

CI C0068718

IT – DERMS Solution Project

REDACTED

September 11, 2026





NSEB APPROVAL SHEET

Project Title: IT - DERMS Solution Project

CI Number: C0068718

Date: September 11, 2026

Expenditure Profile			Type of Filing	
Year	Budget Amount	Project Estimate	☒	Capital Project Authorization
			☐	Unforeseen and Unbudgeted (U&U)
			☐	Planned & Advanced (P&A)
			☒	Subsequent Approval Item
2025	236,595	117,704	☐	Authorization to Overspend (ATO)
2026	857,294	532,163	☐	Scope Change
2027	1,860,114	2,315,547	☐	Final Cost (FIN)
2028	-			
Total	\$2,954,002	\$2,965,414		

COMMENTS

Submitted on behalf of NOVA SCOTIA POWER INCORPORATED

Approved on behalf of NOVA SCOTIA ENERGY BOARD

Authorized Signatory
Dave Pickles
Chief Operating Officer

DATE
September 11, 2026

DATE

CI Number: C0068718

Title: IT - DERMS Solution Project

Start Date:	2025/02
In-Service Date:	2027/09
Final Cost Date:	2028/03
Function:	General Plant
Forecast Amount:	\$2,965,414

DESCRIPTION:

This project will implement a Distributed Energy Resource Management System (DERMS) platform in NS Power's Distribution Control Centre (DCC). The DERMS platform will enable automation of the processes for Distributed Energy Resource (DER) management, including capabilities for monitoring, control, and coordination of DERs on the distribution system. The project includes the selection of a platform which will provide centralized visibility and allow for orchestration of DER dispatch through integration with NS Power's Operational Technology (OT), utility-owned DERs, and aggregators. The project will also establish and/or update operating procedures necessary to facilitate the growing number of DERs in Nova Scotia through use of the DERMS platform.

DERs, such as rooftop solar, battery storage systems, electric vehicles, smart thermostats, and other grid-edge or customer-sited technologies are increasingly becoming an active part of Nova Scotia's electricity grid. Currently, DCC operators have no visibility into the DERs in the distribution system and dispatch of available DERs is enabled by decentralized, manual processes. A robust and automated system for the operational management of DERs is needed to support the increasing adoption of DERs in a manner which allows NS Power to identify and proactively address potential distribution system impacts which may result from increased DER penetration.

The DERMS platform will enable real-time visibility into the status of DERs and will have operational coordination and control capabilities which can be utilized by NS Power, as appropriate, to maintain safe and reliable distribution system operations while supporting continued DER integration into the Nova Scotia grid. The DERMS will be capable of monitoring and coordinating DER aggregations, communicating with DER aggregators, and will be able to integrate DERs into NS Power's OT ecosystem through interfaces with other NS Power enterprise systems such as ADMS. This is a foundational project which will enable monitoring, coordination, and dispatch of DERs alongside traditional grid assets as part of normal distribution system operations.

The solution will provide the DCC with the tools needed to:

- Reduce manual operational DER management effort through process automation;
- Improve operational awareness through centralized visibility and control of DERs;
- Standardize management of a multi-vendor, multi-protocol, multi-integration, DER fleet;
- Establish a framework and operational procedures to support future DER integration.

In addition to establishing a more robust and automated operational system with the visibility and control capabilities needed to identify where DER adoption is changing feeder conditions, the DERMS platform is a foundational investment which has functions that can be scaled in future as Nova Scotia's energy landscape and DER integration strategy continue to evolve. The platform has functionalities which can support future use cases, including those supporting the transition of DERs from unmanaged influences on the distribution system into actively coordinated resources through:

- Integrated tools which enable advancement toward more dynamic hosting capacity analysis
- Grid status awareness and locational dispatch of aggregated DER and Demand Response (DR) resources;
- A common operational framework for DER orchestration;
- A foundation which can support future expansion of DR, customer management, and DER programs;
- Virtual powerplant (VPP) capability and DER aggregation at scale
- Established operational processes and tools which can support and simplify integration of future DER technologies
- Forecasting DER capabilities

Summary of Related CIs +/- 2 years:

Pursuant to Section 11.2 of the CEJC, related CIs for General Plant projects include “Work completed on the same asset (application, building, etc.).”

