources plan proceeding.

particular rigor reserved for matters that reach the Commission, carry an external compliance obligation, or have a substantive impact on ratepayers.

1.3 Summary of Key Findings

- BED has had significant historical issues, and as a result of the action taken by the PUC has begun some remediation activities, including some undertaken during this audit. The initiation of these activities is the simple step, as the need for sufficient remediation will require a significant change in culture and management discipline.
- Root causes are in people, process, governance and culture.
- BED's regulatory errors have been identified externally in the past, by the Department of Public Service, the Commission, or affected customers, rather than caught by BED's own controls. The underlying gap is the absence of a consistent independent pre-filing quality-control (QC) review and periodic quality oversight.
- BED has relied too significantly on Department of Public Service (DPS) for quality control or early draft reviewer. DPS functions as a litigator, represents the public, and acts (informally) as support for the Utilities in matters where the DPS and the utility are aligned. At times this has had significant timing delays and it has created additional work for all. If BED was more efficient and effective there would be significant improvements, but the existing delays occurred on both BED and DPS sides.
- Systemic, historical gaps remain in documentation, independent verification, and policy enforcement across all four domains.
- Controls were weaker historically. After the engagement of the audit by the PUC and the audit initiation, BED has introduced new controls which include the weekly regulatory working group and the new regulatory docket log. Neither, though, functions as a full regulatory compliance management system.
- Accountability and responsibility for critical (regulatory) processes are not formally assigned or clearly defined.
- BED relies on several roles that are unique to a single person, with no trained backup. This creates exposure any time that individual is unavailable or departs, as demonstrated by the McNeil New England Power Pool Generation Information System (NEPOOL GIS) reporting failure. BED lacks a formal succession-planning strategy that identifies these at-risk roles in advance and prepares candidates to fill them. In response to this audit, BED has begun developing a handover template for departing staff and has taken ad hoc steps to manage specific departures as they occurred — real but reactive measures, not yet a proactive, organization-wide strategy.
- We acknowledge that BED has taken real, credited corrective steps; they need to take further steps to mitigate future risk and to close the gap between credited progress and proven reliability.

1.4 Six Root Causes

The root-cause synthesis resolves into six themes grouped under four categories:

Culture:

Behavioral patterns around disclosure, urgency, and risk tolerance

1. BED has a reactive culture with a deferred escalation on disclosure.

BED's external-facing relationships with regulators are genuinely a strength (the email review of 1,439 messages found consistently collegial, professional exchanges with DPS and the Commission, no hostile correspondence, and routine cooperation on joint drafting and problem-solving). The main issue is a specific, recurring behavioral pattern: a reactive posture that defers escalation and disclosure until problems surface externally rather than catching and reporting them internally. This shows up most visibly in the 24A-1346 sector misclassification, which wasn't proactively disclosed until it appeared in the annual report. That reactivity compounds with two other culture-adjacent patterns. First, chronic deadline compression. BED habitually files at the last hour and routinely sends DPS drafts one day ahead with "late notice" apologies, leaving no margin to absorb technical failures like ePUC (the electronic filing and case management system of the PUC) outages. Second, a "busy solo individual" ethos in which critical regulatory work concentrates on one person rather than a resourced team. One policy lead personally sent 30% of all reviewed correspondence and managed most investigated dockets and filings single-handedly across six years, which the audit identifies as the most plausible driver of both the compression pattern and the recurring documentation errors. What BED needs to improve is not the tone of its relationships but the discipline around them. That means a written disclosure and error-reporting policy with a defined reportable-event threshold and escalation timing, so disclosure isn't left to individual judgment under time pressure. It also means enough staffing depth and cross-training so that no single person is the deadline-compression point of failure, and planning margins built into filing timelines rather than relying on extensions and waivers as the relief valve.

People:

Gaps tied to staffing depth, succession, and individual reliance.

2. BED has had significant difficulty maintaining fully trained, backed-up resources and avoiding single-person dependency. This ties into a culture of the busy solo individual, rather than a well-functioning team.

The People category centers on a single, recurring problem: BED runs its most compliance-critical functions on individual reliance rather than resourced, cross-trained teams. The root-cause analysis attributes this to light staffing, budgetary constraints, a competitive labor market, and the absence of any internal regulatory legal staff, whether dedicated or semi-dedicated. These contributors produced difficulty maintaining fully trained, backed-up resources across the following cases: McNeil NEPOOL GIS, 24-1832-INV/25-0231-INV, and 23-1985-INV. This shows up concretely in Domain D. BED has multiple roles that are unique to a single person with no backup available (Finding D-1). Succession planning has been mostly reactive and triggered by unexpected departures rather than a documented strategy that identifies at-risk roles in advance (Finding D-2).

Staff without a utility background take six months to two years to become fully functional (Finding D-3) — meaning a departure creates an extended capability gap, not just a temporary one. The email analysis (section 12.4) independently corroborates this from a different angle. One BED policy lead personally sent 30% of all reviewed correspondence and managed most investigated dockets, deadlines, and filings single-handedly over six years. The audit identifies this as the most plausible driver of both the deadline-compression pattern and the recurring documentation errors. The audit frames people and process gaps as sharing a common trace-back: a light organization that has not yet had the maturity or capacity to document and cross-train at scale. What BED needs to improve is depth, not effort. That means mandatory cross-training tied to every compliance-critical role, and a hard priority on keeping compliance and legal positions filled. It also means formal organization-wide succession planning that identifies key roles at risk of vacancy before they turn over, building on the transition/succession memo template BED has already begun piloting for leadership roles. It also means structured stabilization and training plans for new hires so the six-month-to-two-year ramp-up doesn't leave critical functions exposed in the interim.

Process:

Missing or under-maintained policies, Standard Operating Procedures (SOPs), and approval thresholds.

3. There are critical policies, business processes and SOPs that are not well documented, maintained, or kept current. This is across all areas investigated under this audit.
4. There is an absence of a written policy establishing when an activity or customer offering requires Commission authorization, a tariff filing, or advance notice before BED commits to it, and when and how BED should engage the Department before filing.

The Process category resolves into two related themes, both stemming from the same underlying gap: BED governs its regulated activity through individual judgment rather than documented, mandatory procedure. The first is the absence of a written regulatory-authorization and Department-communication policy — BED has no documented standard for determining when an activity or customer offering requires advance Commission approval or a tariff filing. Its historical pattern in ambiguous gray areas was to proceed on its own interpretation rather than seek a binding determination up front, with the question then surfacing through external review instead. The audit calls this the largest and most significant gap in the record, evidenced by a three-incident pattern (24-0598-PET, 25-1390-INV, 25A-1387). It also notes the irony that BED's internal procurement policy already covers spending thresholds with exactly this kind of clarity — there is simply nothing equivalent for regulatory activities. The second theme is that critical SOPs are not well documented, maintained, or kept current, so recurring, time-sensitive filings aren't governed by procedures with mandatory independent review, leaving correctness dependent on individual diligence. This has moved beyond novel or complex filings into familiar, recurring ones. Examples include a withdrawn Miscellaneous Service Fees Tariff with a formula error caught by DPS ; SQRP reporting failures including unreviewed incorrect data submitted in a Commission-mandated performance report. A REC-reporting deep dive also surfaced unclear role assignments and gaps in critical steps. As with People, the audit ties this back to a light organization that hasn't had the capacity to document and cross-train at scale — process gaps and people gaps share the same root. What BED needs to improve is turning tribal knowledge into governed procedure: a written

regulatory-authorization policy with defined thresholds so ambiguous cases get resolved before launch rather than after the fact. It also means a current and complete policies-and-procedures inventory (Finding B-1) and documented SOPs for every recurring filing type with mandatory independent pre-filing review built in. This should apply not just to cost-of-service calculations, where a review step exists but hasn't been applied with enough rigor. Finally, it means a regulatory delegation-of-authority matrix paired with a RACI (Responsible, Accountable, Consulted, Informed) matrix.

Governance:

Structural gaps in oversight, escalation and internal detection, and an unclear path to accountability

5. BED suffers from regulatory/operations siloing: the initial components of a compliance management system exist but are not yet integrated.
6. Historically, BED has had a misplaced over-reliance on DPS as an external backstop for error detection.

The Governance category is about a missing integration layer, not missing components. BED has pieces of a regulatory compliance management system — the docket log, the weekly regulatory working group, the new senior review layer. However, the pieces haven't yet been assembled into a system that captures every Commission issuance, assigns a named accountable owner, and reports status to leadership on a reliable cycle. The clearest evidence is the foundational failure behind this whole audit: the Commission's March 2022 directives were never institutionalized under a single accountable owner. The team working that docket didn't escalate them or recognize that concentrated, deliberate follow-through was warranted, and the directives were not implemented. The gap hasn't closed with BED's newer structures, either. The second governance theme compounds the first: BED has relied on DPS and the Commission as its de facto error-detection layer, with regulatory filing errors historically caught by external review rather than internal checks before submission. This is a pattern the audit traces to regulatory and operations sitting in separate groups. Contributing factors include no internal regulatory counsel for the entire incident period, and pre-filing checks that in some cases confirm a filing was completed rather than that it was correct. Notably, the audit contrasts this with BED's strong performance on prescriptive, mechanical compliance obligations, such as Independent System Operator of New England (ISO-NE) deadlines and reliability submissions, and its disciplined root-cause practice for safety events. This is evidence that BED has real compliance-management capability; it just hasn't been extended to the state regulatory function. What BED needs to improve is integration and ownership. This means an order-to-obligation register with a documented regulatory-to-operations handoff, so every Commission order converts into a tracked obligation with an accepting owner. It also means a centralized compliance register that carries directives forward across docket closure instead of letting them not be implemented the way the March 2022 directives did. Finally, it means an internal pre-filing quality-control layer so that BED's own controls — not DPS's — are the first line of detection.

1.5 Priority Recommendations

Closing the gap between credited progress and proven reliability is the organizing priority behind every recommendation in this report:

- Create a regulatory DOA (Delegation of Authority) matrix and a RACI matrix to clarify accountabilities and responsibilities and to ensure critical decisions are approved by authorized individuals (detailed recommendations AR-1, BR-3 and BR-4).
- Implement formal, organization-wide succession planning (strategy). If the processes and controls are built but the resources are not available to do the work, they will fail (detailed recommendation DR-3).
- Identify, document, and maintain all critical business processes, and use them for delivery improvement, risk mitigation, planning for upcoming major business, and training of new resources (likely alongside process improvement) (detailed recommendation BR-2).
- Extend the existing regulatory docket log into a centralized compliance register with a named owner, a trained backup, the due date, the source requirement, the required evidence, and the escalation path for every recurring obligation (detailed recommendation AR-2).
- Adopt a written internal regulatory filing authorization and DPS communication policy with defined thresholds (detailed recommendation AR-1).
- Establish an order-to-obligation register and a documented regulatory-to-operations handoff (detailed recommendation AR-3).
- Adopt a written disclosure and error-reporting policy defining the reportable-event threshold, escalation timing, responsible personnel, and decision authority for regulator notification, with explicit protection for employees who self-report their own errors (detailed recommendation AR-5).
- Clarify the existing clause within the Efficiency Vermont (EVT) - BED agreement on communicating changes to data and technical interfaces. Reinforce the associated business processes within both organizations with formal change control techniques to mitigate the risk of future changes not being recognized (detailed recommendation ITR-1).

2 Background and Context

2.1 About Burlington Electric Department

Burlington Electric Department (BED) is a municipally owned electric utility serving customers in Burlington, Vermont. BED operates under the oversight of the Vermont Public Utility Commission (PUC) in two distinct regulatory capacities:

- **As a Distribution Utility (DU):** BED provides electric distribution service pursuant to rates and tariffs approved by the PUC. BED's approved rate change for FY26 was established at 4.33% following a settlement in Case No. 25-1172-TF.
- **As an Energy Efficiency Utility (EEU):** BED is appointed by the PUC to administer energy efficiency programs within Burlington, funded by the Energy Efficiency Charge (EEC) collected from ratepayers and the Thermal Energy and Process Fuel (TEPF) funds.

BED is led by General Manager (GM) Darren Springer, with Emily Stebbins-Wheelock as Chief Financial Officer (CFO) and Manager of Strategy and Innovation. The leadership team also includes Chief Operating Officer (COO) and Manager of Utility Services and Generation Munir Kast, and Manager of Customer Care and Communications Mike Kanarick. Finally, it includes Manager of Safety and Risk Management Paul Alexander, and Manager of Energy Services Dan Edson. These positions constitute BED's executive leadership team. We note that BED exhibits functional strengths in its core operational service delivery, as evidenced by its Service Quality and Reliability Plan (SQRP) metrics. The compliance and process gaps documented relate strictly to governance, accounting, and regulatory management functions rather than technical operational competence.

2.2 Operating Context

Unique Dual Regulatory Mandate — Compliance Complexity

BED is a municipally owned utility regulated by the Department and PUC in a unique dual capacity, as a distribution utility and as an Energy Efficiency Utility. It carries a high volume and variety of regulatory obligations across both utility functions. During the entirety of the incidents period (2019 – 2025), BED operated without internal regulatory counsel, in a complex and evolving efficiency-regulation environment that predated the greater clarity that Act 142 of 2024 introduced. It remains a small and lightly staffed organization from which the departure of a single person creates immediate exposure across several functions. In the 2015 timeframe BED made a conscious decision to pursue an early retirement incentive and significantly reduced the number of full-time-employees (FTE). The organization balances FTE additions (several of which have been in the regulatory space, including a new resource planner, principal counsel, and regulatory specialist position) with affordability of rates for customers.

These constraints are real, and they are acknowledged proportionately. They explain why reliable regulatory controls are difficult to build and sustain at BED's scale, but they do not by themselves account for the internal control gaps identified below. Again, the applicable standard is not perfection. Maximal control carries real cost, financial, operational, and cultural. The appropriate target is reliability proportionate to risk, with particular rigor reserved for everything that goes to the Commission and everything BED is obligated to comply with from outside of the utility. The findings

in this report are written against that standard rather than against a gold-plated ideal. Furthermore, the recommendations in this report are not benchmarked to practices of other Vermont utilities or EEU's, but rather, best practices derived from other engagements/expertise in the Utilities sector.

2.3 Actions taken by management to improve

BED management has taken real, credited steps in the past year, including adding a Principal Counsel and Compliance Officer position, a weekly regulatory working group, improved deadline tracking, and a rebuilt renewable-certificate process. BED instituted a new interim policy whereby the General Manager has final review on any documents submitted to the Commission, with additional senior management review through the regulatory working group, including the CFO. Matters arising after these steps, a late regulatory RFI response to the Commission in Case No. 25-1396-TF and tariff errors made per past practice (Case No. 25-1172-TF), indicate they are necessary but not yet sufficient; a prior Renewable Energy Certificate (REC) error has not recurred, and that remediation is unproven rather than failed.

BED has implemented the following corrective actions:

Action	Related Incidents
Principal Counsel / Compliance Officer position created (will require time to get up to speed)	21-1500-PET, 19-3272-PET, 24A-1346
Weekly regulatory working group established	21-1500-PET, 23-1985-INV, 19-3272-PET
New regulatory docket log	21-1500-PET, 23-1985-INV
New GM / senior management review layer for filings	21-1500-PET, 19-3272-PET
New REC process document with multiple checks (NEPOOL GIS) (room for improvement)	McNeil NEPOOL GIS
Regular senior leadership check-ins with DPS	24A-1346
Improved internal procedures for processing externally sourced data and improved awareness and communication with EVT	24A-1346
Second-check on cost-of-service retained and applied	24-1848-TF, 25-1172-TF

Now routinely practiced:

- Transition of staff / handover / retention post-departure. BED has begun using a standard transition/handover memo template when key staff depart or change roles. It is intended to capture institutional knowledge, open obligations, and system access before a position turns over — a direct response to the single-person-dependency pattern documented across multiple findings.
- Secondary check on cost-of-service calculations and discovery responses. BED has introduced an added independent review step for cost-of-service calculations before filing, and for discovery responses in rate proceedings.

- New process manual and overhauled workflow after the generation-reporting error (McNeil NEPOOL GIS), with built-in checks against single points of failure. BED has documented a revised REC reporting process that assigns the reporting function to multiple named, trained staff rather than a single individual. It builds in a defined reporting calendar, and is intended to ensure the obligation survives any one person's departure. A detailed review of the newly drafted REC process yielded significant changes (key participants missing from the process) and identified opportunities for improvement. We found issues with role assignments, critical steps, and overall clarity; the end-state model which we created differs significantly from the documented process (refer to Appendix 12.7).

3 Audit Scope and Methodology

3.1 Scope

This audit was commissioned because BED has exhibited a documented and persistent pattern of regulatory noncompliance, operational inconsistencies, and internal control deficiencies across multiple proceedings before the Commission from 2021 to present. Despite prior Commission directives to improve - including explicit Commission directive in March 2022 to implement internal quality controls - the pattern has continued. The scope of the audit was to:

- **Assess the adequacy and effectiveness** of BED's internal systems across four principal domains: Regulatory Quality Controls; Operational Management Controls; Financial Quality Controls; and Cross-Functional Management Systems. Enablers of these domains are IT systems/processes and transformational projects. IT and project management aren't standalone domains being audited — they're being examined *to the extent they affect* the four in-scope domains.
- **Conduct root-cause analyses** of the specific incidents documented in the Commission's July 31, 2025 letter; together with related regulatory compliance matters identified during fieldwork (items F13 through F19 in the appendix).
- **Identify systemic weaknesses** and common, holistic root causes cutting across multiple incidents.
- **Deliver prioritized, actionable recommendations** to remediate identified deficiencies and ensure sustained, reliable compliance.

3.2 Methodology

- **Document Review:** Evaluation of internal operational guidelines, purchasing policies, and regulatory filing procedures.
- **Structured Interviews:** Conducted across all key leadership positions, including the General Manager, Chief Financial Officer, Controller, Director of Policy & Planning, Director of Energy Services, and Chief Operating Officer, to cross-reference operational practices against documented frameworks.
- **Process Walkthrough Observations:** Focused on cost-of-service study preparation, external environmental reporting workflows, and EEU fund balance calculations.
- **Quantitative Analysis:** Review of spreadsheets relating to BED EEC 2026 calculation, Rate increase transaction files (Sep 2025 – Mar 2026), BED COS Model_Rate Case 2025 and the 10 April 2026 Stats Book.

The benchmarking framework assessed the following control volumes across BED's Distribution Utility and Energy Efficiency Utility functions:

Domain	Assessment Focus
A — Regulatory Controls	Compliance registers, filing prep SOPs, pre-filing quality checks, Commission order tracking, commitment handoffs
B — Operational Management Controls	SOP inventory existence and currency, regulatory delegation of authority, regulatory compliance control points, process standardization
C — Financial Controls	Tariff accuracy, expenditure authorizations, budget variance monitoring, cost allocation, EEU fund stewardship
D — Cross-Functional Management Systems	Staff training, competency verification, succession planning, knowledge transfer, continuous improvement

Assessment criteria. The controls were assessed against the requirements that bind BED directly: the applicable provisions of Title 30, the Commission's orders and directives in the dockets examined, including the March 2022 directives in Case No. 21-1500-PET, and the NEPOOL (GIS) Operating Rules governing renewable-certificate reporting. BED's own documents, filings, and acknowledgments in the record supply the second layer of criteria. The audit team's expectations for control design, including independent review separate from the preparer, named ownership with trained backups, documented procedures for recurring obligations, and defined escalation and disclosure standards, reflect established regulatory compliance practices. These expectations were confirmed against recognized internal-control frameworks. They include Federal Government Accountability Office (GAO) Standards for Internal Control in the Federal Government and the Committee of Sponsoring Organizations of the Treadway Commission (COSO) Internal Control Integrated Framework. They also include the Institute of Internal Auditors (IIA) Three Lines of Defense Model. This confirms that the expectations applied are consistent with widely accepted standards rather than particular to this audit.