- No other projects in 2024, 2025, 2026, 2027, or 2028.

Depreciation Class: General Plant – Office Furniture and Equipment - Computer Software

Estimated Life of the Asset: 10 years

JUSTIFICATION:

Justification Criteria: Information Technology Application and Hardware System

Sub Criteria: Customer Experience

Why do this project?

DERs, including solar PV, battery storage, electric vehicles, demand response resources, and customer-owned energy assets continue to play an increasingly important role in achieving Nova Scotia’s clean energy objectives. NS Power’s DCC operators currently have limited real-time visibility and control of DERs on the distribution system and the operational processes which enable DER dispatch are decentralized and manual. Deploying DER orchestration capabilities through DERMS strengthens system-wide DER and feeder visibility and modernizes core grid operations and control platforms. This sets a foundation for reliable and secure DER dispatch, supports grid resilience and flexibility, and helps ensure DERs can be integrated with the system as active, controllable resources rather than passive connections.

The growing adoption of DERs in Nova Scotia presents risks to the distribution system if left unmanaged long-term. Uncoordinated and unmonitored DERs interacting with the distribution grid can result in unplanned behavior, creating localized impacts that cannot be identified by grid operators without a DERMS platform. The integration of existing and future DERs, enabled by a DERMS platform which is fully embedded into DCC operations, enables the visibility needed to accurately forecast, understand, and manage potential impacts of DERs. The DERMS platform enables improved feeder visibility, operating awareness, distribution restoration strategies and coordination of DER and voltage-control settings.

NS Power recently engaged a third-party consultant, Dunskey, to develop a Distributed Energy Resource Integration Roadmap (DERIR) for Nova Scotia in collaboration with key stakeholders. The aim of the DERIR was to provide a holistic view of DER integration in Nova Scotia. As DER adoption scales, Dunskey notes that new operational challenges are introduced and properly coordinated DER deployment increases grid operators' visibility and control, improving grid security, affordability and reliability. Dunskey considers DERMS to be integral to DER integration because they provide real-time DER visibility, coordination, and control, and can connect to individual DERs, aggregate their capabilities, and support real-time monitoring, forecasting, and dispatch based on grid needs, market signals, and operating constraints.

This project advances the DER orchestration strategy set out in the DERIR which is intended to allow for coordination of DER behaviour to help avoid grid constraints. Specifically, this project supports the DERMS Requirement and Evaluation Framework and DERMS Procurement and Progression initiatives in the DERIR. These are foundational roadmap initiatives which Dunskey considers to be aligned to current DER integration priorities in Nova Scotia and necessary to advance DER integration efforts.

This project will allow NS Power to better understand near-term DER impacts through DERMS integrations with NS Power’s Operational Technology (OT), utility-owned DERs and potentially E1’s Demand Response Aggregator. It will establish a foundation which will allow the Company to build grid awareness and DERMS experience and develop DER operational management procedures. The DERMS platform also has capabilities that allow for future expansion toward broader DER orchestration and planning as data quality, operating experience, and system requirements mature.

Why do this project now?

Increased customer adoption of DERs, increasing severity and frequency of weather events, and environmental policy mandates (e.g. 80 percent renewable energy) are all key considerations within Nova Scotia’s current energy landscape. NS Power needs to establish operational management capabilities and processes which provide DER visibility and enable coordination, where appropriate. This project will enable NS Power better visibility to understand the status

and capabilities of DERs on the system today which will support the efficient, effective management of an increasingly complex and bi-directional electric system as DER penetration continues to increase.

From 2019 to 2024, EV vehicle registrations increased from 160 annual registrations in 2019 to over 2,800 in 2024, and net-metering interconnections tripled from 764 in 2019 to over 2,000 in 2025. Approximately 7.5% of feeders have net metering participation rates exceeding 5% of connected premises, with the highest reaching 10.8%. Heat pump installations are also growing in the province, with an estimated 21,300 installations in 2025. The 2026 Load Forecast Report projects that about 50 percent of homes use heat pumps for heating (63 percent for cooling) in 2026, increasing to 73 percent for heating (89 percent for cooling) by 2036.

Nova Scotia's system peak demand is forecast to increase approximately 11 percent between 2025 and 2035. The Province's 2030 Clean Power Plan and the most recent IRP's led by NS Power (2020 IRP and 2022 Evergreen IRP) point to the value of Demand Response programming to reduce peak load requirements. The management of DERs connected to the grid is becoming increasingly important to enable system flexibility, reliability, and stability and to advance Nova Scotia's climate goals.

Additionally, amendments to the Electricity Act introduced in 2022 allow customers to install self-generation and energy storage systems of up to 27 kW without participation in Nova Scotia Power's interconnection review process. As a result, more behind-the-meter DERs may be deployed without detailed utility studies, limiting NS Power's visibility into these assets, their characteristics, and their potential interactions with the grid.

These trends highlight the need for proactive planning and management of DER adoption and electrification-driven demand growth. As DER penetration increases, utilities commonly experience operational challenges including voltage and power quality issues, masked load that obscures actual system demand, reverse power flow, protection and backfeed occurrences, and increased forecasting uncertainty. These impacts can affect planning assumptions, system restoration activities, and the safe and reliable operation of the distribution system. These issues will become increasingly relevant for NS Power as DER adoption grows, particularly on rural radial feeders and where behind-the-meter resources may operate without direct utility visibility.

Without a DERMS, NS Power has limited ability to monitor DER behaviour, accurately assess DER impacts on feeder conditions, forecast system DER impacts, and coordinate DER operations through its OT systems. This project will improve visibility and DER forecasting and establish the grid-aware operational capabilities which will be required to proactively manage rising DER adoption and maintain reliable system operations.

NS Power has confirmed partial funding support through federal funding for DERMS, reducing the overall cost of the project by approximately \$1.7M. The agreement with NRCAN dictates that the project must be approved, executed, and benefits realized by March 31, 2028.

Investment in this platform will also support sustained DER adoption and evolving DER management needs such as hosting capacity assessments, non-wires alternatives, and improved DER forecasts and analysis. Investment in a scalable DERMS platform now will support DER integration planning as DER adoption increases and grid requirements continue to evolve, while allowing NS Power to take advantage of notable project savings through NRCAN funding.

Why do this project this way?

NS Power does not currently have a centralized platform for operational management of DERs. Today, DERs are managed through a combination of vendor-specific platforms, customer program systems, and manual processes. This approach limits operational visibility, coordination across DER programs, and integration with utility operational systems, and will become increasingly difficult to scale as DER adoption grows.

NS Power determined that a scalable, foundational Grid DERMS was the preferred implementation alternative to achieve NS Power's goals of visibility, coordination, and control capabilities.

NS Power evaluated several alternatives, including continued reliance on manual processes, expanded use of existing demand response and DER aggregation platforms, an ADMS-led approach, and implementation of a comprehensive enterprise-wide DERMS. While each alternative provides certain benefits, none provides the combination of grid awareness, operational coordination, scalability, and integration required to support increasing DER adoption in Nova Scotia.

Continued reliance on manual processes and stand-alone vendor tools is not a sustainable long-term option. As DER adoption increases, the volume of operational data, coordination requirements, and system interactions grow significantly, making manual monitoring, analysis, and dispatch increasingly resource-intensive and difficult to scale.

Demand response management systems and DER aggregators are effective for customer enrollment, program administration, and device-level coordination but do not provide visibility into localized distribution system conditions or constraints. Similarly, ADMS is a critical operational platform but does not provide the specialized DER registration, forecasting, aggregation, communications, and orchestration capabilities available through a DERMS.

A comprehensive enterprise-wide DERMS was also considered; however, it would introduce additional cost and complexity while duplicating capabilities already provided by existing market participants and customer-facing platforms. NS Power's current requirement is to establish foundational utility operational capabilities for DER visibility, coordination, and integration with distribution operations.

The selected approach implements a foundational DERMS platform that integrates with existing operational technology, demand response platforms, and DER aggregators while providing the grid-aware coordination layer required to support safe and reliable distribution system operations. The solution establishes a scalable foundation that can evolve alongside future DER adoption and operational requirements.

The DERMS software was competitively procured through an RFP process. Ten vendors were invited to participate, and four submissions were received and evaluated. The selected solution achieved the highest overall evaluation score based on requirements, functionality, vendor support, and implementation considerations.