3.3 Limitations and Independence

Several limitations bear on the weight of specific conclusions and are stated in the interest of candor:

- Interview statements are paraphrased and attributed by role rather than to named individuals.
- Conclusions on corrective-action effectiveness are necessarily preliminary pending observation over future quarters.
- Observations on BED's federal and regional compliance performance (Section 4.2) are drawn from interviews and are not the product of an independent audit of those programs, which lie outside the audit scope.
- **Sequencing:** The recommended written policies, registers, checklist, and RACI and DOA matrices are low or no cost and are recommended for the coming fiscal year. The internal quality-control and oversight layer and systematized independent review processes are anticipated to build over the following two years. A six-month progress report against the performance benchmarks in Section 11 would allow BED, the Department, and the Commission to see early whether the improvements are holding, ahead of the recommended 18-month follow-up assessment in Section 11.2.
- **Independence:** Our analysis is based on the comprehensive documentary evidence, interview outputs, and technical review logs supplied during the audit period. We operate as an independent evaluator separate from both the Vermont Department of Public Service and Burlington Electric Department.

4 Domain A Findings — Regulatory Quality Controls

We present the Domain A assessment: the control areas assessed, general observations, seven findings with the matters in the record that support them, and recommendations with measures of completion. The findings characterize the incidents examined in this audit; what BED has changed since is credited in Section 2.3 and assessed under what remains open below.

4.1 Overall Domain A Assessment

We systematically assessed Domain A controls in the following areas; compliance registers, filing preparation, SOPs, pre-filing quality checks, and Commission order tracking and commitment handoffs. This resulted in the following assessment:

- **Compliance Register & Obligation Tracking:** BED's regulatory docket log provides a foundation, but at the time of assessment, functioned as a PUC-docket tracker rather than a comprehensive regulatory compliance register. Some entries contain blank fields for owners, due dates, and compliance statuses, and not capturing recurring regulatory requirements and compliance obligations outside of dockets.
- **Filing Preparation & Pre-Filing Quality Controls:** While a two-person preparation and management review protocol now exists, it has failed to exist historically as an independent verification check of calculations and figures, allowing formula errors to reach external regulators undetected.
- **Commission Order Compliance:** Directive-level implementation milestones have historically been omitted from tracking, leading to non-implementation of mandatory orders.
- **Performance & External Reporting Monitoring:** Deadlines are tracked via manual shared Outlook calendars rather than automated alerts, and there is no independent pre-filing quality-control review applied consistently across filing types and no periodic review of filing quality reported to leadership.

4.2 General Observations

When regulators or a customer brings a filing error or tracking omission to light, BED management responds cooperatively and implements corrective updates. That response is credited, but it is reactive: it begins only after an outside party has identified the problem. The gap this finding addresses is the absence of internal detection before a filing goes out. Four further observations provide context:

Compliance performance is strong in other areas. Where regulatory standards are prescriptive and mechanical, defined in fixed form, on a fixed calendar, with the required content specified in advance, BED's record is strong. Staff described missing no ISO New England deadlines since 2008 and no failures to deliver renewable certificates. Reliability submissions were prepared through the standard reliability audit worksheet with a supporting breaker-testing program. The ISO-required risk matrix is maintained and reviewed as a group. There is a dedicated risk-management professional for reliability standards and a multi-decade federal hydroelectric relicensing is in progress. These observations are drawn from interviews and are not the product of an independent audit of those programs; they are reported as a fair contrast rather than as an attestation. The contrast indicates the gaps in the state regulatory and efficiency space are not a general inability to

comply: the compliance-management capability exists within BED and has not been fully extended to the state regulatory function.

Root-cause discipline exists but has not crossed the silo. BED conducts disciplined root-cause analysis for safety events but has not applied that discipline to the regulatory function. A standing regulatory lessons-learned practice would extend a discipline BED already operates elsewhere.

Capability and engagement. BED's regulatory expertise has rested on a small number of individuals who built their knowledge through immersion rather than structured training, and for much of the incident period BED operated without internal regulatory counsel. BED is addressing this through the new Principal Counsel and Compliance Officer role and a new hire recruited for regulatory and stakeholder-engagement skills, and its engagement with the Department and the Commission has become more regular over the past year. This is recorded as a developing and creditable direction.

An external-data dependency. Efficiency Vermont supplies much of the data that feeds several of BED's efficiency filings, this data exchange has resulted in errors in the past. In the matter in Case No. 24A-1346, per BED's 2023 EEU Annual Report, contributing errors included misallocated sector codes, EVT overbilling, and gaps in EVT's sales data delivery following a system upgrade, with complete sales data not delivered until late in the performance period. BED has no change-notification or delivery-assurance protocol with its principal external data provider. We have found that both parties are contractually obligated to do so, but either the obligation was not implemented, the business process was not clear, or change control was lacking in one or both organizations. We recommend a remedy in each of these areas.

4.3 Detailed Findings

The Domain A findings fall into two classes: accountability and remedy. Most are attributable to control deficiencies, gaps in the design or operation of BED's own controls, for which BED is accountable. Two result from clarity gaps, where the applicable standard itself was unclear, BED complied once the requirement was identified. There are recommendations directed in part at the Commission and the Department: the regulatory-authorization threshold matter (Finding A-2) and the (Renewable Energy Standard (RES) compliance matter in Case No. 25-0476-INV (noted under Finding A-6). Clarity gaps represent instances where the governing standard itself was unclear, such as uncertainties regarding when a tariff filing is required for a novel customer offering. Importantly, the existence of a clarity gap does not absolve BED of responsibility. When faced with ambiguity in the rules, BED's historical pattern was to proceed on its own interpretation, and the question then surfaced through external review rather than through BED resolving it in advance. BED complied promptly once the question was raised, but it did not pursue clarification of apparent ambiguity up front. Proceeding on a known ambiguity without getting it formally resolved is itself a gap in regulatory engagement, which is why Recommendation AR-1 pairs a written BED threshold policy with an accessible way to get threshold questions answered.

Across the incidents examined, BED's regulatory errors have been identified externally, by DPS, the Commission, or customers, rather than being caught before filing in some cases. BED maintains no consistent independent pre-filing quality-control review across filing types and no periodic review of filing quality reported to leadership. This absence of internal detection controls allowed individual control weaknesses to reach the Commission undetected and connects all six root-cause themes.

Finding A-1. Absence of an internal quality-control function adequate to detect filing errors before submission. BED does not maintain a consistent independent pre-filing quality-control review across filing types, conduct a periodic review of filing quality, or report a regulatory quality measure to leadership. The weekly regulatory working group operates as a coordination meeting rather than a quality-monitoring function. The remediation to date has focused on completing the process rather than verifying the quality of the result. The corrected controls largely confirm that steps were performed and that entered values match source documents, rather than confirming that the reported values themselves are accurate, with limited exceptions where values are checked. Supporting matters include the withdrawn Miscellaneous Service Fees Tariff, in which the Department identified a formula error after the filing was made, and 23-1985-INV, in which no secondary verification caught an un-updated budget input before filing. Also relevant is 24-1832-INV/25-0231-INV, in which compounded efficiency-charge errors went undetected through successive filings over multiple years. The Department's August 29, 2025 letter characterized the Department as functioning as a quality-control backstop for BED's filings.

Finding A-2. No documented standard for determining when Commission authorization or a tariff filing is required. BED has no documented standard for determining when an activity or customer offering requires Commission authorization or a tariff filing under Title 30 before BED commits to it. The internal procurement policy sets dollar thresholds for internal spending authority only, and the gap is most consequential precisely where the rules are ambiguous. Supporting matters include 24-0598-PET, where retroactive reimbursement of District Energy System expenditures was denied for lack of advance approval. Also relevant is 25-1390-INV, where it was unresolved whether a customer offering required a tariff filing and BED filed a tariff once the question was raised, and 25A-1387, where program-funding eligibility was assumed without a documented statutory check. This results from a gap in regulatory clarity in part, however, the internal standard is BED's own obligation and does not depend on any action by the Commission or the Department. A separate, optional recommendation invites the regulators to consider written threshold guidance.

Finding A-3. Incomplete regulatory compliance register and no directive carry-forward. BED maintains a regulatory docket log, improved over the past year, that tracks open PUC proceedings and provides a foundation for sustainable improvement. During the period examined, the docket log did not function as a complete regulatory compliance register. Entries did not always include named owners, due dates, and escalation paths, recurring obligations that live outside dockets were not included, and no mechanism carried Commission directives forward after a docket closed. As a result, obligations depended on individual memory and fell through staff transitions.

Supporting matters include 21-1500-PET, where five formal Commission directives were not implemented and were not escalated. Also relevant is the McNeil NEPOOL GIS reporting failure, which cost approximately \$951,000 in losses to BED with additional losses to joint McNeil owners, Green Mountain Power (GMP) and the Vermont Public Power Supply Authority (VPPSA). This brought the publicly reported combined impact to approximately \$1.8 million. BED sought remedies from both NEPOOL and the Connecticut Public Utilities Regulatory Authority; none were granted. BED mitigated the counterparty exposure by purchasing replacement certificates to meet its Connecticut delivery obligations and retired affected certificates against Vermont Tier I requirements at a substantially lower unit value, partially salvaging value for the joint owners.

Finding A-4. No documented standard operating procedures (SOPs) with mandatory independent pre-filing review. Recurring, time-sensitive filings are not governed by documented procedures with mandatory review by someone other than the preparer, including formula-level verification for spreadsheet-based filings. This runs against the fundamental principle that the person who prepares a regulatory filing should not be the only person who verifies it. A process walkthrough of one renewable-certificate process found the documented procedure did not match current practice. Details are provided in Appendix 12.7. Supporting matters: 23-1985-INV, the McNeil NEPOOL GIS reporting failure, 25A-0149 and 26A-0191, and the withdrawn Miscellaneous Service Fees Tariff.

Finding A-5. No written disclosure and error-reporting policy. BED has no written policy defining a reportable-event threshold, escalation timing, responsible personnel, and decision authority for regulator notification. An active practice exists and is articulated by individual managers, but it is unwritten and understood inconsistently, and BED's non-retaliation language protects those who report an event or impose discipline, not an employee who self-reports an error. Supporting matters: 24A-1346, where the sector misclassification and related errors were not disclosed until the annual report.

Finding A-6. The McNeil renewable-certificate remediation is not yet established as effective. Following the McNeil NEPOOL GIS reporting failure, BED designed and implemented a new certificate process (documented May 7, 2025) with multiple checks, a named team with cross-trained backups, and layered reminders. It also includes a senior-management failsafe that operated as designed in the most recent quarter. The governing standard is the NEPOOL GIS Operating Rules, which set fixed quarterly trading-period deadlines and make a missed certificate entry effectively irreversible. This is substantive corrective effort and is credited. The prior data-entry error has not recurred; however, the clean period is short, and two design residuals remain. First, verification confirms entered values match source reports rather than that the underlying generation readings are accurate. Second, a single-person dependency persists at the generation-data quality-assurance layer. Effectiveness is therefore open rather than established. The RES compliance matter in Case No. 25-0476-INV is a separate compliance-clarity question, resolved through compliance at no cost, and is not evidence bearing on this remediation.

Finding A-7. No commitment-to-operations tracking or handoff. BED maintains no mechanism converting Commission orders, settlement terms, approved plans, and filed representations into

tracked operational obligations with named owners. It also has no documented handoff from the regulatory function to the operating teams responsible for execution. As a result, BED can be compliant at the point of filing yet diverge in implementation. Supporting matters: 21-2701-INV, where a rate element BED itself had established in a prior proceeding, effective July 1, 2021, was omitted from BED's subsequent EEC filing three months later without the deviation being flagged, ultimately being discovered on Commission review. The omission occurred even though BED had shared draft calculations with the Department beforehand. The Department's pre-filing engagement is informal and is not a Department approval. BED sometimes provides little time for that review; the responsibility to verify a filing before submission rests with BED. Pre-filing sharing is therefore not a substitute for BED's own verification. Supporting matters include 22-1473-PET, where BED Act 151 implementation diverged from its representations to the Commission. Also relevant is 25-1172-TF, tariff compliance errors made in accordance with past BED practice.

What is established versus what remains open. Established: the design findings above are present-state facts drawn from BED's own documents and interviews; they do not depend on the outcome of any pending case. BED has cooperated openly with the audit and undertaken genuine corrective effort; these findings describe control design, not an absence of good faith. Open: whether BED's recent corrective actions, the Compliance Officer role, the weekly working group, improved tracking, the new REC process, and leadership check-ins with DPS, are operating effectively and will be sustained. Matters arising after these steps were in place, including tariff errors made in accordance with past BED practice (Case No. 25-1172-TF), indicate the corrective actions are necessary but not yet sufficient. The McNeil NEPOOL GIS reporting error has not recurred since the new process was put in place; its remediation is credited as built but not yet proven.

4.4 Detailed Recommendations

Each recommendation below is stated with a measure of completion, so that progress can be tracked and verified.

- **Quick Hits – ASAP**
 - **AR-1 (Finding A-2).** Adopt a written regulatory-filing authorization policy with defined thresholds, classifying an activity or regulated offering as requiring Commission approval, a tariff filing, advance notice, or no action. Add a pre-filing authorization checklist and a regulatory DOA matrix mirroring BED's existing procurement controls. Measure: a documented authorization determination is recorded for every applicable filing and regulated-offering launch before commitment. (Top priority.)
 - **AR-2 (Finding A-3).** Extend the existing regulatory docket log into a centralized regulatory compliance register with a named / accountable owner, a trained backup, the due date, the source requirement, the required evidence, and the escalation path for every recurring obligation. The register should carry Commission directives forward across docket closure, with an intake step under which every Commission issuance affecting BED is logged and routed to a named owner within a defined period. Measure: every recurring obligation has a named owner and trained backup, no statutory or Commission deadline is missed, and

every closed-docket directive is carried into a tracked forward obligation. Most of the controls in this package, including this register, will in practice be owned by the new Principal Counsel and Compliance Officer function. Whether that function is adequately resourced, positioned, and defined, including its reporting line, its authority over filings prepared in other departments, and the clarity of the role definitions that feed it. That question is assigned to the follow-up assessment recommended in Section 11.2, when there will be evidence to evaluate.

- **AR-3 (Finding A-7).** Establish an order-to-obligation register and a documented regulatory-to-operations handoff. Measure: every Commission order and filed commitment is converted into a tracked operational obligation with an owner and completion evidence, with recorded acceptance by the receiving operational owner.
- **AR-5 (Finding A-5).** Adopt a written disclosure and error-reporting policy defining the reportable-event threshold, escalation timing, responsible personnel, and decision authority for regulator notification, with explicit protection for employees who self-report their own errors. Measure: the policy is adopted with a defined reporting threshold and written self-report protection, and disclosure decisions are logged against it.
- **Next Fiscal Year and Beyond**

The following recommendations should be started for critical areas this fiscal year, and be planned for future years as part of the work.

- **AR-4 (Finding A-4).** Document standard operating procedures for each recurring filing type with mandatory independent pre-filing review, including formula-level verification for spreadsheet-based filings. Measure: a documented SOP exists for each recurring filing type, and the review includes verification of filing inputs against the currently approved figures and any related Commission orders or decisions. An independent reviewer sign-off is recorded on every filing, and the preparer and reviewer are never the same person.
- **AR-6 (Finding A-1).** Implement an internal error-detection layer: an independent pre-filing quality-control review applied across recurring filing types, supported by a periodic regulatory-quality review that logs identified issues and their remediation for leadership. Measure: the review is documented and applied to each recurring filing type, and the periodic quality review is presented to leadership on a set cadence.
- **AR-7 (Finding A-6).** Complete and prove the McNeil NEPOOL GIS remediation: extend verification to source-data accuracy, close the generation-data quality-assurance single-person dependency with a trained independent backup, and re-test over consecutive periods. Measure: the source-accuracy step is documented and operating, a named trained backup is in place, and a defined run of consecutive clean GIS trading periods is completed before closure.

Durability. The record shows that improvements this Commission directed in March 2022 were not implemented and that the same failure classes recurred. Our recommendations are proposed to address this in three ways. First, each recommendation carries a measure of completion that can

be verified from documents rather than accepted on assertion, so implementation is checkable, not represented. Second, we recommend that the Commission orders 6-month implementation reports and a follow-up assessment as per Section 11.2 to verify that the controls are structurally embedded in daily operations and deviations become visible on a set schedule rather than at the next failure. Third, each obligation is assigned to a named accountable owner with a trained backup, where the March 2022 directives had no institutional owner. The corrective actions will be established as effective when each completion measure is met and sustained through the progress-report cycle, and, for the renewable-certificate remediation, when the defined run of consecutive clean trading periods is complete.

Regulator-directed remedies. Because the regulatory-authorization matter and the Renewable Energy Standard (RES) compliance matter are in part attributed to the clarity of the standard itself, part of the remedy is proposed at the regulators. The audit is specific about what is being asked. Three determinations in the record lacked a governing standard when they arose. The first was whether a customer-facing pilot offering of the Moduly type requires a tariff filing before launch. The second was how load is to be measured against retail sales for RES compliance, on which the Commission has since opened a standardized proceeding for all utilities. The third was what constitutes adequate statutory confirmation of program-funding eligibility of the kind at issue in 25A-1387. Written threshold guidance addressing these three classes of determination, initiated by the PUC and designed in consultation with utilities, would remove the ambiguity that produced them. On the clarification channel, the audit recognizes the Commission's quasi-judicial constraints. A formal declaratory-ruling petition already exists and has been used by peer utilities, but it is public and resource-intensive for routine threshold questions. The Department's informal engagement, while more accessible, is not binding and not always timely sought or received. A middle path for the Commission's consideration is a defined procedure for submitting threshold questions of general applicability for resolution by written guidance of general application, rather than case-specific advice, supplemented by periodic regulatory compliance training for regulated entities. Finally, the implementation of the contractual obligation for EVT and BED to communicate and handle changes in data feeds points at further issues. These involve having well-designed roles, responsibilities, and business processes that are implemented by EVT as well as BED.

5 Domain B Findings — Operational Management Controls

5.1 Overall Domain B Assessment

We systematically assessed Domain B controls in the following areas; SOP inventory existence and currency, regulatory delegation of authority and accountability, regulatory compliance control points and process standardization. This resulted in the following assessment:

- **Policies & Process Standardization:** BED lacks a written error-reporting policy, a clear internal pathway for near-miss tracking, or standardized regulatory handoff protocols.
- **Decision-Making & Regulatory Impact Gateways:** Tracking frameworks contain no operational step to evaluate to what extent a filing or program offering requires rigorous review.
- **Internal Communication (siloeing):** No written, formalized process exists to transfer specific commitments made during regulatory hearings to the operational teams tasked with delivery.