Contingency Statement

Contingency for this project has been determined using a combination of subject matter expertise such as Professional Engineers, and the non-binding contingency guidelines. Consistent with the Decision Gate (DG) process described in the non-binding contingency guidelines, a 20 percent contingency has been applied. This project is in DG5. To support Natural Resources Canada funding requirements, the Capital Work Order is being submitted prior to the completion of System Integrator (SI) procurement and detailed planning discussions with the implementation vendor and SI. As a result, certain implementation, integration, and resource requirements are based on preliminary estimates and may be refined as project planning progresses.

The contingency is intended to address risks related to internal labour required for integration activities, resource availability, commercial pricing adjustments prior to contract execution, and System Integrator costs resulting from the RFP process. The contingency reflects prudent project planning and is intended to provide sufficient flexibility to accommodate refinements identified during the detailed design and implementation phases.

Reason for Variance

The increase of \$11,412 from the 2026 ACE Plan subsequent submittal estimate of \$2,954,002 is due to improved cost and schedule clarity obtained through the RFP process.

Capital Project Detailed Estimate

Location: General Plant

CI#: C0068718

Title: IT - DERMS Solution Project

Execution Year: 2025-2027

Description	Unit	Quantity	Unit Estimate	Total Estimate	Cost Support Reference	Completed Similar Projects (FP#s)
Regular Labour						
Project Manager	PD	270	\$ 420	\$ 113,400		
OT BSA	PD	229	\$ 420	\$ 96,180		
IT Integration Specialist	PD	105	\$ 420	\$ 44,100		
IT Planner	PD	15	\$ 420	\$ 6,300		
IT BSA	PD	51	\$ 420	\$ 21,252		
DBA	PD	15	\$ 420	\$ 6,300		
OT Lead	PD	250	\$ 420	\$ 105,000		
ADMS Specialist	PD	60	\$ 420	\$ 25,200		
SME	PD	60	\$ 420	\$ 25,200		
DCC Manager	PD	35	\$ 420	\$ 14,700		
Engineering	PD	150	\$ 420	\$ 63,000		
DCC System Operator	PD	77	\$ 420	\$ 32,340		
OCM	PD	65	\$ 420	\$ 27,300		
Technician	PD	7	\$ 420	\$ 2,940		
QA	PD	45	\$ 420	\$ 19,074		
			Sub-Total	\$ 602,286		
Contracts						
Asset Integration field work	lot	1	\$ 26,250	\$ 26,250		
			Sub-Total	\$ 26,250		
Consulting						
Planning Support	lot	1				
Integration Support	lot	1	\$ 150,000	\$ 150,000		
Cyber Security Consulting	lot	1	\$ 19,200	\$ 19,200		
Implementation Support	lot	1	\$ 1,135,000	\$ 1,135,000	Attachment 2	
Architecture Consulting	lot	1	\$ 27,520	\$ 27,520		
Professional Implementation Services (PIS)	lot	1			Attachment 1 pg 22	
			Sub-Total	\$ 2,869,033		
Capital Contributions						
NRCan Capital Contribution	lot	1	\$ (1,700,000)	\$ (1,700,000)		
			Sub-Total	\$ (1,700,000)		
Materials						
Integration hardware	lot	1	\$ 50,000	\$ 50,000		
			Sub-Total	\$ 50,000		
Other Goods & Services						
Contingency	%	20%	\$ 3,547,569	\$ 709,514		
			Sub-Total	\$ 709,514		
Interest Capitalized						
AFUDC				\$ 70,230		
			Sub-Total	\$ 70,230		
Administrative Overhead						
AO				\$ 338,101		
			Sub-Total	\$ 338,101		
SUB-TOTAL (no AO, AFUDC)				\$ 2,557,083		
TOTAL (AO, AFUDC included)				\$ 2,965,414		
Original Cost				\$ -		

Note 1: The labour figures noted above are an average of salaries across a variety of jobs within similar classifications including fringe, and are used solely for budgeting purposes.

Note 2: Small differences in totals are attributable to rounding.



Instructions: Select option in Column B.
Columns C through G will auto-populate.