5.2 General Observations

BED's technical operational delivery — including distribution reliability and customer service responsiveness — is structurally sound. The compliance failures documented are mostly confined to internal administrative governance and cross-functional tracking workflows. The utility relies on its newly established regulatory steps, closer cross-functional reporting structures, and the oversight of the Compliance Officer to prevent operational delivery from diverging from regulatory representations.

5.3 Detailed Findings

Finding B-1: No up-to-date documented inventory of policies, processes, and SOPs. BED does maintain individual policies and procedures, and the audit found no evidence that those documents themselves are outdated. The gap is one level up: BED shared an inventory of its policies and procedures, but it proved incomplete and not current. Meaning BED cannot reliably map what documentation exists, who owns it, or when it was last reviewed. This is foundational to the findings that follow — without a trustworthy inventory, it's difficult to know with confidence which critical processes are adequately documented, and which aren't.

Finding B-2: Critical business processes and SOPs lack complete and correct documentation. Existing business processes should document "what" needs to be done, not "how" it is done. This distinction is challenging for many organizations to hold onto, but doing so avoids excess detail at the high level and creates clarity for improvement — whether that improvement is process-driven or system-driven. At the highest level, a business process rarely changes much with a new system: "what" is required stays the same; only "how" it is done changes. As part of the audit, we reviewed the newly draft REC process document. We found issues with critical steps and overall clarity of the existing process. The end-state model that we created differs significantly from the

documented process, including involving key participants not defined in the original documented process.

Finding B-3: No regulatory delegation-of-authority (DOA) and no RACI matrix to support critical decisions. Without a documented DOA matrix, there is no formal standard for who is authorized to approve consequential regulatory decisions; without a RACI matrix, ownership of critical processes defaults to informal understanding rather than documented accountability. BED currently has no formal mechanism defining who is authorized to make or approve critical regulatory decisions, and no structured framework clarifying who is Responsible, Accountable, Consulted, and Informed across BED's compliance-critical processes. In practice, this means authority and ownership for consequential decisions — what gets filed, who signs off, who is accountable when something goes wrong — rest on informal understanding rather than a documented, verifiable standard. That gap is not abstract: it's visible in the audit's REC reporting deep dive, where the process walkthrough surfaced unclear role assignments.

BED has included a Roles/Responsibilities matrix in its *Business Process for Generation Asset Environmental Attribute Reporting* document. It classifies participant roles as Primary, Backup, Supporting, Informed and Verifier. This is a non-typical approach. The defined roles are confusing and the accountable owner role is missing. After a walkthrough of the process with the SME, we noticed the roles defined in the matrix are not aligned with actual practice. A RACI matrix would resolve exactly this kind of ambiguity by making explicit who owns each step, which is precisely the condition that let the REC reporting gaps persist undetected.

- **Quick Hits – ASAP**

- **BR-1(Finding B-1):** Update and maintain the policies and procedures inventory list.
- **BR-2 (Finding B-2):** Identify, document, and maintain all critical business processes, and use them for delivery improvement, risk mitigation, planning for upcoming major business, and training of new resources (likely alongside process improvements). This will also be very impactful in lowering the long-term cost of the major business information system replacements that BED has planned in the near future.
- **BR-3 (Finding B-3):** Create a regulatory DOA matrix to ensure critical decisions are approved by authorized individuals.
- **BR-4 (Finding B-3):** Create a RACI matrix to clarify accountabilities and responsibilities for critical processes.

A RACI matrix would directly resolve the unclear ownership seen in the REC reporting deep dive. An example RACI and business-process document is provided in Appendix 12.7, revising the existing process document with accurate roles and responsibilities.

- **Next Fiscal Year and Beyond**

- **BR-5 (Finding B-2):** Continue to identify, document, and maintain all other business processes, and use them for improvement, risk mitigation, and training of new resources (likely alongside process improvements).

6 Domain C Findings — Financial Quality Controls

6.1 Overall Domain C Assessment

We systematically assessed Domain C controls in the following areas; tariff accuracy, expenditure authorizations, budget variance monitoring, cost allocation, EEU fund stewardship and governance and oversight. This resulted in the following assessment:

- **Tariff accuracy:** Tariff application and revenue processes are informally managed and need formal documentation to meet strict regulatory expectations.
- **Budget variance monitoring:** Budgets are monitored, and the new Financial Information System (FIS), once implemented, will support continuous monitoring.
- **Governance & oversight:** Overall, we find BED's financial control environment operationally functional but procedurally immature. The primary opportunity is not necessarily to introduce additional financial controls, but to strengthen the governance surrounding existing controls through formal documentation, standardized procedures and objective performance measurement.

6.2 General Observations

BED now routinely shares draft rate calculations with regulators for informal review before filing, to catch validation issues and reduce communication issues. We found no significant gaps related to BED's aging ERP; BED has implemented a complex coding regime and uses work orders to work around system limitations.

6.3 Detailed Findings

Finding C-1: Spreadsheet review: BED submitted EEC rate calculation spreadsheets containing errors across multiple annual filing cycles (approximately 2020–2023). The errors were not detected by BED prior to submission, nor were they identified by DPS during its pre-filing review process, despite both parties having an established practice of sharing draft calculations before filing. Some of the errors were ultimately self-discovered by BED and self-reported to DPS, other errors were ultimately identified through the Commission's process and information requests. In a related matter, a RES compliance workbook submitted by BED was found by DPS to contain multiple errors. These included data pasted into incorrect columns, mislabeled columns, and omitted information, which DPS corrected itself before the filing could be accepted.

Finding C-2: Financial control procedures are frequently performed but are not consistently documented or formally approved. BED staff are currently doing the work — reviewing figures, checking calculations, sharing draft rate calculations informally with regulators before filing — but that work isn't captured in a form that can be verified after the fact. There's no standardized template for how a review should be documented, no consistent record of who performed a given control step, when, and against what criteria, and no formal sign-off.

Finding C-3: Control effectiveness is not routinely measured using defined performance indicators. Where financial controls exist and operate, BED currently has no mechanism to know whether they're working well, working adequately, or quietly degrading. There's no baseline for

what "good" looks like for a given control, no Key Performance Indicator (KPI) tracking control performance over time, and no defined threshold that would flag a control as underperforming before it fails on a live filing.

Finding C-5: Financial risk management activities are not formally documented. BED engages in risk-related thinking and decision-making, but this hasn't been consolidated into a structured, written financial risk framework. There's no financial risk policy defining what counts as a risk, how it should be scored or prioritized, who owns it, and how it gets reviewed on a cycle. There's no single Enterprise Risk Register that centralizes identified financial risks in one place where leadership can see them together rather than as scattered, informal knowledge held by individuals.

Finding C-6: Formal escalation criteria for regulatory variances and control exceptions have not been consistently established. When a number comes in outside expected tolerance — a regulatory variance, a control exception, a figure that doesn't match what was filed or approved — BED currently has no quantified, written standard for what triggers escalation. Nor is there a standard for to whom or on what timeline it should be escalated. Escalation, where it happens, depends on individual judgment about whether something seems serious enough to raise, rather than a defined dollar or percentage threshold mapped to a tiered response.

6.4 Detailed Recommendations

- **Quick Hits – ASAP**
 - **CR-1 (Finding C-1):** Systematize spreadsheet formula reviews before tariff and rate submissions.
 - **CR-2 (Finding C-1):** Ensure post-implementation tariff monitoring occurs within 30–60 days of rollout.
 - **CR-5 (Finding C-5):** Formalize Enterprise Risk Frameworks: Draft a comprehensive high-level financial risk policy and centralize all identified risks into a structured Enterprise Risk Register.
 - **CR-6 (Finding C-6):** Define Clear Escalation Paths: Establish quantified dollar or percentage thresholds for regulatory variances and map them to a strict, tiered escalation timeline for reporting (as part of the disclosure policy).
- **Next Fiscal Year and Beyond**
 - **CR-3 (Finding C-2 and C-3):** Standardize Documentation & Approvals: Create a centralized control registry with standardized templates, and implement formal, auditable digital sign-off workflows for control execution. This registry should be a requirement for the upcoming Financial Information System (FIS) implementation.
 - **CR-4 (Finding C-3):** Measure & Test Effectiveness of financial internal controls: Define specific KPIs for control health. Benchmark baselines can be defined, targets set and measured over months / years.

6.5 Quantitative Findings

We performed a computational and data integrity review on the following files:

- BED EEC 2026 Calculation

- Rate Increase Transaction files (Cycle 1-3 and Cycle 4)
- BED COS Model_Rate Case 2025
- 10 April 2026 Stats Book

We focused on whether the numbers are internally consistent, correctly calculated, and free of errors before filing or submission. For all files, we checked formula errors ((#DIV/0!, #REF!, #VALUE!, #N/A, etc.) and arithmetic accuracy (whether line items sum to their totals, and cross-tab references agree).

For each file we reviewed the items as per below. A summary of the findings is provided per file. Overall, findings were minor.

BED EEC 2026 Calculation

Items reviewed:

- Sign logic on the 2025 collections true-up (whether over/under-collections were being added or subtracted correctly)
- GRT tax divisor label vs. actual formula
- Consistency of kWh totals across tabs
- Whether zero-value rows were filtered per the process instructions

Findings:

#	Severity	Tab	Issue
1	Minor	EEC 2025 data	#DIV/0! in P13:P16 for future months
2	Minor	EEC Calculation	Incorrect divisor label in C73 (.99 vs .98975)
3	Informational	EEC 2024 data vs Billing Det.	kWh source difference, expected

Rate Increase Transaction Files (Cycle 4 and Cycle 1-3)

Items reviewed:

- Formula errors and zero-value rows in final refund output files
- Whether partial tax exemption rates were correctly applied to affected accounts
- Balance transfer deletions — whether flagged records were removed from the extract
- Cross-cycle contamination — whether Cycle 4 accounts appeared in the Cycle 1-3 output and vice versa
- Whether the refund rate formula was applied consistently

Findings:

#	Severity	File	Issue
2	Process	Both files	Zero-value refund rows not filtered per Steps 6c/7c/8c — could use cleanup before CSV export
3	Informational	Both files	Balance transfer and cycle separation working correctly

COS Model

Items reviewed:

- All line items: Test Year + Known & Measurables = Rate Year
- All subtotals and grand totals (Power Supply, O&M, Total Operating Expense, Total Cost of Service)
- Interest expense schedule build-up
- Revenue requirement and TIER calculation logic
- Line numbering consistency in the K&M Summary

Findings:

#	Severity	Issue
1	Minor	Duplicate line number 66 in K&M Summary (Fish Passage Plan and REC Sales both labelled 66)

Stats Book

Items reviewed:

- Formula errors across all 14 tabs
- Sources = Uses energy balance for current and prior months
- Customer count consistency across rate classes
- Production data plausibility (McNeil, Hydro, GT) year-over-year
- Date references in the MAIN tab for the reporting month

Findings:

#	Severity	Issue
1	Minor	RTCUST count anomaly in Sep/Oct/Nov 2025 — worth confirming against billing system
2	Informational	No formula errors; all key totals and energy balances check out

7 Domain D Findings — Cross-Functional Management Systems

7.1 Overall Domain D Assessment

We systematically assessed Domain D controls in the following areas; staff training, competency verification, succession planning, knowledge transfer and continuous improvement, resulting in the following assessment:

- **Staff Training and Competency Verification:** While technical training is solid, compliance-specific training frameworks and standardized authorization-to-file gateways have historically been informal.
- **Succession Planning and Knowledge Transfer:** Organizational compliance processes frequently lack documented backups, leading to critical data loss when key personnel depart.
- **Continuous Improvement and Issue Escalation:** BED does not operate a centralized repository for lessons learned or Root-Cause Analysis (RCA) tracking, preventing the institutionalization of process fixes.

7.2 General Observations

Following the generation reporting operational breakdown, BED developed a cross-disciplinary process that resulted in a comprehensive, newly documented process manual and an overhauled workflow with several built-in checks specifically designed to eliminate single points of failure. Regular check-ins for senior leadership with regulators have also been instituted to strengthen external communication. Leadership has started identifying key positions to address succession planning and is in the process of creating a template to support succession planning.

7.3 Detailed Findings

Finding D-1: Single-point-of-failure risk: critical knowledge lives with individuals rather than repositories. Regulatory and operational knowledge at BED is held informally by specific staff rather than captured in documented procedures or shared systems, so continuity depends on individual availability. This pattern is evidenced most directly by the McNeil NEPOOL GIS reporting failure — a missed deadline tied to staff turnover that cost BED approximately \$951,000. It is independently corroborated by the correspondence review, which found one policy lead personally managed 30% of all reviewed communications and most investigated dockets, deadlines, and filings across the six-year period.

Finding D-2: Formal succession planning was mostly reactive and focused on short-term and unexpected departures. In some cases BED has taken proactive succession planning steps, but leadership acknowledged they can improve in this area and drafted and started rolling out the “Template for Transition/Succession Planning Memo”. Implementation will be for leadership roles initially and further roll-out for critical (regulatory) roles will follow. Still lacking is a documented strategy that identifies key roles at risk of vacancy and prepares potential candidates to fill them, typically through training, mentoring, and knowledge transfer, so the organization can maintain

continuity when leaders or critical personnel leave. It reduces operational and institutional-knowledge risk by ensuring there's a clear pipeline of qualified successors rather than relying on ad hoc or reactive hiring when a departure occurs.

Finding D-3: New resources often lack the desired background; BED confirms it takes new staff without a utility industry background six months to two years to become fully functional. Regulatory and operational competency at BED has historically been built through immersion — individuals learning the role over years on the job — rather than through structured, transferable training. That works as long as an individual stays, but it means a new hire without prior utility experience represents an extended capability gap, not a quick fill. BED itself confirms the ramp-up period runs six months to two years before that person is functioning at full capacity. This compounds directly with Finding D-1 (single-point-of-failure risk). If critical knowledge lives with individuals rather than documented processes, then replacing one of those individuals doesn't just require finding a qualified candidate. It requires absorbing a multi-month-to-multi-year gap in effective coverage for that function.

Finding D-4: No formal lessons-learned or root-cause repository exists, so errors can reoccur. BED already applies disciplined root-cause analysis to safety events — this capability just hasn't extended to the regulatory and compliance function. Without a standing practice to capture what went wrong after a filing error or compliance incident, and no repository to carry those lessons forward, the same failure patterns can recur unchecked.

7.4 Detailed Recommendations

- **Quick Hits – ASAP**
 - **DR-1 (Finding D-1):** Implement mandatory cross-training tied to every compliance-critical role.
 - **DR-2 (Finding D-1):** Prioritize keeping compliance and legal positions filled to eliminate single-person risk.
 - **DR-3 (Finding D-2):** Implement formal (organization wide) succession planning (strategy).
- **Next Fiscal Year and Beyond**
 - **DR-4 (Finding D-3):** Establish stabilization and training plans for the first six months to two years for new resources, with backup coverage.
 - **DR-5 (Finding D-4):** Use a standard post-mortem template after every material filing or error and carry findings forward into processes.
 - **DR-6 (Finding D-4):** Build a centralized case-management and lessons-learned process and system.

8 General IT Business Systems and Data

8.1 General Observations

We held ten meetings with BED leadership and Subject Matter Experts (SMEs) close to the V3 Rebate system central to Case No. 24A-1346. The V3 Rebates system tracks usage and the related applicable rebates of Energy Efficiency Utility (EEU) programs that are approved by the PUC. Case No. 24A-1346 amongst others investigated the cause for data errors in that system. We initially focused on the V3 Rebates system directly involved in the case. However, we also assessed Information Management practices, the system change roadmap, and key organizational maturity indicators ahead of upcoming regulatory risks, alongside a detailed review of 21 BED artifacts (including documents, emails, code, and system diagrams). Ultimately, our findings on Systems and Data strongly mirror the overarching themes of People, Process, Governance, and Culture identified across the four domains examined.

BED has made significant strides in improving its use and governance of information technology systems and data in recent years, and continues to make strategic choices that support continued, iterative improvement. Much of this is supported by a positive internal culture that leverages trust to drive guidance and formal governance in ways that often exceed the level of maturity seen in organizations of similar scale.

The organization maintains a streamlined framework of formal controls for managing applications and data outside of the core IT infrastructure domain. This structure is typical and often appropriate for an organization of this scale, and most critical controls are in place. System and data management are largely overseen by skilled, committed subject-matter experts, and cross-departmental and external collaboration remains highly effective. That said, baseline risks exist, though these could be readily mitigated through targeted process adjustments.

A review of this custom system found that, despite minor flaws commonly seen with small, in-house, bespoke systems, it possesses adequate internal controls and audit capabilities. It also adheres to appropriate boundaries around system of record and the integrity of financial information. In addition to processing individual rebate requests from BED customers, the system enables BED staff to process increased volumes of midstream channel rebates submitted by EVT. It also helps identify and resolve common issues in EVT data with a high degree of accuracy and auditability. This uses automated and manual checks. Once discovered, the root cause of the prior finding in Case No. 24A-1346 was clearly identified and was remediated promptly and effectively.

Looking ahead, BED is embarking on an ambitious, concurrent timeline of major system changes; many of those systems directly support regulatory obligations. While the strategic intent to modernize and consolidate systems is well-founded, and the selected platforms represent best-of-breed functionality, the transition will introduce challenges. Edge cases, system customization, data conversion, system integration, and reliance on vendors in project implementations with scopes crossing multiple systems and domains will require careful oversight. Prioritizing a mature framework to validate key regulatory obligations as these platforms are deployed will be crucial to success. This is covered in more detail in the appendix.

8.2 Detailed Findings

Although the analysis of the audit primarily focused on the V3 Rebates system, other business systems were examined at a high level. The findings relating to V3 along with systemic practices found across the four examined domains flagged risks both for ongoing operations and planned upcoming system changes.

Finding IT-1: Baseline risks regarding business continuity and a lack of segregation of duties exist within the business applications and data environment outside of core IT infrastructure.

Maintenance of the V3 Rebates system is highly reliant on individuals and tacit knowledge; although some documentation exists, it is incomplete. There is no formal, centralized process in place to control and track changes, and some system functionality operates outside of a controlled Production environment. While there is an intent to migrate V3 to the incoming Customer Information System (CIS), the necessary foundational groundwork and fit-gap analysis to verify the viability of the migration has not been conducted. The custom Net Metering database application is also slated to migration to the CIS and likely exhibits a similar risk profile as V3.

Finding IT-2: BED's provided example of software requirements for the V3 Rebates system shows significant gaps in information and structure. Based on findings across the four domains and noting the lightness of the organization, it is likely that these themes are more pervasive.

Finding IT-3: Data quality checks are currently inconsistent, reactive, and sometimes manual, within the V3 Rebates system, although effective when they are in place. This results in limited organizational visibility into how automated processing may affect data quality. There is not a central data quality practice spanning different business functions.