Document No: XXX-XX-XXXX-XXXX

Project Cost Estimate Input Checklist and Maturity Matrix																				
Equipment Replacement		Required fields:		Estimate Classification																
Project Name: IT - DERMS Solution Project		Started or Preliminary	Class 5	Class 4	Class 3	Class 2														
Maturity Level of Project Definition Deliverables		Defined or Complete																		
General Project Data																				
A. Scope																				
Project Scope of Work Description	Defined (D)	P	P	D	D	D														
B. Capacity																				
Not Applicable																				
C. Project Location																				
Hardware (server, network infrastructure)	Defined (D)	P	P	D	D	D														
D. Requirements																				
Codes and/or Standards	Not Applicable (NA)	NR																		
Legislative Requirements	Not Applicable (NA)	NR																		
E. Technology Selection																				
Design/Technology	Defined (D)	NR	P	D	D	D														
F. Strategy																				
Contracting/Sourcing	Defined (D)	NR	P	D	D	D														
Escalation	Not Applicable (NA)	NR																		
G. Planning																				
Logistics Plan	Defined (D)	P	P	P	D	D														
Integrated Project Plan	Preliminary (P)	NR	P																	
Project Code of Accounts	Defined (D)	NR	P	D	D	D														
Project Schedule	Defined (D)	NR	P	D	D	D														
Regulatory Approval & Permitting	Defined (D)	NR	P	D	D	D														
Risk Register	Defined (D)	NR	P	D	D	D														
Stakeholder Consultation/Engagement/Management Plan	Defined (D)	NR	P	D	D	D														
Work Breakdown Structure (WBS)	Defined (D)	NR	P	D	D	D														
Start-up & Commissioning Plan	Preliminary (P)	NR	P	P/D																
Technical Deliverables (Specifications and/or Drawings)																				
Network Infrastructure	Preliminary (P)	P	P																	
Data Architecture	Preliminary (P)	P	P																	
Security Assessment	Preliminary (P)	NR	P																	
Privacy Impact Assessment	Not Applicable (NA)	NR																		
Information Systems/Telecommunication Drawings	Not Applicable (NA)	NR																		
Total Responses		<table border="1"> <tr> <td colspan="2">Total # Deliverables for this Project</td> <td>5</td> <td>16</td> <td>12</td> <td>11</td> <td>11</td> </tr> <tr> <td colspan="2">% Defined/Complete towards Class Estimate</td> <td>100%</td> <td>100%</td> <td>75%</td> <td>69%</td> <td>69%</td> </tr> </table>					Total # Deliverables for this Project		5	16	12	11	11	% Defined/Complete towards Class Estimate		100%	100%	75%	69%	69%
Total # Deliverables for this Project		5	16	12	11	11														
% Defined/Complete towards Class Estimate		100%	100%	75%	69%	69%														

Comments:

While AACE does not provide guidelines for the Information Technology (IT) projects, industry best practices such as PMI's Practice Standard for Project Estimating recommend IT Projects follow a Risk base work cycle like a Decision Gate (DG) process where the project scope, schedule, and budget are continuously defined over a series of decision gates. This project is filed at DGS with a contingency level consistent with that stage of the project. The maturity checklist completed above demonstrates that the majority of the project deliverables have been defined and that the relevant technical deliverables have been started. This project measured 75% of deliverables defined or completed for a class 3 estimate.

Legend:

The maturity level is an approximation of the completion status of the deliverable. The completion is indicated by the following descriptors:

General Project Data:

- Not Required (NR): May not be required for all estimates of the specified class, but specific project estimates may require at least preliminary development.
- Preliminary (P): Project definition has begun and progressed to at least an intermediate level of completion. Review and approvals for its current status has occurred.
- Defined (D): Project definition is advanced, and reviews have been conducted. Development may be near completion with the exception of final approvals.

Technical Deliverables:

- Not Required (NR): Deliverable may not be required for all estimates of the specified class, but specific project estimates may require at least preliminary development.
- Started (S): Work on the deliverable has begun. Development is typically limited to sketches, rough outlines, or similar levels of early completion.
- Preliminary (P): Work on the deliverable is advanced. Interim, cross-functional reviews have usually been conducted. Development may be near completion except for final reviews and approvals.
- Complete (C): The deliverable has been reviewed and approved as appropriate.

Note: This checklist is intended to be used for IT/OT projects. In lieu of specific AACE guidelines for these types of projects, this checklist was developed by NS Power following the principles of the guidelines to demonstrate confidence in the cost estimate maturity.