Finding IT-4: Software and data testing methodologies appear inconsistent and not repeatable within the V3 Rebates system and are not always well aligned with clearly defined business or regulatory requirements. There are not central standards around software testing spanning different business systems. This may improve with the recent hire of Business Analysts, but concerns remain considering the scale of upcoming major system changes.

Finding IT-5: Documentation of data flows between systems and external parties is either superficial or missing entirely. This highlights both operational risk that relies highly on tacit knowledge and key individuals, and positions BED poorly for multiple upcoming system changes.

Finding IT-6: Document collaboration increasingly leverages Office 365 (O365) tools and is integral to storing much of the information used for regulatory compliance. The current environment of shared network drives and O365 uses basic controls but is not well-positioned for growth and effective information management.

Finding IT-7: IT hardware, network, identity and access management, and operating system controls are in place. Business application changes are controlled by the business owners. Central controls (such as cross functional change control) are not in place across all business domains.

8.3 Detailed Recommendations

- **Quick Hits – ASAP**

For current impactful operational systems:

- **ITR-1 (Finding IT-1, Finding IT-7):** Formalize a Change Control process for critical and/or high-risk business systems and data exchanges with external agencies. Upstream data providers (e.g. EVT) should have obligations to participate. There is currently a contractual clause in a contract between EVT and BED that has the obligation, but it was not followed in the V3 Rebates system case (Case No. 24A-1346). This has identified either a lack of understanding or a lack of execution from EVT, and a lack of understanding from BED to not recognize a lack of full compliance with the contract. Establishing between both EVT and BED what is required and how to best accomplish it is necessary. As a result of the error, informal practices are occurring, but formalizing it and making the contractual tie has not been done. Given its similar risk profile: the custom Net Metering database application and any similar BED systems with regulatory exposure should also participate in the formal Change Control process.
- **ITR-2 (Finding IT-5):** BED should formalize its data interface inventory and adopt standardized tools and processes for interface management. Without sufficiently detailed documentation, risks associated with aligning integrated systems are often not properly identified during Change Control and new system rollouts. Vendors do not manage end-to-end information flows.
- **ITR-3 (Finding IT-1):** Address gaps in documentation (requirements, interfaces, data troubleshooting, testing) of the V3 Rebates system and align with IT controls (e.g. move configuration currently in Dev database to Production, use Git for code management) to reduce operational risks. Given its similar risk profile: the custom Net Metering database application and any similar BED systems with regulatory exposure should be treated with the same degree of rigor.

For current business system projects (not the enterprise): include recommendations ITR-1 through ITR-3 AND

- **ITR-4 (Finding IT-2):** Build internal fluency in requirements analysis and data-integration rather than relying primarily on vendors, expand business-analyst / architecture capacity, and use disciplined project management for the upcoming multi-system rollout.
- **ITR-5 (Finding IT-4):** Standardize software and data testing to ensure alignment with business and regulatory requirements. Build this expertise in-house instead of relying on external vendors, whose testing methods are often inconsistent and limited in scope. To support this transition, increase Business Analysis capacity and oversight before launching major projects.
- **ITR-6 (Finding IT-1):** Perform a formal, rigorous and unbiased fit-gap analysis to assess the viability of migrating the V3 Rebates system to the incoming CIS. Then act decisively on the

result by either positioning the system formally for migration to the CIS OR improving the controls on the V3 Rebates system to make it more operationally robust. Given its similar risk profile: the custom Net Metering database application and any similar BED systems which are planned to be consolidated into the CIS should be treated with the same degree of rigor.

- **Next Fiscal Year and Beyond**

- **ITR-7 (Finding IT-3, Finding IT-5):** Establish formal frameworks to shift the current strong but localized culture of data quality toward consistent analysis and reporting. This will improve regulatory compliance, streamline change management, and significantly lower risk during upcoming major system conversions. Activities like formal data profiling and cleanup prior to system migration projects should be mandatory.
- **ITR-8 (Finding IT-6):** Establish Information Management policies and best practices, and leverage tools to help support Information Management in the Office 365 domain.

9 Root-Cause Analysis

9.1 The Foundational Failure — Case No. 21-1500-PET

The non-implementation of the Commission's March 2022 directives served as the foundational root cause enabling subsequent process failures to persist. Because the directives were not institutionalized under a single, accountable owner, project teams continued to operate in isolated silos, and the binding directives were not escalated or tracked to implementation.

9.2 Root Causes

Six themes grouped into four root-cause categories.

Themes 1, 3, 4, 5, and 6 are control deficiencies for which BED is accountable. Theme 2 is in part a clarity gap: the standard governing when Commission authorization or a tariff filing is required is itself unclear. BED complied in the relevant matters once the requirement was identified, and the remedy is directed partly at the Commission and the Department. The RES compliance matter in Case No. 25-0476-INV falls in the same class and is distinguished from the McNeil NEPOOL GIS remediation in Section 4.3.

People

Gaps tied to staffing depth, succession, and individual reliance.

1. Difficulty in having fully trained, back-up resources, with all roles filled, single person dependency

Cases: McNeil NEPOOL GIS, 24-1832-INV/25-0231-INV, 23-1985-INV

Contributors: departure of staff; heavy reliance on individual subject-matter experts; limited cross training in staff; light staffing; budgetary constraints; difficulty being in competitive market; no internal regulatory legal staff (dedicated or semi-dedicated)

Process

Missing or under-maintained policies, SOPs, and approval thresholds.

2. Absence of a written regulatory-authorization and communication policy with defined thresholds — BED does not have a documented standard for determining when an activity or customer offering requires advance Commission approval or a tariff filing before regulated offerings launch. More significantly, when operating in gray areas, BED's historical pattern was to proceed on its own interpretation rather than pursue a binding determination up front through the channels that exist, and the question then surfaced through external review. The internal procurement policy covers spending thresholds but BED has nothing similar for regulatory activities.

Cases: 24-0598-PET, 25-1390-INV, 25A-1387

3. Critical SOPs not well documented, maintained, or kept current — recurring, time-sensitive filings are not governed by documented procedures with mandatory independent review (pre-filing quality controls), leaving correctness and consistency dependent on individual diligence. This gap now extends beyond complex or novel filings to familiar, recurring ones. Examples include a withdrawn tariff with a formula error caught by DPS (after which a full management audit was recommended), and SQRP reporting failures, including unreviewed hypothetical data submitted in a Commission-mandated performance report. A pre-filing review process does exist for cost-of-service calculations but has not been applied with sufficient rigor to catch every error before filing. We also did a deep dive into one of the REC reporting processes and found issues with roles assignments, issues with critical steps, and overall clarity.

Cases: 23-1985-INV, McNeil NEPOOL GIS, 25A-0149, 26A-0191, Revised Misc. Service Fees Tariff (Aug 4, 2025, withdrawn)

Contributors: ambiguity between local/state approval; reliance on individual diligence; limited SOP capacity

Pattern: people and process gaps both trace back to a light organization that has not had the maturity and capacity to document and cross-train at scale.

Governance

Structural gaps in oversight, escalation and internal detection, unclear path to accountability

4. Regulatory/operations siloing — BED has no integrated regulatory compliance management system. BED has components of one — the docket log, the weekly working group, and the new senior review layer. But they are not yet integrated into a system that captures every Commission issuance, assigns named accountable owners, and reports status to senior leadership. So obligations and decisions are reliably and systematically routed between docket teams, operations, and leadership. The non-implementation of the March 2022 Commission directives is the clearest example: the team working the docket didn't escalate the items or recognize that it was warranted for deliberate, concentrated action and response. The gap persists in BED's newer structures.

5. Reliance on DPS as an external backstop for detection — Historically, errors in regulatory filings are most often identified through external review, by the Department, the Commission, or customers, rather than by sufficient internal checks before a filing goes out.

Cases: 21-1500-PET, McNeil, 24-1832-INV, 25A-0149, 19-3272-PET, and others

Contributors: regulatory and operations in separate groups; no internal regulatory counsel during the period; on some filings, checks confirm completion more than correctness (uneven across filing types).

Culture

Behavioral patterns around disclosure, urgency, and risk tolerance

6. Reactive culture (busy) and deferred escalation on disclosure timing — issues are addressed reactively and disclosure to the Commission has at times been delayed. For example, the residential-to-commercial sector misclassification in efficiency reporting was not proactively disclosed until the annual report (24A-1346)

Case 24A-1346

Contributors: capacity and resourcing constraints; caution toward the Commission; no written threshold for what must be reported and when; some challenges with timeliness of submission and response from DPS/PUC.

10 Implementation Roadmap

10.1 Detailed Implementation Roadmap

Detailed, sequenced recommendations for each domain are set out in Sections 4.4, 5.4, 6.4, 7.4, and 8.3 above. We recommend actions that are more focused on preventing future regulatory issues, improving the efficiency and effectiveness of BED’s processes rather than addressing only the specific issues found within the regulatory cases studied. A fully sequenced implementation roadmap with named owners, milestones, and target dates is set out below.

Owners below are assigned by role based on BED’s current organizational structure as described in this audit report. Target dates are confirmed target dates by BED and DPS. While BED has begun preliminary implementation of recommendations contained in this report following its submission to the Commission on July 31, 2026, the official commencement date of the Implementation Roadmap remains formally tied to the issuance date of the Commission's Final Order concerning this report. This date is designated as "**Day 0**" for all below implementation timelines and milestones.

This roadmap turns each recommendation into a trackable action. Each includes a named accountable owner (by role), a concrete milestone or deliverable that can be verified from documents rather than accepted on assertion (consistent with the audit’s “measure of completion” standard), and a target date. It is organized into three execution phases, followed by governance milestones that apply across all phases.

- Phase 1 — Immediate Actions (0–90 days): the report’s “Quick Hits — ASAP” items. Low-cost, high-leverage, foundational.
- Phase 2 — FY2027 Build-Out (approx. months 3–12): the report’s “Next Fiscal Year and Beyond” items that establish the underlying control layer.
- Phase 3 — FY2028 Maturity and Sustainment (approx. months 13–24): items the report describes as building “over the following two years,” plus items contingent on other BED programs (e.g., the Financial Information System (FIS) and Customer Information System (CIS) projects).

Where a recommendation’s pace depends on a BED capital projects (e.g., FIS, CIS, V3 migration) or on DPS/Commission action, that dependency is called out.

• Governance and Accountability Structure

The audit found that most of this recommendation package will, in practice, be owned by the new Principal Counsel and Compliance Officer function.

Governance Role	Assigned To (per audit report)	Function in This Plan
Executive Sponsor	General Manager	Accountable for the overall success of this initiative and for reporting to the Commission and DPS; clears resourcing and cross-departmental obstacles; signs the six-month progress report.
Regulatory Lead	Principal Counsel and Compliance Officer	Accountable for the day-to-day execution of the roadmap; maintains the compliance register, order-to-obligation register, and disclosure log; chairs the weekly

		regulatory working group; tracks milestone status against this plan.
Finance Workstream Owner	CFO	Accountable for Domain C (Financial Quality Controls) actions and escalation-threshold items with the Compliance Officer.
Operations Workstream Owners	Managers / Team leaders	Responsible for documenting and maintaining critical business processes and RACI assignments within their departments; nominate and train cross-training backups; supply data for the compliance and order-to-obligation registers.
Enterprise Risk Register	Manager of Risk Management and Safety	Accountable for the Enterprise Risk Register. Input to be provided by other workstream owners.
IT / Systems Workstream Owner	Director of IT	Accountable for general IT technical infrastructure actions, including technical change control, and the interface inventory.
V3 Rebates system Business Owner	V3 Business Owner	Accountable for the business use and evolution of the v3 Rebates system from a business perspective, including the fit-gap analysis and direction for the system.
Net Metering application Business Owner	Net Metering Business Owner	Accountable for the business use and evolution of the Net Metering system from a business perspective, including the fit-gap analysis and direction for the system.
Steering / Review Body	Weekly Regulatory Working Group (existing)	Standing forum to review register status, flag at-risk milestones, and pre-clear regulator communications; expand its remit to include roadmap status as a recurring agenda item.

• Roadmap Overview

Priority coding used throughout this plan mirrors the audit's sequencing guidance: written policies, registers, and matrices are low-or-no-cost and due immediately; the internal quality-control and oversight layer builds over the following two years.

Phase	Window	Focus	Recommendation Count
Phase 1 — Immediate	Day 0 – Day 0 + 90 days	Written policies, registers, and matrices — the foundational controls with no material cost.	19
Phase 2 — FY2027 Build-Out	Month 3 – 12 from Day 0	SOPs, independent review layers, training/succession programs, and system documentation gaps.	9
Phase 3 — FY2028 Maturity	Month 13 – 24 from Day 0	Sustained oversight, data-quality frameworks, and items tied to major system projects (FIS, CIS).	4

• Phase 1 — Immediate Actions (0–90 Days)

Regulatory Quality Controls

ID	Recommendation	Owner	Milestone / Deliverable	Target Date
AR-1	Adopt a written Commission/DPS communication and regulatory-authorization policy with defined thresholds, a pre-filing authorization checklist, and a regulatory DOA matrix.	Principal Counsel & Compliance Officer; approved by GM	Policy adopted; a documented authorization determination is recorded for every applicable filing/regulation-offering launch before commitment.	Day 0 + 30 days
AR-2	Extend the regulatory docket log into a centralized compliance register with	Principal Counsel & Compliance Officer	Register live; every recurring obligation has a named owner	Day 0 + 60 days

	named owner, trained backup, due date, source requirement, evidence, and escalation path per obligation.		and backup; closed-docket directives carried forward as tracked obligations.	
AR-3	Establish an order-to-obligation register and documented regulatory-to-operations handoff.	Principal Counsel & Compliance Officer, with Managers / Team leaders	Register operating; every Commission order/filed commitment converted to a tracked obligation with owner, evidence, and recorded receiving-owner acceptance.	Day 0 + 60 days
AR-5	Adopt a written disclosure and error-reporting policy: reportable-event threshold, escalation timing, responsible personnel, decision authority, and self-report protection.	Principal Counsel & Compliance Officer; approved by GM	Policy adopted with defined threshold and self-report protection; disclosure decisions logged against it.	Day 0 + 30 days

Operational Management Controls

ID	Recommendation	Owner	Milestone / Deliverable	Target Date
BR-1	Update and maintain the policies and procedures inventory list.	COO, supported by Managers / Team Leaders	Current, complete P&P inventory published with an owner assigned for ongoing maintenance.	Day 0 + 60 days
BR-2	Identify, document, and maintain critical business processes (starting with the highest-risk / most compliance-exposed processes, e.g., REC/EEC reporting).	Managers / Team leaders, coordinated by COO	First tranche of critical processes documented to “what, not how” standard, incorporating the RACI/process example provided by the audit.	Day 0 + 90 days (first tranche)
BR-3	Create a regulatory delegation-of-authority (DOA) matrix.	Principal Counsel & Compliance Officer	DOA matrix approved and distributed; critical decisions require sign-off by an authorized individual per the matrix.	Day 0 + 60 days
BR-4	Create a RACI matrix for critical processes (starting with the REC reporting example).	Principal Counsel & Compliance Officer, with Managers / Team leaders	RACI matrix implemented for critical processes, resolving the ownership gaps identified in the REC reporting deep dive.	Day 0 + 60 days

Financial Quality Controls

ID	Recommendation	Owner	Milestone / Deliverable	Target Date
CR-1	Systematize spreadsheet formula reviews before tariff and rate submissions.	CFO	Documented independent-review step in place; preparer and reviewer are never the same person for any tariff/rate submission.	Day 0 + 30 days
CR-2	Ensure post-implementation tariff monitoring occurs within 30–60 days of rollout.	CFO	Monitoring procedure adopted and applied to the next tariff rollout following adoption.	Day 0 + 60 days
CR-5	Formalize Enterprise Risk Frameworks: draft a financial risk policy and centralize identified risks into a structured Enterprise Risk Register.	Manager of Safety & Risk Management (with support from CFO for financial risks)	Risk policy adopted; Enterprise Risk Register populated with all currently identified financial risks.	Day 0 + 90 days
CR-6	Define clear escalation paths: quantified dollar/percentage thresholds for regulatory variances,	CFO, with Principal Counsel & Compliance Officer	Thresholds and tiered timeline published as part of the	Day 0 + 60 days

	mapped to a tiered escalation timeline (folded into the disclosure policy).		disclosure and error-reporting policy (AR-5).	
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Cross-Functional Management Systems

ID	Recommendation	Owner	Milestone / Deliverable	Target Date
DR-1	Implement mandatory cross-training tied to every compliance-critical role.	COO with Principal Counsel & Compliance Officer	Compliance-critical roles inventoried; cross-training assignments made for the highest-risk single-person-dependency roles first.	Day 0 + 90 days
DR-2	Prioritize keeping compliance and legal positions filled to eliminate single-person risk.	General Manager / HR	Recruitment and backfill treated as a standing priority; vacancy-to-fill cycle time tracked.	Ongoing, effective immediately
DR-3	Implement formal, organization-wide succession planning (strategy).	General Manager / HR	Succession-planning strategy scoped and kicked off, building on the existing Transition/Succession Planning Memo template.	Day 0 + 60 days (kickoff)

General IT Business Systems and Data

ID	Recommendation	Owner	Milestone / Deliverable	Target Date
ITR-1	Formalize a Change Control process for critical/high-risk business systems and external data exchanges (e.g. EVT interface); require upstream provider participation.	Director of IT (lead) and system ownership of V3 and Net Metering Business Owners	Change Control process documented and in force; EVT participation obligation clarified within the EVT-BED agreement.	Day 0 + 60 days
ITR-2	Formalize the data interface inventory and adopt standardized tools/processes for interface management.	Director of IT, Business Analyst (BA)	Interface inventory published, covering technical and business function for each known interface.	Day 0 + 90 days
ITR-3	Address documentation gaps in the V3 Rebates and Net Metering systems (requirements, interfaces, troubleshooting, testing); move Dev-database configuration to Production; adopt Git for code management.	Director of IT, BA, V3, Net Metering SME's	V3 Rebates documentation complete; configuration and code management aligned with IT controls.	Day 0 + 90 days
ITR-6	Perform a rigorous, unbiased fit-gap analysis on migrating V3 Rebates and Net Metering to the incoming CIS, and act decisively on the result.	V3 Business Owner, Net Metering Business Owner	Fit-gap analysis complete with a documented go/no-go decision (migrate to CIS, or harden V3 and Net Metering controls).	Day 0 + 90 days

• Phase 2 — FY2027 Build-Out (Months 3–12)

ID	Recommendation	Owner	Milestone / Deliverable	Target Date
EVT specific from ITR-1	Clarify the EVT-BED agreement clause on communication of changes to data/technical interfaces; reinforce with formal change-control techniques in both organizations.	Director of IT	Clause clarified and counter-signed by EVT; joint change-control procedure documented.	Day 0 + 6 months contingent on EVT engagement

AR-4	<u>Identify, organize/categorize and document</u> SOPs for each recurring filing type with mandatory independent pre-filing review, including formula-level verification for spreadsheet-based filings.	Principal Counsel & Compliance Officer, with Managers / Team leaders	SOP exists for each recurring filing type; independent reviewer sign-off recorded on every filing; preparer/reviewer never the same person.	Day 0 + 9 months
AR-6	Implement an internal error-detection layer: independent pre-filing QC review across recurring filing types, plus a periodic regulatory-quality review reported to leadership.	Principal Counsel & Compliance Officer	QC review documented and applied to each recurring filing type; periodic quality review presented to leadership on a set cadence.	Day 0 + 12 months (build continues into FY2028)
AR-7	Complete and prove the McNeil NEPOOL GIS remediation: extend verification to source-data accuracy, close the single-person QA dependency with a trained backup, and re-test over consecutive periods.	Manager of Utility Services & Generation, with Principal Counsel & Compliance Officer	Source-accuracy step documented and operating; named trained backup in place; defined run of consecutive clean GIS trading periods completed.	Day 0 + 12 months
BR-5	Continue identifying, <u>organizing</u> documenting, and maintaining remaining business processes.	Managers and Team leaders, coordinated by COO	Remaining critical/non-critical processes documented on a rolling basis; used for training and continuous improvement.	Rolling through FY2028
CR-3	Standardize documentation and approvals: centralized control registry with standardized templates and formal, auditable digital sign-off workflows; required for the upcoming FIS implementation.	CFO/Controller, with Director of IT	Control registry designed and templates approved; sign-off workflow requirement incorporated into FIS implementation scope.	Aligned to FIS project timeline; registry design by Day 0 + 12 months
CR-4	Measure and test effectiveness: define KPIs for control health, set benchmark baselines, and measure over time.	CFO/Controller	Control-health KPIs defined with baselines; first measurement cycle completed.	Day 0 + 9 months
DR-4	Establish stabilization and training plans for the first six months to two years for new resources, with backup coverage.	COO, with Managers / Team leaders	Standard onboarding/stabilization plan template adopted and applied to new hires in compliance-relevant roles.	Day 0 + 9 months
DR-5	Use a standard post-mortem template after every material filing or error; carry findings forward into processes.	Principal Counsel & Compliance Officer	Post-mortem template adopted; applied to every material filing/error occurring after adoption.	Day 0 + 60 days (adopt) → in continuous use
DR-6	Build a centralized case management and lessons-learned process and system/repository.	Principal Counsel & Compliance Officer, with Director of IT	Case-management system/repository in place (short term) and long-term direction set; lessons-learned entries linked to root-cause codes from the audit.	Day 0 + 12 months
ITR-4	Maintain and expand internal fluency in requirements analysis and data integration (consider leveraging SmartWorks success); expand BA/architecture capacity; apply experienced PM to the upcoming multi-system rollout.	Director of IT, BA, with COO	BA/architecture resource plan (including capability, capacity) and resource approved and staffed (hire, redeploy, or contract) ahead of major system rollout milestones.	Day 0 + 9 months
ITR-5	Standardize software and data testing to ensure alignment with business and	Director of IT	Standardized testing framework documented and used on the next major system	Day 0 + 9 months

regulatory requirements; build this expertise in-house.	change. Resource plan (including capability and capacity)
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• Phase 3 — FY2028 Maturity and Sustainment

ID	Recommendation	Owner	Milestone / Deliverable	Target Date
ITR-7	Establish formal frameworks to shift BED's strong-but-localized data-quality culture toward consistent analysis and reporting.	Business owners with support from Director of IT	Data-quality framework adopted for critical and new systems, ahead of major CIS /system conversions.	FY2028
ITR-8	Establish Information Management policies and best practices; leverage Office 365 tools to support them.	Records Manager/Information Management officer	Information Management policy adopted; supporting O365 configuration in place.	FY2028

Phase 3 dates for ITR-7 and ITR-8 are placeholders pending confirmation of the FIS and CIS project schedules, since both recommendations are explicitly sequenced around "upcoming major system conversions."

• Awaiting Regulatory Action (Not Phase-Scheduled)

The items below are not on a BED-controlled timeline and are tracked separately from the three phases above rather than forced onto a date BED cannot actually commit to.

ID	Recommendation	Owner	Milestone / Deliverable	Target Date
Regulator-directed	Support DPS/Commission consideration of written threshold guidance on the three unresolved determination classes identified in the report (pilot-offering tariff status, REC load measurement, program-funding eligibility confirmation).	Principal Counsel & Compliance Officer (BED-side liaison)	BED input provided to any Commission process addressing these classes; internal interim guidance issued pending Commission action.	As Commission process opens

• Governance Milestones (Apply Across All Phases)

Milestone	Owner	Basis	Target Date
Six-months progress report filed as a compliance filing in this docket	General Manager / Principal Counsel & Compliance Officer	Report Section 10.2 / Durability discussion	Day 0 + 6 months
Roadmap status review with weekly regulatory working group. Minutes should be documented and actioned for these meetings	Principal Counsel & Compliance Officer	Standing governance cadence (this plan)	Monthly, beginning Day 0
KPI reporting per Section 11 KPI table	Workstream owners → Principal Counsel & Compliance Officer	Report Section 11.1 (Monthly/Quarterly/Semi-annual per KPI)	Per KPI frequency, beginning with each KPI's underlying control going live
Annual KPI relevance review (SMART* check)	Principal Counsel & Compliance Officer	Report Section 11.1	Day 0 + 12 months, then annually
External follow-up compliance assessment	Commissioned by DPS	Report Section 11.2	Within 18 months

**SMART is a test that each KPI must pass to be usable — SMART stands for Specific, Measurable, Achievable, Relevant, Time-bound.*

Dependencies and Execution Risks

- EVT dependency: ITR-1 and the EVT-BED agreement clarification require counterparty engagement outside BED's direct control.
- FIS and CIS project timing: CR-3, ITR-6, ITR-7, and ITR-8 are sequenced around major system projects whose schedules are set elsewhere; dates here should be re-synced once those project plans are confirmed.
- Historical durability risk: the report notes that improvements directed by the Commission in March 2022 improvements were not sustained. This plan's monthly working-group review and the six-month progress filing are the primary mechanisms to catch drift before the 18-month follow-up assessment.
- Consecutive-period dependency: AR-7's closure depends on completing a defined run of consecutive clean GIS trading periods, which may extend the Day 0 + 11 months target date independent of BED's effort.

Next Steps to Finalize This Roadmap

- BED leadership confirms or revises the proposed owners and target dates in this document, particularly for any item touching the still-forming Compliance Officer function.
- BED and DPS agree on the cadence and format for status reporting against this roadmap ahead of the six-month progress filing.

11 Performance Benchmarks

11.1 Recommended Key Performance Indicators (KPIs)

These KPIs are meant to monitor the recommendation that tolerance-and-escalation targets are enforceable and auditable. We recommend they are monitored and periodically reported on. We also suggest that these KPIs are reviewed annually to make sure that they continue to be SMART (Simple, Measurable, Accurate, Relevant and Timely).

Regulatory Quality Controls		
KPI	Measure	Frequency
Regulatory register completeness	% of recurring obligations with owner, backup, due date, source requirement, evidence, and escalation path documented	Monthly
On-time regulatory filings	% of Commission/DPS filings submitted by due date	Monthly
Communication & pre-PUC submission policy adherence	% of Commission/DPS communications routed through defined communication/regulatory-authorization policy thresholds before submission	Monthly
Order-to-obligation traceability	% of Commission orders with a documented obligation entry and operations handoff	Quarterly
Time to disclosure	Average days from error identification to regulator notification, vs. policy threshold	Per incident / rolled up quarterly
Operational Management Controls		
KPI	Measure	Frequency
P&P inventory currency	% of policies/procedures maintained and reviewed within defined review cycle (e.g., annually)	Quarterly
Critical process documentation coverage	% of identified critical business processes with current, approved documentation	Quarterly
RACI matrix coverage	% of critical processes with an approved RACI assignment	Semi-annual
Delegation-of-authority exceptions	# of decisions made outside the approved DOA matrix	Monthly
Financial Quality Controls		
KPI	Measure	Frequency
Spreadsheet review compliance	% of tariff/rate spreadsheets with completed independent formula review prior to submission	Per submission
Post-implementation monitoring compliance	% of tariff rollouts monitored within the 30–60 day window	Per rollout / quarterly rollup
Enterprise Risk Register currency	% of identified financial risks logged, scored, and reviewed within cycle	Monthly
Variance escalation timeliness	% of threshold-breaching variances escalated within the defined tiered timeline	Monthly
Cross-Functional Management Systems		
KPI	Measure	Frequency
Cross-training coverage	% of compliance-critical roles with at least one trained backup	Quarterly
Succession plan coverage	% of critical roles with a documented, approved successor or plan	Semi-annual
General IT Business Systems and Data		
KPI	Measure	Frequency
Change control compliance	% of changes to critical/high-risk systems processed through formal change control	Monthly

Interface inventory completeness	% of known data interfaces documented (technical + business function)	Quarterly
V3 Rebates documentation gap closure	% of identified V3 Rebates documentation gaps remediated	Monthly (until closed)
Fit-gap analysis status	Milestone completion (scoping / analysis / decision) for V3-to-CIS migration assessment	Monthly during active phase

11.2 Recommended Follow-Up Assessment

Given the historical context of directed process improvements decaying over time, we strongly recommend that the DPS commissions a formal follow-up compliance assessment within **18 months**. This review should verify that newly established controls have been structurally integrated into daily operations. Furthermore, as per the KPI overview in section 10.2 Implementation roadmap we recommend BED to file a six-months progress report as a compliance filing in this docket, every six months until the PUC closes the docket.

12 Appendices

12.1 Documented Incidents

The following specific incidents, drawn from the Commission's letter of July 31, 2025 and dockets additionally provided by DPS were examined during this audit. They formed the evidentiary foundation for the root-cause analysis and broader assessment work.

Ref	Case / Incident	Nature of Incident
F1	Case No. 23-1985-INV	Rate proposal based on unapproved budgets.
F2	Case No. 22-3947-TF	Net-metering tariff error; \$26,275 under-compensation to 206 customers. BED implemented verbal DPS guidance.
F3	Case No. 24-1832-INV	Significant negative EEU fund balance from years of compounded calculation errors.
F4	McNeil NEPOOL GIS	Failure to report McNeil renewable energy certificates (RECs) in NEPOOL GIS; approximately \$951,000 in losses to BED, with additional losses to Green Mountain Power and the VPPSA.
F5	Case No. 21-2701-INV	BED omitted a required rate element without flagging the deviation, discovered on Commission review.
F6	Case No. 19-3272-PET	Chronic pattern of late, incomplete, and internally inconsistent filings.
F7	Case No. 24-0598-PET	Retroactive reimbursement of DES expenditures denied by PUC on the grounds advance approval should have been sought.
F8	Case No. 24-1848-TF	\$100,460 of ineligible DES costs in rate case; not disclosed in discovery, but BED proactively identified error and brought it to the DPS and Commission's attention afterward.
F9	Case No. 25-1010-INV	Not analyzed – open investigation.
F10	Case No. 24A-1346	33% residential-sector budget overage, attributable in part to sector misclassification and EVT-sourced data errors; not proactively disclosed.
F11	Case No. 22-1473-PET	Act 151 program implementation inconsistent with Commission representations.
F12	Case No. 25-1172-TF	Correction of F8, not recurrence. Filed 4.5%; PUC approved 4.33% following settlement identifying ineligible one-time costs in cost-of-service study; customers overcharged 0.17pp since late summer 2025; refund required.
F13	Case No. 21-1500-PET	Non-implementation of five formal Commission directives issued March 2022: (1) robust pre-filing review processes; (2) compliance checks for Commission orders; (3) QC controls for filing accuracy; (4) timely self-reporting of issues; and (5) all in place before the next demand resources plan proceeding; not escalated within BED.

Ref	Case / Incident	Nature of Incident
F14	Case No. 25-1396-TF	Late response to a request for information; BED was unaware of the existing obligation, as was DPS. The response went out only after a Department counsel called BED.
F15	Case No. 25-1390-INV	Battery-storage pilot; the applicable standard for whether a tariff filing was required was unclear; BED filed a tariff once the question was raised.
F16	Case No. 25A-1387	Thermal and process-fuel program funding eligibility assumed without a documented statutory check.
F17	Case No. 25-0476-INV	Renewable Energy Standard compliance question (load-versus-sales interpretation; certificate-banking attestation); resolved through compliance at no cost.
F18	Case Nos. 25A-0149; 26A-0191	Service-quality and reliability reporting failures; the Q4 2024 filing and the January 2026 filing are distinct matters.
F19	Revised Miscellaneous Service Fees Tariff (withdrawn August 2025)	Tariff withdrawn after the Department identified a formula error following filing.

12.2 Finding-to-evidence map

Findings in the regulatory domain have been mapped to the cases as per the below table.

Finding	Supporting matters
A-1	Absence of internal detection shown across the record: F19 (Misc. Service Fees Tariff, formula error identified by the Department after filing); F1 (23-1985-INV, no secondary verification before filing); F3 (24-1832-INV / 25-0231-INV, errors undetected through successive filings); the Department's August 29, 2025 letter.
A-2	F7 (24-0598-PET); F15 (25-1390-INV); F16 (25A-1387)
A-3	F13 (21-1500-PET); F4 (McNeil NEPOOL GIS)
A-4	F1 (23-1985-INV); F4 (McNeil NEPOOL GIS); F18 (25A-0149; 26A-0191); F19 (Misc. Service Fees Tariff)
A-5	F5 (21-2701-INV); F10 (24A-1346). F8 (24-1848-TF) described without asserting intent
A-6	F4 (McNeil NEPOOL GIS) and the May 7, 2025 remediation; F17 (25-0476-INV) is a separate compliance-clarity matter
A-7	F5 (21-2701-INV); F11 (22-1473-PET); F14 (25-1396-TF); F12 (25-1172-TF)

12.3 Defined terms and abbreviations

Organizations and Parties

Abbreviation	Full Term
BED	Burlington Electric Department (City of Burlington Electric Department)
DPS	Department or Department of Public Service (Vermont Department of Public Service), the public advocate and investigative arm before the Commission .
DU	Distribution Utility
EVT	Efficiency Vermont (the statewide energy efficiency utility program that VEIC operates under contract with the Vermont Public Utility Commission (PUC) .
GMP	Green Mountain Power
PUC	Commission or Public Utility Commission (Vermont Public Utility Commission), the quasi-judicial regulator
VEIC	Vermont Energy Investment Corporation (the nonprofit organization focused on clean energy and energy efficiency in Vermont)
VPPSA	Vermont Public Power Supply Authority, a joint-action agency representing locally owned municipal electric utilities in Vermont. Since January 2024, BED has been a strategic member of VPPSA.

Regulatory Cases and Case Types

Abbreviation	Full Term
INV	Investigation (case type suffix — e.g. Case No. 25-2607- INV)
TF	Tariff Filing (case type suffix — e.g. Case No. 25-1172- TF)
PET	Petition (case type suffix — e.g. Case No. 24-0598- PET)

Programs and Systems

Abbreviation	Full Term
CIS	Customer Information System — the software a utility uses to manage customer accounts — billing, metering, payments, and service history in one system of record.
DES	District Energy System — a non-regulated project BED spent ratepayer and EEU funds on without confirmed Commission approval .
DEER	Database for Energy Efficient Resources
EEC	Energy Efficiency Charge — the charge on customer bills that funds ratepayer energy efficiency programs.
EEU	Energy Efficiency Utility — BED's role as an administrator of state-funded energy efficiency programs.
ePUC	The electronic filing and case management system of the Public Utility Commission.
FIS	Financial Information System — the software used to manage an organization's core financial operations; general ledger, accounts

payable/receivable, budgeting, and financial reporting, in one system of record.

GIS

Generation Information System — in this context refers to the **NEPOOL GIS** (see below).

ISO-NE

Independent System Operator New England, the regional grid and wholesale-market operator (also ISO New England).

NEPOOL

New England Power Pool — the regional electricity market organization

NEPOOL GIS

New England Power Pool Generation Information System — the system used to track and report renewable energy credits (RECs).

REC

Renewable Energy Credit — a tradeable certificate representing the environmental attributes of renewable energy generation.

RES

Renewable Energy Standard — Vermont's Renewable Energy Standard (RES), under 30 V.S.A. Chapter 89, requires electric utilities like BED to source an increasing share of their power from renewable energy, with tiered sub-requirements for distributed generation, fossil-fuel savings, and new regional renewables, putting the state on a path to 100% renewable electricity by 2035.

SQRP

Service Quality and Reliability Plan — BED's framework for tracking and reporting service quality metrics to the Commission.

TEPF

Thermal Energy and Process Fuel Program

V3

The V3 Rebates system tracks usage and the related applicable rebates of Energy Efficiency Utility (EEU) programs that are approved by the PUC.

Audit and Process Terms

Abbreviation

Full Term

CCO

Chief Compliance Officer — a dedicated compliance leadership role

CFO

Chief Financial Officer — a dedicated financial leadership role

**Regulatory
Compliance**

Compliance with the State of Vermont – Public Utility Commission

GM

General Manager — BED's senior executive

HR

Human Resources

IT

Information Technology

KPI

Key Performance Indicator

QC

Quality Control

RCA

Root Cause Analysis

RCM

Risk and Control Matrix

RFI

Request for Information

RFP

Request for Proposals — the DPS document commissioning the audit

SME

Subject Matter Expert

SOP

Standard Operating Procedure

External Standards

Abbreviation

Full Term



NERC

North American Electric Reliability Corporation (non-profit regulatory authority whose mission is to assure the effective and efficient reduction of risks to the safety and reliability of the grid infrastructure across North America).

12.4 Email Analysis

What was reviewed: 527 PDF email exports covering 1,439 unique messages between BED, DPS, PUC, and counterparties from November 2019 through June 2026 related to the investigated dockets.

Tone & Culture — Positive

Relationships between BED and state regulators are consistently collegial and professional throughout the entire period. They use first names, personal asides, occasional winks and emotions. Only 3% of the messages were sent after hours and 1% on weekends, concentrated around hearing cycles and filing deadlines, including pressure peaks rather than a chronic overwork culture. Median reply time is 1.4 hours. There are no hostile exchanges anywhere in the extracted data. Both sides routinely cooperate on joint drafting, pre-filing reviews, and real-time problem solving from 2020 onwards. This includes dealing with institutional confusion — mixed-up case numbers, wrong-docket citations, clerical date errors — which appears on all sides and is corrected without blame.

Key Structural Problem — Deadline Compression

BED habitually files on the due date (which is standard practice), often in the final hours, and routinely sends drafts to DPS one day before deadlines with apologies for "late notice." This pattern has repeatedly collided with ePUC portal failures (at least six deadline-day technical incidents), producing marginally late filings. Extensions and waivers became the routine relief valve — the 2023 IRP (60 days), multiple EEC filings, and the 2025 EEC implementation (waived to March 1 from January 1) — indicating planning margins that are consistently thinner than the workload demands.

Quality Control — The Core Weakness

Documentation errors recur and escalate over the period. Examples include a self-reported tariff error (2022), a wrong-column Tier III figure (2023), a superseded incorrect EEC file (2024), and a RES compliance workbook that DPS found contained "multiple errors" and rebuilt itself.

By August 2025 the PUC wrote formally to DPS about "errors or inconsistencies in the regulatory process," prompting direct GM-to-Commissioner engagement.

Single Point of Failure

One BED policy lead sent 30% of all messages (431 of 1,439) and personally managed most investigated dockets, deadlines, filings, and ePUC mechanics across the entire six-year period. Parallel deadlines repeatedly converged on this single individual — identified as the most plausible root cause of both the compression pattern and the recurring errors.

Internal BED correspondence is effectively absent from the information provided. There are 19 unique internal messages and only one was exported stand alone, the other were quoted in external threads later. We confirmed that BED initially did not populate internal emails and later provided us with internal emails related to a specific case (22-3947) as per our request.

Recovery — Visible from Late 2025

DPS formalized a one-week advance-review expectation (July 2025), BED's GM personally negotiated filing schedules, and by December 2025 DPS described BED's testimony as "very

thorough with no questions or concerns." Early 2026 shows drafts circulating earlier, though deadline compression has not fully disappeared.

12.5 Projects and Upcoming Changes

Burlington Electric currently has a very aggressive roadmap of innovation and transformation projects. Reviewing these projects in depth was outside the audit's scope, but we identified clear organizational, cultural and project-specific patterns; many are low-cost to address with significant potential for improvement. We highlight these as risks worth monitoring, particularly where they may affect the regulatory space.

BED has been executing projects with a particular profile: a light organization that hires vendors to implement its software. We have been impressed with what BED has achieved in its IT infrastructure and environment. The risk worth highlighting is in the business applications, particularly around current and future projects.

It is rare for a vendor to look after every element of an implementation, specifically: scope, objectives, requirements, design, data conversion, integration and evolution. Vendors rarely offer contract changes in a client's interest on their own; a short-term versus long-term cost tradeoff worth watching.

BED's approach is tailored to minimize cost and maximize innovation. Our experience over the last 25 years with over 300 large Utility projects has provided many lessons that we have outlined here. The risk of unplanned issues and challenges is very high given BED's systemic lack of documented process, federated approach to managing systems and data, very lean operating model, and lack of experience with similar large-scale changes.

On the positive side, BED continues to be very innovative and an example of what can be achieved. It is also not typical for organizations to be used to or good at executing large transformational projects (system-related and otherwise).

The observations and recommendations in this section represent potential improvements and risk mitigation opportunities, not formal audit findings.

• General Observations

Observation P-1: We identified examples of typical large-project challenges at BED. Determining the magnitude of each challenge and how well it is currently managed would require dedicated project reviews. These risks exist to varying degrees in all change-related projects, regardless of how well they are managed.

We are recommending universal improvements that can both mitigate these risks and lessen their impact where they occur.

- Scope, Objectives, Design, Requirements missed or malformed
- Data quality or transformation issues
- Data Conversion challenges
- Integration risk
- Missed opportunities
- Operational setup challenges
- Contractual challenges
- Risk of cost overrun
- Cost of delay
- Cost of missed capital opportunity
- Stabilization risk

- Detailed Recommendations

12.5.1.1 Quick hits – ASAP

The major focus should be having BED drive the projects, supported by clear assignment of accountabilities and responsibilities and by sufficient resourcing, ensuring the tail does not wag the dog.

- **PR-1 (Observation P-1):** Define overall organizational objectives and define how each initiative will support them.
- **PR-2 (Observation P-1):** Document all data interfaces for key systems in terms of technical and business function. This is very useful to mitigate risks with change control as well as upcoming projects.
- **PR-3 (Observation P-1):** Develop a strategy for each initiative including all of the below:
 - PR-3A: Review the contracts and revise where possible — particularly any elements that would let BED capitalize on the project or more clearly define KPIs and responsibilities between the organizations.
 - Assess the short term and long-term costs and benefits of resource changes:
 - PR-3B: Develop an internal project organization chart with upper-level (separate resource) accountabilities for cost/schedule and solution quality. The core business lead should be full time on the project during and after the project; optimally an application owner.
 - PR-3C: Define a project control structure with responsibilities for cost/schedule with a PM, infrastructure architecture with an IT resource, business architecture and solution architecture either being separate or combined as they rely on different skill sets.
 - PR-3D: Build out and design the organization that is needed post-go-live early. Have a dedicated system owner for each large system who has no daily duties outside of the project. They will continue the role post go-live.
 - PR-3E: Develop an internal capability plan to address project management gaps that vendors are unlikely to fill, or where internal delivery would be more economical or effective. This must include conversion, integration, data cleaning, testing and change management as temporary resources.
 - PR-3F: Build an actively manage a risk register for projects, daily. Actively make mitigation plans and contingency plans for each risk. Do so for vendor-based and internal items.
 - PR-3G: Develop a punch list for post go-live items and set expectations during a stabilization period.

12.5.1.2 Large project impacts, short term cost and long-term savings

For projects already budgeted and/or started:

- **PR-4 (Observation P-1):** Make an informed decision around project changes with the BED board if the long-term returns and risk reduction from projects is worth the short-term cost, in addition to schedule gains.

- **PR-5 (Observation P-1):** One of the most complex — and consequential — aspects of any project is defining business processes, requirements, and design in terms of *what* is core to the organization, not *how* it should be executed. This distinction is a persistent challenge across most organizations and utilities, but getting it right minimizes cost and effort while maximizing return. Where possible, this work should be sequenced by priority and completed before vendors need it.

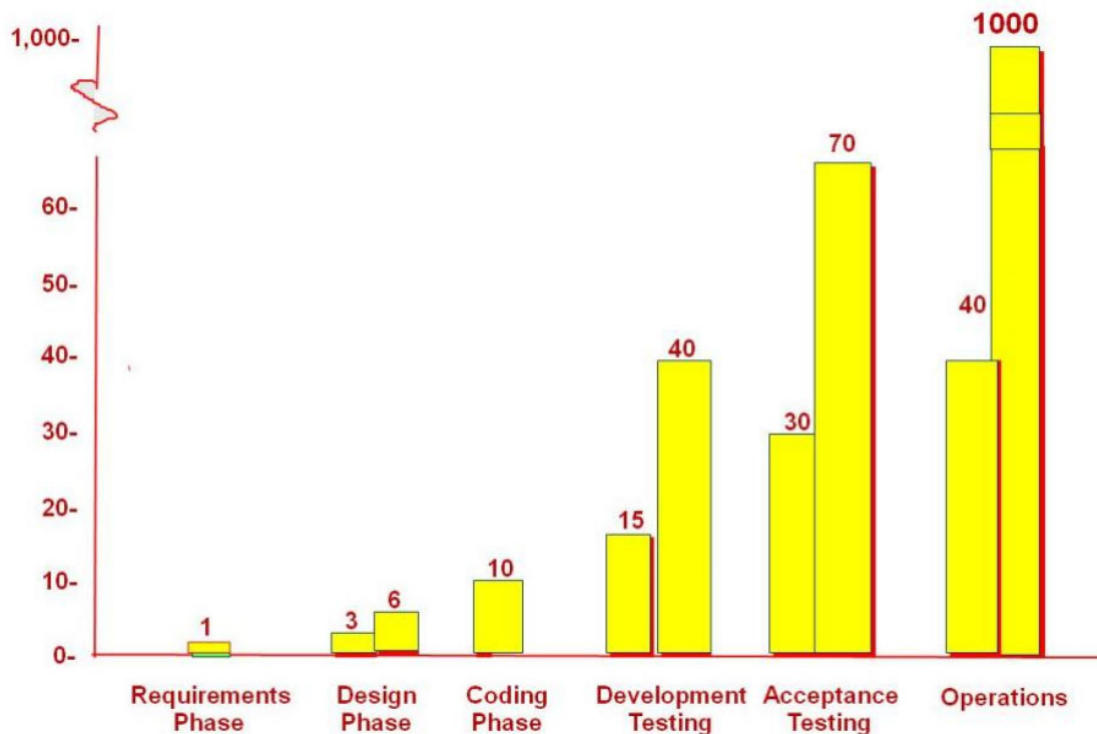
For projects not yet budgeted and started:

- **PR-6 (Observation P-1):** Start the project and be ahead of the vendors for data quality assessments, data cleaning, any contractual items that will be put on BED or are not covered.

• Details on Risk, Short Term Cost and Optimal Approaches

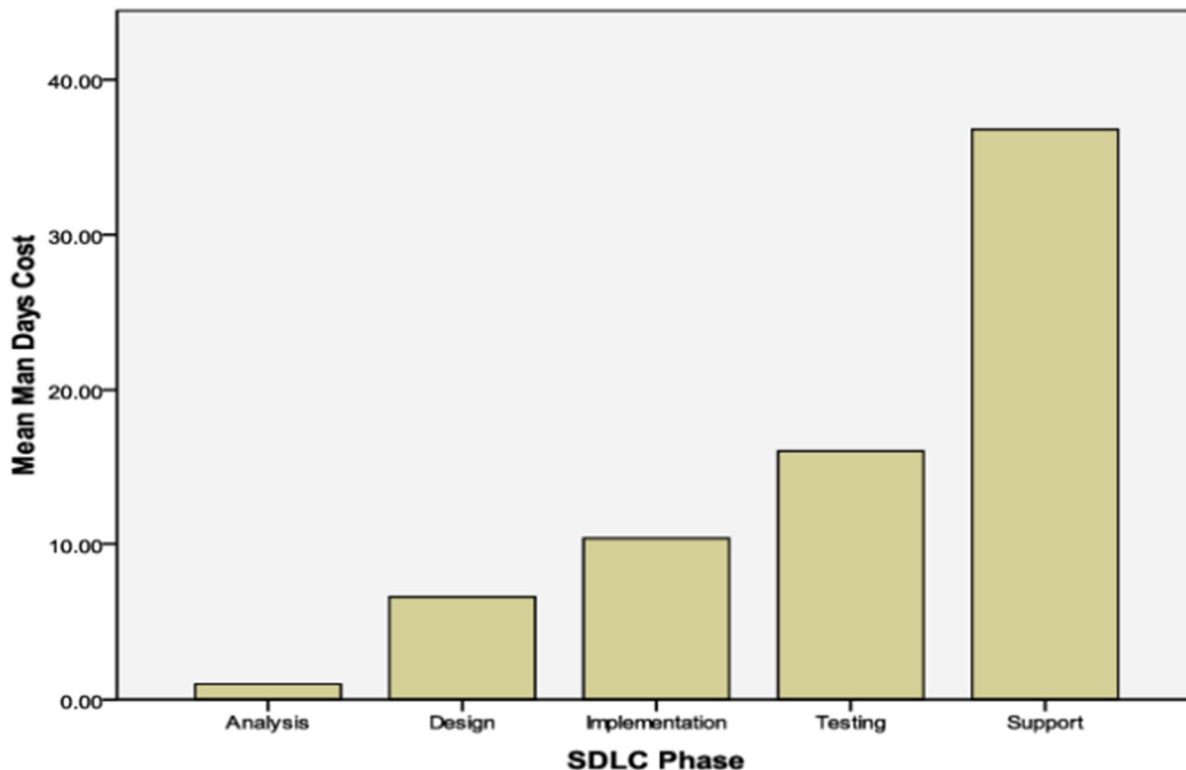
It is a balancing act to determine how much risk to have in an organization, particularly where measures put in to improve quality, reduce risk or increase control with associated costs. This section outlines the balance we are recommending and how short-term added costs are necessary to avoid long-term issues and long-term costs often not accounted for directly.

Project related Cost of Change



Hooks, I. F. and Farry, K. A., Customer-Centered Products: creating successful products through smart requirements management; AMACOM Books, NY, NY, 2001

Costs escalate quickly the later in the project lifecycle that changes occur, particularly complex ones, whether following a methodology of agile or traditional, hybrid or other means.



IBM System Science Institute Relative Cost of Fixing Defects

Modern techniques have revised some of this thinking. Mostly because the cost of software changes has come down with modern techniques. Many large system implementations have not caught up to some of these improvements. We are familiar with the software products BED has acquired and acknowledge that these products have these improvements. However, some of the challenges that BED has faced, are not impacted by these improvements.

It was well said in March of 2026 by Mike Cohn, in “The Cost of Change Curve is Outdated”:

“Understanding users is still hard. Product discovery is still hard. Organizational decision-making is still hard. AI can help us analyze data or prepare for interviews, but it hasn’t eliminated the need to deeply understand what users need and why. The hard part hasn’t disappeared—it has moved.

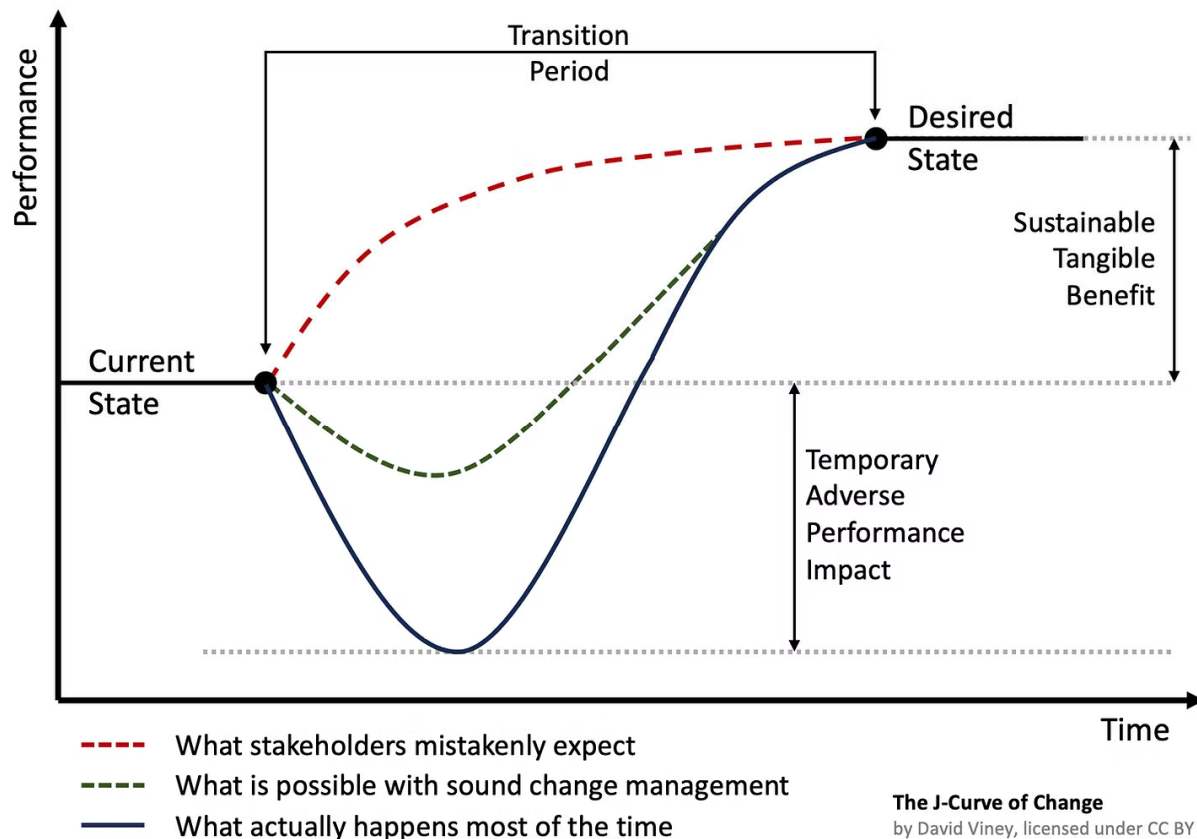
For decades, our premise has been that coding was the hard part. That is no longer true. Today, teams may spend more time understanding user needs and getting feedback.

But once we have feedback, acting on it is cheaper than ever.

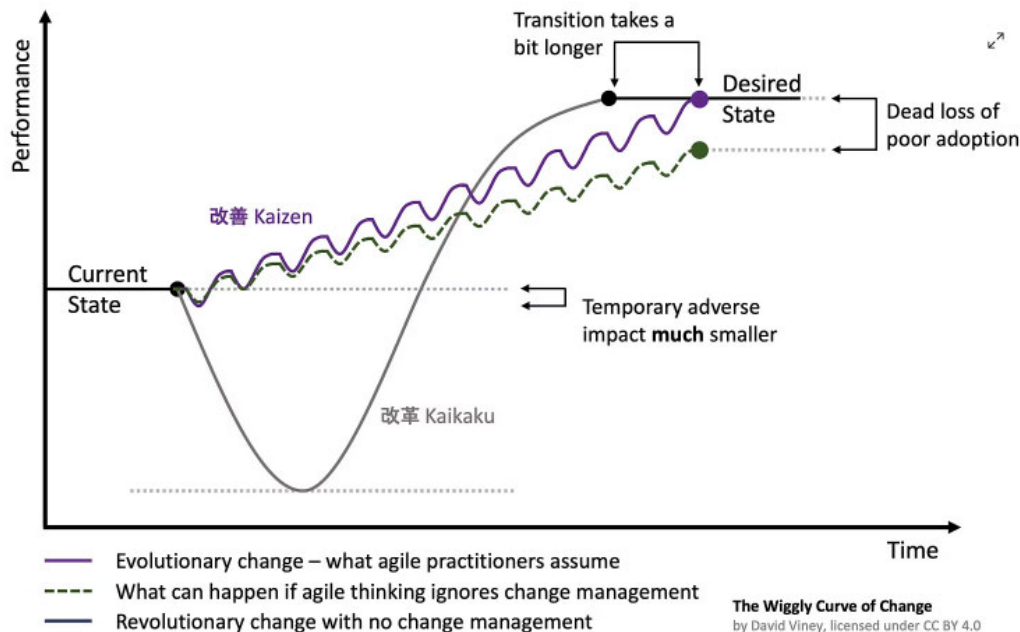
That is the key change in software economics.”

Many organizations focus on project cost alone, overlooking the transition/stabilization period and the broader organizational impact of large projects. The organizational impact of associated changes—and the stabilization period that follows—is typically not addressed in vendor contracts or their implementations. We reviewed the Software Licensing Agreements (SLAs) from BED for several of their new vendors, but did not review the underlying project contracts. (Note: on our own projects, we almost always modify vendor project contracts and frequently must accept vendor SLAs with only minor changes.)

Stabilization periods carry a real cost to the organization and typically result in performance impacts. Moving through these periods with only minor negative effects takes time and effort, and does not happen unless it is explicitly planned for. We have not evaluated BED's change management capability, nor assessed their maturity in delivering projects, as this fell outside the scope of the audit. We did, however, examine the specific systems tied to their regulatory issues, including areas affected by both the CIS and FIS projects. Based on this review, we see significant risk of regulatory non-compliance if system implementations are not properly managed through disciplined change management.



The model above will hold for most of BED's projects, as their project scales are large and will focus on a single deployment. Once in production, smaller changes can occur in a more agile fashion. In agile projects that deploy many things in small pieces, the impact of these changes can be lessened and smoothed out. However, most vendors are not mature in this model and often do not differentiate between emergency fixes, low impact changes, and more substantive changes that can impact interfaces, data, and people.



During this change period things are less stable and more effort is expended.

Typical challenges with projects: Scope, Objectives, Design, Requirements missed or malformed. An in-depth study conducted by the PMI Institute found that when projects do not meet their original goals and business objectives, inaccurate requirements management is the primary cause of that outcome almost half of the time (47 percent).

When inadequate or poor communication is the primary cause of project failure, three out of four organizations report that the issue negatively affects requirements management (75 percent) — more than any other area of their projects, including risk, stakeholders, schedule or budget. There are many components to successful project implementation — all of them interrelated and important — but clearly requirements management is one of the most critical, and when it is done poorly, the consequences can be severe. The cause and effect of poor requirements management is worse for low-performing organizations, where more than half of projects are unsuccessful primarily due to poor management of requirements. This problem costs low performers nearly 10 cents for every dollar spent.

By comparison, in high-performing organizations, only 11 percent of projects don't meet their original goals primarily due to poor requirements management, and the waste is a much more bearable 1 percent.

However, low-performing organizations are wasting almost 10 times more money on projects and programs due to poor requirements management than their high-performing counterparts — about 10 percent of every dollar spent compared to 1 percent.

Sources of these defects can include: Ambiguity, Contradictions in Scope, Undefined Scope Creep, Assumptions Gone Wrong, Lack of Stakeholder input, Insufficient Validation, Rushed Timelines.

- **Data quality or transformation issues**

Modernizing highly customized legacy CIS environments requires extensive dual-running environments and parallel processing to validate data. For tier-1 utilities, these capital programs frequently scale beyond **\$200 million**, where un-cleansed data represents the single largest variable threatening project stabilization (*Mordor Intelligence, 2026*).

Data related issues are often caused by work-arounds to handle individual system issues and can change over time. These segmented issues are often not found on these large projects until the new system is robustly tested or worse, deployed to production.

Data cleansing done reactively after go-live usually requires heavy manual intervention, field verification ("truck rolls to nowhere"), and external call-center support to handle billing anomalies. Because these remediation efforts are classified as Operations & Maintenance (O&M) expenses rather than capital expenditures (CapEx), every dollar wasted on data-driven operational inefficiency is a dollar that could have been used to fund regulatory-approved, return-earning capital projects.

When ERP projects failed to deliver on time or budget: data issues were identified as reason (42.6% of budget overruns, 63.6% of timeline overruns).

Poor data quality directly degrades decision quality and system modeling accuracy across enterprises, contributing to an average of **\$15 million per year in losses** for large organizations due to operational inefficiencies, rework, and faulty decision-making (Ehrlinger et al., 2019). When transitioning core utility systems, carrying unverified master records into a new environment amplifies these baseline losses significantly.

- **Data Conversion challenges:** Data conversion is often an issue, as this relies on both an outgoing vendor (the legacy) and the client (for their use of the product and their work-arounds) and is difficult to both assess and remediate.
- **High Risk of Total Project Failure:** Data migration is not simply a technical transfer of records; without rigorous upstream data quality control, incomplete or corrupted data directly leads to replacement project failure (Azeroual & Jha, 2021). Furthermore, perceived sunk costs in legacy systems combined with poor baseline information quality create major friction, delaying user adoption and increasing the financial risk of ERP replacement initiatives (Jo & Park, 2023).
- **Integration risk:** Exponential "Integration Tax" on Future Compliance Projects: When a utility lacks integration competency, the technical debt of a major deployment remains embedded in the enterprise. Each subsequent mandatory regulatory system change (e.g., implementing time-of-use billing mandates or real-time outage reporting interfaces) requires custom re-engineering of data pipelines. The Cost: Utilities with low integration maturity typically see systems integration consume 40% to 50% of future IT project budgets, compared to 15% to 20% for mature organizations. This opportunity cost squeezes out grid-hardening and modernization capital investments under strict regulatory CapEx ceilings.
- **Missed opportunities:** Many vendors either try to maximize revenue or minimize the effort of an implementation or do not consider and assess what can provide the greatest value at the lowest cost. Utilities often do not push for these items, as change can be difficult and it's a rare organization that looks for these opportunities in a project without the innovations being defined in advance as a goal.
- **Operational setup challenges:** Vendors do not typically train or define either the skills, resourcing or training needed to sustain their solutions, nor the process and culture needed

to successfully sustain and evolve them. Setting them up early can dramatically reduce the cost of the change.

- **Contractual challenges:**

“Only 25.3% of organizations sought guidance for contract negotiations.”

Organizations’ hesitation to engage in these services may reflect a lack of awareness about the long-term implications of poorly structured agreements.

- **Risk of cost overrun:** 215% Average Cost Overruns: In heavy industrial and utility-adjacent environments, ERP deployments suffer an average cost overrun of 215%. Underestimating the scope of data profiling, cleansing, mapping, and field validation before the technical migration begins is cited as a leading root cause (Godlan / Panorama Consulting, 2025).
- **70% Business Case Failure Rate:** Up to 70% of enterprise ERP initiatives fail to achieve their original return on investment (ROI) or business case objectives. The primary failure mechanisms are behavioral adoption hurdles and severe data quality deficiencies that were ignored during the pre-migration phase (Gartner / Huron Consulting, 2026).

- **Cost of delay**

Approximately **44% of utility providers** report significantly delayed software deployment timelines when replacing legacy CIS systems (*Fortune Business Insights*, 2026). In addition to the vendor and project and staff costs of a delayed go-live. If a system go-live is delayed because missed regulatory requirements are discovered during User Acceptance Testing (UAT), the utility cannot push the asset into the rate base. *The Cost:* If a utility is seeking a \$60 million annual rate increase (\$5 million/month) and the system deployment is delayed by 6 months due to rework, the opportunity cost is **\$30 million in unrecoverable revenue** due to regulatory lag.

\$200M+ Capital Exposure: Modernizing highly customized legacy CIS environments requires extensive dual-running environments and parallel processing to validate data. For tier-1 utilities, these capital programs frequently scale beyond \$200 million, where un-cleansed data represents the single largest variable threatening project stabilization (Mordor Intelligence, 2026).

- **Cost of missed capital opportunity:** Many of the advisor companies, financial and accounting firms are used to working with companies who want to avoid capital spend and operationalize all costs. Utilities do not work this way. ARC’s experience in this space is that the methods available to capitalize projects are often missed by most utilities which winds up costing the rate payers more rather than building a capital asset and deferring costs over time.
- **Stabilization risk:** Carrying over unverified master records (e.g., erroneous rate tables, misaligned meter read sequences, or duplicated accounts) triggers massive exception volumes. Nationally, unresolved utility billing exceptions and data errors contribute to billions in commercial revenue losses annually, demonstrating that failing to scrub data before cutover creates immediate cash-flow disruption (Bluefield Research / Bynry, 2026). In addition, operational issues after go-live produce an O&M drain on the utilities, a substantial effort and distraction during stabilization periods.

12.6 Timeline Analysis (Case 22-3947-TF)

BED has provided a timeline for one particular case so we could have a robust awareness of both the interactions and timelines in a case. This case is the solar incentive (net-metering) case. The audit team has validated and elaborate based on emails received.

Unified chronology of 572 messages: 507 internal (Netmetering5.pst + supplemental production), 32 external-corpus, and 33 newly added (customer contact-form thread, direct BED–DPS negotiation correspondence, and the Apr 2022 Wing–Gibbons meeting-scheduling chain), Jan 19, 2022 – May 2024, with origin events from June 2021 confirmed via Stebbins–Wheelock's contemporaneous OneNote notes of the Jun 1, 2021 DPS call (added Jul 23, 2026). Cases 21-2186 / 22-3947-TF. Updated July 23, 2026

- The Timeline in Seven Phases

1. Origin (Jun–Aug 2021)	BED's actions here were grounded in two things it did not originate: the statute, and DPS's own oral direction. On Jun 1, 2021, DPS's Sean Foley told BED verbally, on a Teams call, that 'Adjustor moves with rate case. Adjustor moves down as tailblock rate goes up' — in substance the formula written into 30 V.S.A. § 219a(h)(1)(K)(i) (2014 Act 99), which sets the required NM 1.0 solar credit as the 'adder sum' (\$0.20 for systems ≤15kW) minus the tailblock rate. On Jun 4, BED's billing lead implemented that guidance, holding the combined tailblock + incentive total to \$0.20/kWh for existing NM 1.0 customers — a –21.2% cut to the incentive that exactly offset the concurrent 7.5% tailblock increase. BED documented its understanding contemporaneously. The same statutory subdivision, however, separately provides that a credit 'shall not fluctuate' with later rate changes (IV), and that an installed system keeps its credit for at least 10 years (v) — read together, these most plausibly mean the formula sets a customer's credit once, then freezes it, rather than recomputing it at every rate case. Neither DPS's verbal guidance nor BED's implementation accounted for that protection, which is what later put BED offside of 30 V.S.A. § 219a(h)(1)(K)(i)(IV) and is the root cause of the whole matter. DPS's own position later shifted: after the 2022 customer complaint, DPS Legal reviewed the matter and advised the incentive should not have been adjusted for these customers, citing the same 'shall not fluctuate' provision. A SEPARATE FINDING, same day: BED's billing lead also flagged, in writing, that the manual method left the system unable to track a future credit-back — a distinct, downstream controls gap, unrelated to whether the rate-design application was lawful.
2. Complaint (Jan–Feb 2022)	A customer contact form on Jan 19 asks BED to explain the rate increase against solar savings — the earliest documented contact. A second, independent customer raises the same question by Feb 10; BED's Residential Energy Services Engineer gives both customers a written paraphrase of the PSD guidance months before any regulatory filing. DPS convenes complaint discussions six days before the Commission approves the rate case containing the error (Feb 24).
3. DPS review (Mar–Jun 2022)	BED files the compliance tariff Mar 11 (a month absent from every email record) and meets with DPS twice — Mar 3 and May 3, 2022 — on the underlying complaint; neither meeting's content survives except by retrospective reference. DPS sends BED the actual highlighted statute (30 V.S.A. § 219a) Apr 7 — its first written position on the merits — then restates it as a prose legal argument May 18. DPS asks twice whether BED's counsel will attend a follow-up meeting and, on Apr 20, explicitly flags that the issue 'might ultimately have legal ramifications that could also end up before the PUC.' BED's earliest documented contact with counsel is Jun 9 — about seven weeks later, and 'per our call' in that email implies contact began even earlier by phone. Separately, BED voluntarily stopped billing the disputed surcharge to customers effective May 1, 2022, before any DPS or PUC order. An annotated tariff follows Jun 6.
4. Drafting & negotiation (Jun–Aug 2022)	BED sends DPS a written 2-step remediation plan Jun 16 (revert via the pending rate case; refund via separate filing). DPS rejects that venue Jul 7, directing BED to the biennial-update process instead — the actual origin of the eventual 22-3947 filing. BED had also proposed refunding only the one-year difference (Aug 2021–Aug 2022); DPS

	disputes that scope Jul 8. Meanwhile, drafting continues: impact tables by May 6, complete draft revisions by Jun 30, refund-authorization language added Jul 11 — the 13-week 'lag' was continuous working time.
5. Filing & self-report (Sep 2022)	Case 22-3947 filed Sep 2 with the refund proposal; DPS admits it could not review the draft. Crunch: 213 messages in the month, testimony revised five times in one day. Sep 14, 5:05 PM: the regulatory specialist self-reports a two-value clerical error with no prior internal discussion; management learns of it the next morning and responds procedurally, without reproach. External counsel (William Ellis, McNeil Leddy & Sheahan) is active throughout on testimony and filing documents.
6. Orders (Sep–Nov 2022)	PUC approves the reverted incentive Sep 30, acknowledging the error was 'inadvertently approved.' Refunds authorized Nov 16. Nov 22: the original erroneous tariff is approved in the old docket after eight months of silence.
7. Refunds & close (Jan 2023 – May 2024)	Refunds hand-calculated — the exact gap flagged in Jun 2021 — and credited to 206 customers (\$26,275) in Jan–Feb 2023, a wider scope than BED's initial one-year proposal but notably smaller than BED's own \$64,682 shortfall estimate from May 2022 (see Phase 3) — the two figures are not reconciled in the record reviewed. External counsel remains active through refund execution (Nov–Dec 2022). The internal record ends Apr 28, 2023, but the external corpus shows customer-notice work continuing into May 2023 and the docket closing into the routine biennial cycle by May 2024.

- BED's implementation was grounded in the statute and in DPS's own oral direction. The \$0.20 combined total is the statutory 'adder sum' under 30 V.S.A. § 219a(h)(1)(K)(i), and the formula DPS's Sean Foley described verbally on Jun 1, 2021 mirrors it. BED's billing lead implemented what BED understood DPS to be directing, and documented that understanding contemporaneously (Jun 10, 2021: 'a correct interpretation of the DPS's guidance, based on my understanding'). The error, when it surfaced, was a shared one — a real statutory formula applied to the wrong population, following real (if incomplete) guidance from the regulator — not a rate-design mechanism BED devised on its own.
- The error was a specific misapplication, not the formula itself. Read together, 30 V.S.A. § 219a(h)(1)(K)(i)'s adder-sum formula and its (IV)/(v) protections most plausibly mean a customer's credit is set once, then frozen for 10 years. Applying the formula to recompute credits for customers already installed — rather than reserving it for new installations — is what conflicts with the statute. Neither DPS's Jun 1, 2021 verbal guidance nor BED's Jun 4 implementation addressed that distinction.
- The root cause and the controls gap are two different failures. The rate-design application is what made the credit unlawfully fluctuate with the residential rate — that was true the day it was implemented. The credit-back tracking gap, flagged the same day, only became consequential sixteen months later when the error had to be corrected.
- BED's legal-engagement gap is narrower than first thought, and BED acted on its own before any order. We received a redacted "all text removed" email with BED's counsel and contact begins Jun 9, 2022 — about seven weeks after DPS raised the question in April, not four months — and 'per our call' in that email implies contact began even earlier by phone. BED also stopped billing the disputed surcharge on its own initiative, May 1, 2022, before any DPS or PUC order.
- The record's gaps are caused by a data-completeness caveat, not the absence of communication (i.e. silence). March 2022 — the compliance-filing month — remains absent

from every email record after five rounds of requests for the relevant emails; the entire Jun 9–14, 2022 counsel-engagement exchange is likewise absent from the email files provided. Only the docket itself evidences the March filing.

- Conduct findings favor good faith on both sides, with a specific, identifiable error rather than misconduct. BED's record shows consistent, good-faith explanation to customers from early 2022, an unprompted refund proposal, an against-interest self-report, a voluntary halt to disputed billing in May 2022, counsel engaged within about seven weeks of DPS raising the question, and — per the statute and DPS's own oral direction — implementation of a real legal formula it did not invent. The gap in BED's process was not seeking written confirmation of that guidance before applying it to existing customers, and not independently catching that the formula, as applied, conflicted with the 10-year lock-in protection in the same statute it was relying on. On the regulator's side: DPS's own line staff described the formula without its lock-in caveat, DPS Legal later took a different position citing the same subdivision. DPS took ten months to put any position in writing, and its venue decision set the filing track that produced the September crunch.

12.7 Business Process Analysis

We analyzed one of BED's key business processes to determine if it was correct and actively used by staff to produce the required results. We also assessed BED's approach to the development and adoption of business process management and compared that with what we've seen in other electric utilities.

We converted one of the business processes; BED's *'Business Process for Generation Asset Environmental Attribute Reporting'* into a more traditional business process model in order to assess its quality and value to the organization.

We found that it was unclear how thoroughly BED tested its documented business process as it appeared to be incomplete, unclear and not current. It consisted of a bulleted list of tasks rather than a graphical model with supporting documented procedures.

We met with BED leadership and two business analysts to review our findings and demonstrate a business process example, based on one of BED's current business processes, of how many other utilities create and use documented business processes.

The objective of this meeting was to explore how BED currently documents its business processes and introduce BED to an alternative way to build and maintain corporate knowledge to support:

- Correct and consistent performance of duties
- Clarification of roles and responsibilities
- Introduction of performance measurements
- Knowledge transfer to backup resources
- Training of new resources
- Continuous improvement efforts

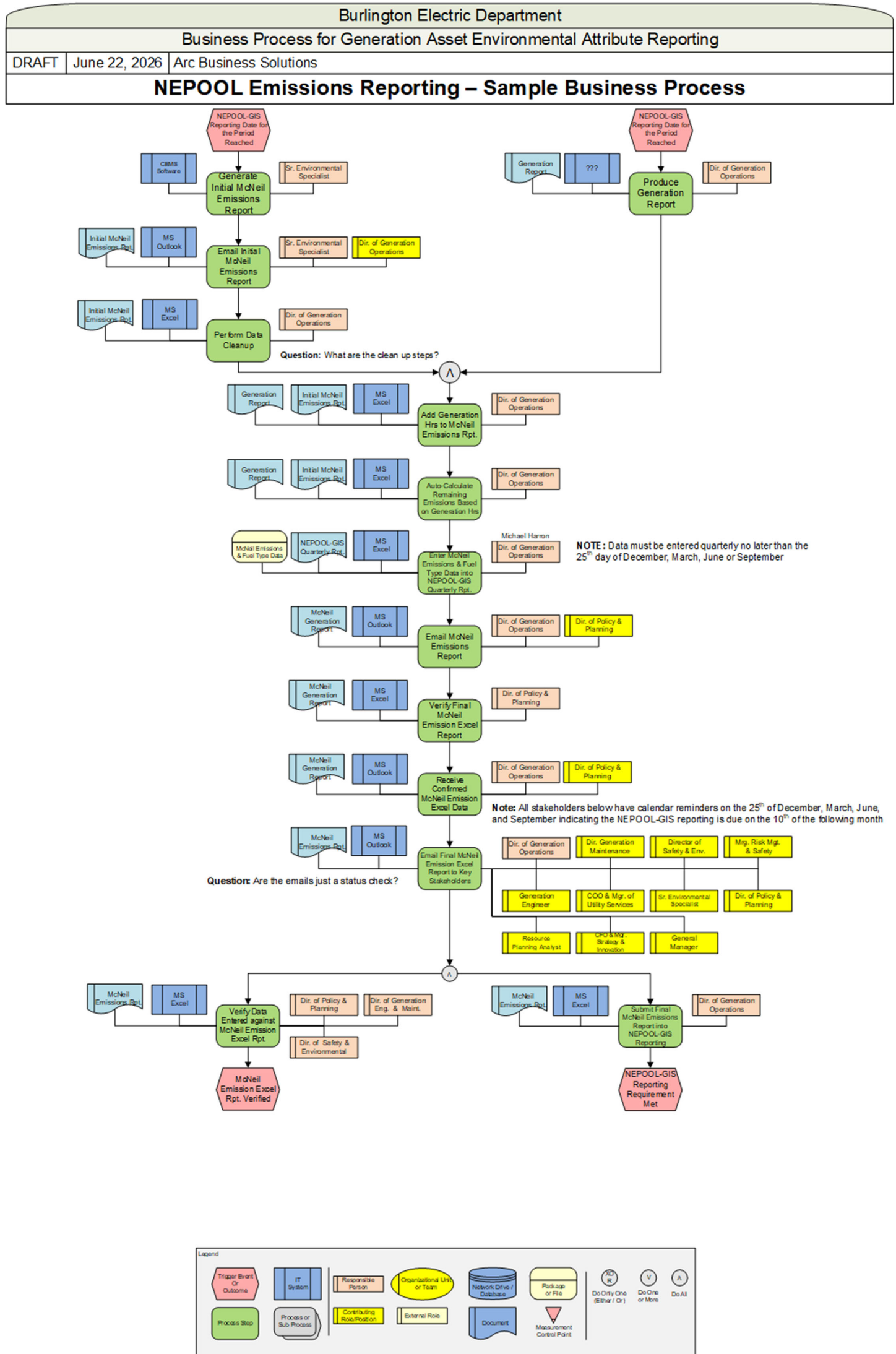
The following depicts the evolution of how a business process is created and evolved from a bulleted text list to a simple draft business process model to a fully validated end state model.

Text List – the starting point. This text was taken from the process drafted by BED: *‘Business Process for Generation Asset Environmental Attribute Reporting’*.

NEPOOL Emissions Reporting – Current State Business Process

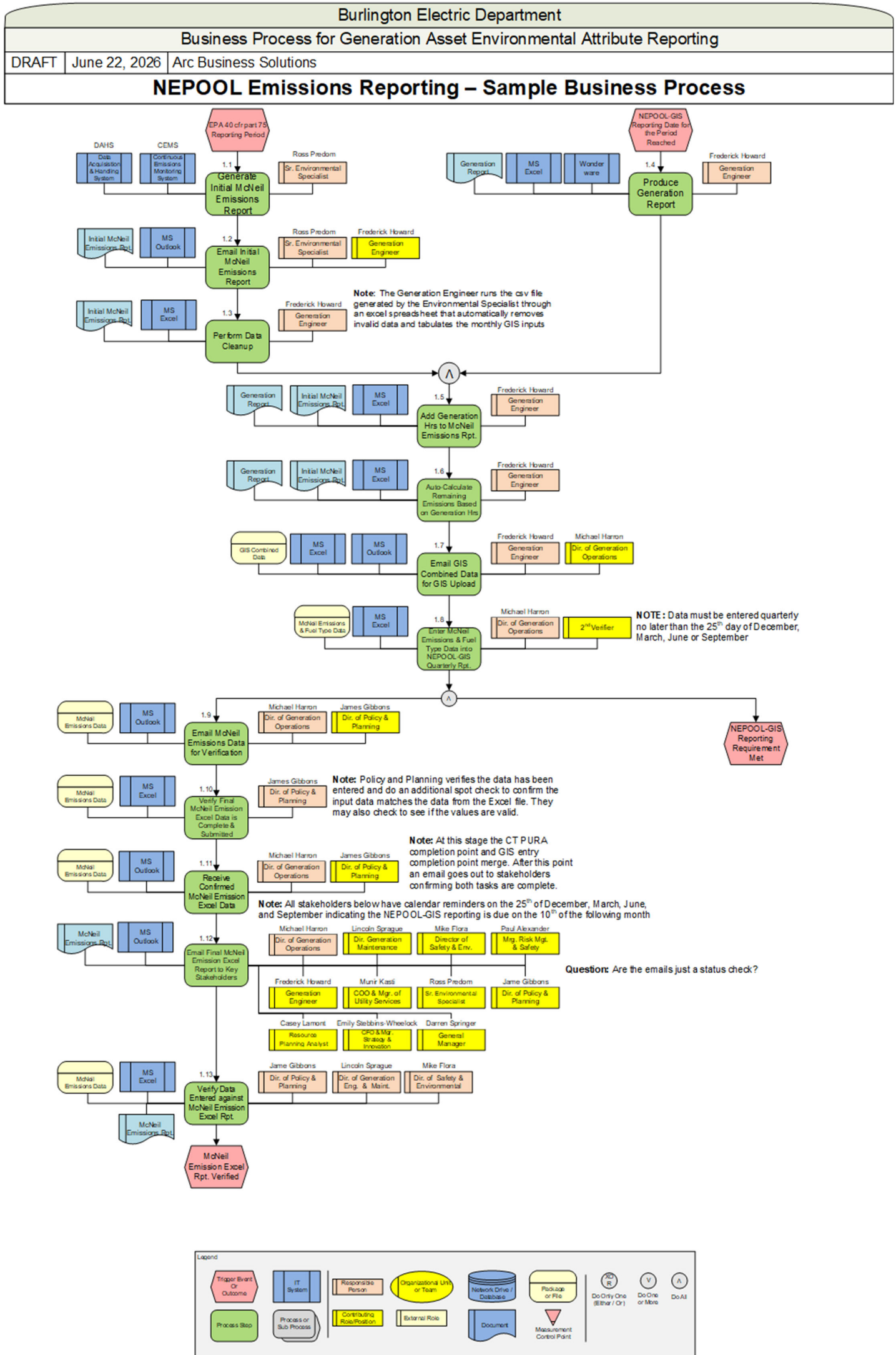
1. Sr. Environmental Specialist generates the initial McNeil emissions Excel report from the CEMS software and sends it to the Director of Generation Operations.
2. Director of Generation Operations performs data cleanup (correcting misreadings by equipment, e.g.) and adds generation hours from the Generation Report.
3. The Excel sheet auto-calculates remaining emissions based on generation hours.
4. The Director of Generation Operations enters McNeil emissions and fuel type data into the NEPOOL-GIS quarterly no later than the 25th day of December, March, June, or September (15 days prior to the quarterly reporting deadline).
5. The Director of Generation Operations emails the final McNeil emissions Excel report to Policy & Planning for data entry verification purposes.
6. The Director of Generation Operations emails the following when McNeil data entry is complete:
 - Director of Generation Maintenance
 - Generation Engineer
 - COO and Manager of Utility Services
 - Director of Safety
 - Sr. Environmental Specialist
 - Manager of Risk Management & Safety
 - Director of Policy & Planning
 - Resource Planning Analyst
 - Resource Planner
 - CFO and Manager of Strategy & Innovation
 - General Manager
7. The Director of Generation Engineering & Maintenance and/or the Director of Safety & Environmental will check data entered against the emissions Excel report.
8. Policy & Planning will check data entered against the emissions Excel report.
9. All positions indicated in #5 above have calendar reminders on the 25th day of December, March, June, and September indicating that NEPOOL-GIS reporting is due on the 10th of the following month.

Initial draft model – the first evolution from plain text to an end-to-end graphical model.



Validated end state model – The validated end state model is ready for BED staff to implement and follow. It significantly differs from the initial draft in several key respects. During the review meeting, the BED subject matter expert noted that the Generation Engineer plays a critical role in contributing and combining key report data — a role the original text / model failed to identify. The original text and model also left the report submission point unclear; the final model identifies it explicitly. Another discrepancy the end state model surfaced: most report data validation occurs after submission, not before. BED leadership explained this is because the report can be resubmitted if issues with the original data are found.

Validated End State Model. More clarity is added at each stage.



We also demonstrated a useful method of documenting the supporting procedure for this model. The following is an extract from the report we created that demonstrates how the work is done, who does the work, what systems and data are used to perform the work, and what to do if something goes wrong.

1.0 PROCESS DETAILS

Process Steps	
Step 1.1 Generate Initial McNeil Emission Report	Sr. Environmental Specialist generates the initial McNeil emissions Excel report from the CEMS software <i>Responsible: Sr. Environmental Specialist</i> <i>Contributes: NA</i> <i>External Role: NA</i> <i>Outputs: Initial McNeil emissions Excel report has been generated and sent to the</i> <i>Systems: CEMS</i>
Step 1.2 Email Initial McNeil Emissions Rpt.	Sr. Environmental Specialist sends the initial McNeil emissions Excel report to the Director of Generation Operations. Director of Generation Operations <i>Responsible: Sr. Environmental Specialist</i> <i>Contributes: Generation Engineer</i> <i>External Role: NA</i> <i>Outputs: Initial McNeil Emissions report emailed to Generation Engineer</i>
Step 1.3 Perform Data Cleanup	Director of Generation Operations performs data cleanup (correcting misreadings by equipment, e.g.) Note: The Generation Engineer runs the csv file generated by the Environmental Specialist through an excel spreadsheet that automatically removes invalid data and tabulates the monthly GIS inputs <i>Responsible: Generation Engineer</i> <i>Contributes: NA</i> <i>External Role: NA</i> <i>Outputs: McNeil emissions Excel report data cleaned</i> <i>Systems: MS Excel</i>
Step 1.4 Produce Generation Report	Generation Engineer produces the Generation Report. <i>Responsible: Generation Engineer</i> <i>Contributes: NA</i> <i>External Role: NA</i> <i>Outputs: Remaining emissions data added to the McNeil emissions Excel report</i> <i>Systems: Wonderware, MS Excel</i>

Process Steps	
Decision 2  Do All	When the data from Initial McNeil Emission Report has been cleaned up and the Generation report has been produced, go to: Step 5 Add Generation Hrs to McNeil Emissions Rpt.
Step 1.5 Add Generation Hrs. to McNeil Emissions Rpt.	Generation Engineer adds generation hours from the Generation Report. Responsible: Generation Engineer Contributes: NA External Role: NA Outputs: McNeil emissions and fuel type entered into the NEPOOL-GIS by the required date Systems: MS Excel
Step 1.6 Auto-Calculate Remaining Emissions Based on Generation Hrs.	The Excel sheet auto-calculates remaining emissions based on generation hours. Responsible: Generation Engineer Contributes: NA External Role: NA Outputs: The Excel sheet has auto generated the remaining emissions Systems: MS Excel
Step 1.7 Email GIS Combined Data for GIS Upload	The Generation Engineer emails the GIS combined data for GIS upload Responsible: Generation Engineer Contributes: Director of Generation Operations External Role: NA Outputs: GIS combined data emailed to Director of Generations Operations
Step 1.8 Enter McNeil Emissions & Fuel Type Data into NEPOOL-GIS Quarterly Report	- The Director of Generation Operations enters McNeil emissions and fuel type data into the NEPOOL-GIS quarterly no later than the 25th day of December, March, June, or September (15 days prior to the quarterly reporting deadline). - At this point the NEPOOL-GIS reporting requirement has been met ☐ Process Complete Responsible: Director of Generation Operations Contributes: 2nd Verifier External Role: NA Outputs: McNeil emissions and fuel type data entered into the NEPOOL-GIS quarterly
Decision 2  Do All	After Step 1.8 Send report to key stakeholders AND Submit report: - Step 1.9 Email final McNeil Emission Excel report for verification - Outcome: Submit Final McNeil Emission Excel Rpt. to Satisfy NEPOOL-GIS Reporting

Process Steps	
Step 1.9 Email Initial McNeil Emissions Report	The Director of Generation Operations emails the final McNeil emissions Excel report to Policy & Planning for data entry verification purposes. <i>Responsible: Director of Generation Operations</i> <i>Contributes: Director of Policy and Planning</i> <i>External Role: NA</i> <i>Outputs: Policy and Planning has received the final McNeil emissions Excel report</i>
Step 1.10 Verify Final McNeil Emission Excel Report	- Director of Policy and Planning verifies the final McNeil emissions Excel report - Note: Policy and Planning verifies the data has been entered and do an additional spot check to confirm the input data matches the data from the Excel file. They may also check to see if the values are valid. <i>Responsible: Director of Policy and Planning</i> <i>Contributes: NA</i> <i>External Role: NA</i> <i>Outputs: The final McNeil emissions Excel report verified</i>
Step 1.11 Receive Confirmed McNeil Emission Excel Data	The Director of Generation Operations receives the verified McNeil emissions Excel report from the Director of Policy and Planning <i>Responsible: Director of Generation Operations</i> <i>Contributes: Director of Policy and Planning</i> <i>External Role: NA</i> <i>Outputs: Verified McNeil emissions Excel report ready for submission</i>
Step 1.12 Email Final McNeil Emission Excel Report to Key Stakeholders	- The Director of Generation Operations emails the McNeil data entry is complete to key company stakeholders - NOTE: All contributing stakeholders receive calendar reminders on the 25th of December, March, June, and September indicating the NEPOOL-GIS reporting is due on the 10th of the following month <i>Responsible: Director of Generation Operations</i> <i>Contributes: Director of Generation Maintenance, Generation Engineer, COO and Manager of Utility Services, Director of Safety, Sr. Environmental Specialist, Manager of Risk Management & Safety, Director of Policy & Planning, Resource Planning Analyst, Resource Planner, CFO and Manager of Strategy & Innovation, General Manager</i> <i>External Role: NA</i> <i>Outputs: Relevant company stakeholders have received the final McNeil data</i>

Process Steps	
Step 1.13 Verify Data Entered against McNeil Emission Excel Rpt.	The Director of Generation Engineering & Maintenance and/or the Director of Safety & Environmental check data entered against the emissions Excel report.
	☐ Process Complete
	<i>Responsible: Director of Generation Engineering & Maintenance and/or the Director of Safety & Environmental</i> <i>Contributes: NA</i> <i>External Role: NA</i> <i>Outputs: McNeil data verified against the emissions Excel report</i>

RACI MATRIX

Another tool we demonstrated to BED was a RACI matrix. The purpose of a RACI matrix is to clarify who is responsible for doing the work, who is ultimately owns for the work, and who else might be involved with the work as an advisor. Finally, it identifies who is informed about the work as it is completed. RACI stands for **R**esponsible, **A**ccountable, **C**onsulted and **I**nformed. This clarity helps organizations to streamline their work, produce consistent and predictable results, and clarifies who is in charge of the work as well as who else contributes to the work. The example we presented is below:

NEPOOL-GIS Reporting – Current State Business Process RACI

REC Report Tasks		Tasks Actors												
		Sr. Environmental Specialist	Generation Engineer	Director of Generation Maintenance	2nd Verifier	Director of Policy and Planning	Director of Generation Maintenance	Director of Safety (Sales?) & Environment	Manager Risk Management and Safety	COO & Manager of Utility Services	Resource Planning Analyst	CFO & Manager of Strategy and Innovation	General Manager	
1.1	Generate Initial McNeil Emissions Report	R												
1.2	Email Initial McNeil Emissions Report	R	R											
1.3	Perform Data Cleanup		R											
1.4	Produce Generation Report		R											
1.5	Add Generation Hours to McNeil Emissions Report		R											
1.6	Auto-Calculate Remaining Emissions Based on Generation Hours		R											
1.7	Email GIS Combined Data for GIS Upload		R	R										
1.8	Enter McNeil Emissions and Fuel Type Data into NEPOOL-GIS Quarterly Report [report uploaded]			A	R									
1.9	Email Initial McNeil Emissions Report for Verification			R		R								
1.10	Verify Final McNeil Emissions Excel Report Data is Complete and Submitted					R								
1.11	Receive Confirmed McNeil Emission Excel Data			R		R								
1.12	Email Final McNeil Emission Excel Report to Key Stakeholders	I	I	R		I	I	I	I	I	I	I	I	I
1.13	Verify Data Entered Against McNeil Emission Excel Report					R		R	R					

R – Responsible, A – Accountable, C – Consulted, I – Informed

12.8 Cost of Out-of-Control vs In-Control Benefits

BED's regulatory record includes 13 documented incidents (F1–F13, one excluded per open Commission order) spanning 2019–2026. Modeling the internal staff time, external spend, revenue/rate impact, and regulatory-relationship cost of each incident puts the historical cost of being **out of control** at roughly \$1.08M–\$1.63M (mid-case ~\$1.32M). This is driven largely by the ~\$1M unreported REC issue (F4) and a cluster of smaller filing, funding, and reporting errors. Much of this cost — refunds, overcharges, corrective staff time, external legal/consulting — flows through to rates, meaning ratepayers, not shareholders, absorb the consequences of non-compliance.

Beyond the one-time incident costs, staying out of control carries an ongoing annual drag of an estimated \$40,000–\$215,000 (mid-case \$100,000). A meaningful share of this is a direct ratepayer cost. DPS staff routinely correcting or rewriting BED submissions is public sector time paid for by ratepayers, and every incident that draws extra PUC/DPS scrutiny adds review overhead that is likewise recovered through rates. Add to that senior bandwidth absorbed in avoidable escalations, onboarding friction from undocumented processes, and slower regulatory approvals, and the picture is one of ratepayers repeatedly funding the cost of BED's process gaps rather than the benefit of well-run operations.

Moving to an **in-control** state — implementing a threshold policy, RACI, compliance register, process documentation, and a second-review/QC step — carries an estimated one-time cost of \$40,000–\$250,000 (mid-case \$120,000) plus \$15,000–\$60,000/year (mid-case \$25,000) to sustain. Against \$100,000/year of avoided ongoing cost, that yields net annual savings of roughly \$75,000 (mid-case), with payback in about 19 months — savings that, structurally, benefit ratepayers since BED's costs are rate-recovered. This excludes the far larger avoided exposure to one-time incidents like F4 and F8, each of which represented direct dollars pulled from the rate base through refunds or disallowed costs.

For ratepayers specifically, an in-control BED means several things. First, avoiding *unrecoverable* losses like the McNeil NEPOOL GIS reporting failure (F4, ~\$951,000) — a genuine net cost to ratepayers that cannot be undone once the reporting deadline is missed. This is different in kind from episodes like the F2 net-metering error (\$26,275) and F8 ineligible DES costs (\$100,460): these were refunds and disallowed costs that, once corrected through subsequent rate proceedings, largely returned ratepayers to the position they would have been in absent the error — a timing and administrative cost, not a lasting one. Second, less DPS and BED staff time spent identifying, litigating, and correcting these errors after the fact. From a pure ratepayer-cost standpoint, staff time is a relatively fixed input regardless of error rates; the efficiency loss of errors and litigated cases necessarily, could delay other proceedings, unless there was slack in workloads or headcount increases. The efficiency gain from fewer errors is realized mainly in redirecting that staff time to higher-value work, not in avoiding a ratepayer charge that wouldn't otherwise be incurred. Third, a stronger regulatory relationship that translates into faster rate case approvals and less contested review of routine filings. This value shows up as lower administrative drag on every future rate case, not just a one-time fix — and it compounds precisely

because it avoids the rare, unrecoverable losses like McNeil, not because it eliminates refund-type errors that are otherwise largely self-correcting.

There's also a qualitative benefit that doesn't fully monetize but matters to ratepayers over time: regulatory goodwill. Recent PUC correspondence flagged "errors or inconsistencies in the regulatory process," prompting direct GM-level engagement with the DPS Commissioner — evidence that an out-of-control posture invites heavier scrutiny on every subsequent filing, which itself becomes a recurring, rate-recovered cost. Restoring that goodwill (placeholder value: \$25,000–\$150,000/year) works in ratepayers' favor by lowering the friction, and cost, of getting future rate requests approved.

Bottom line: the cost of remaining out of control (historical: ~\$1.3M; ongoing: ~\$100K/year) substantially exceeds the cost of moving in control (~\$120K one-time, ~\$25K/year), with payback in under two years. Because BED's costs are rate-recovered, this isn't just an internal efficiency question — it's a direct ratepayer protection case: every dollar of non-compliance cost avoided is a dollar that doesn't need to be recovered through rates.

All figures are illustrative mid-case estimates from the model; ranges (low/mid/high) are available in an underlying workbook for each line item.