T203 - APPENDIX A - TCO PROJECT FINANCIALS - IT -DERMS Solution

Project costs must be detailed by major project phase and would normally align with a potential stage-gate (i.e. preliminary design, initial scoping, requirements, etc.). Within each phase, major cost items must be described separately as appropriate to the type and scale of the project. The tables may be expanded to include additional phases if required and columns may also be added if it is necessary to include additional fiscal years.

Table A.1 - Project Costs (CAPEX or OPEX)

Project Costs (gross)	CAPEX	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034
Phase 1 - (describe)											
530050 Regular Labour	CAPEX	\$ 30,841	\$ 173,461	\$ 397,984	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
531550 Contracts	CAPEX	\$ -	\$ -	\$ 26,250	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
531400 Materials	CAPEX	\$ -	\$ -	\$ 50,000	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
532500 Consulting	CAPEX				\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
532850 Application Software	CAPEX				\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
535100 Other Goods and Services	CAPEX	\$ -	\$ -	\$ 709,514	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
536750 Capital Contributions	CAPEX	\$ (101,086)	\$ (568,292)	\$ (1,030,622)	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
535700 Admin Overheads	CAPEX	\$ 17,411	\$ 97,345	\$ 223,345	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
605050 AFUDC Interest	CAPEX	\$ 4,305	\$ 8,541	\$ 57,384	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Total Costs (Sum Lines 1, 2, 3)	\$ 2,965,414	\$ 117,692	\$ 532,175	\$ 2,315,546							

Table A.2- Sustaining Operating Costs

Sustaining Operating Costs (gross)	OPEX	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034
Licensing Fees	OPEX							\$ -	\$ -	\$ -	\$ -
Labour to maintain and operate the DERMS platform	OPEX							\$ -	\$ -	\$ -	\$ -
Nrcan Contribution	OPEX							\$ -	\$ -	\$ -	\$ -
Total Sustaining Operating Costs	\$ 2,974,483				\$ 879,553	\$ 1,047,465	\$ 1,047,465				

Table A.3 - Operating Savings to be Realized

Savings		2025	2026	2027	2028	2029	2030	2031	2032	2033	2034
		\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
		\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Total Savings											

Note to Authors: Table A.5 Lines 7 through 9 are populated automatically from Tables A.1 through A.3

Table A.4- TCO Financial Summary

TCO	Total	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034
Total Capital Costs (Line 4)	\$ 2,965,414	\$ 117,692	\$ 532,175	\$ 2,315,546							
Total Sustaining Operating Costs (Line 5)	\$ 2,974,483				\$ 879,553	\$ 1,047,465	\$ 1,047,465				
Total Operating Savings (Line 6)	\$ -										
Net TCO (Line 7+8)-Line 9)	\$ 5,939,896	\$ 117,692	\$ 532,175	\$ 2,315,546	\$ 879,553	\$ 1,047,465	\$ 1,047,465	\$ -	\$ -	\$ -	\$ -
FTEs	Total	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034
Total FTEs Required - Implementation	6.15	0.35	1.80	4.00	-	-	-	-	-	-	-
Total FTEs Required - Ongoing	5.25	-	-	-	1.75	1.75	1.75	-	-	-	-
Current FTEs No Longer Required	-	-	-	-	-	-	-	-	-	-	-
Net FTE Requirement (Lines 15+16-17)	11.40	0.35	1.80	4.00	1.75	1.75	1.75				

REDACTED (CONFIDENTIAL INFORMATION REMOVED)

**CI C0068718 Confidential Attachment 1 has been removed
due to confidentiality.**

Category	Scope Item	Range		
		Low	Most Likely	High
Planning (Phase 1) 2026	Requirements & Use Cases Validation	\$ 75,000.00	\$ 112,500.00	\$ 225,000.00
	Solution Architecture	\$ 20,000.00	\$ 30,000.00	\$ 250,000.00
	Data Quality Assessment and Readiness	\$ 75,000.00	\$ 112,500.00	\$ 400,000.00
	High-Level Design	\$ 10,000.00	\$ 15,000.00	\$ 350,000.00
	Test Planning	\$ 25,000.00	\$ 37,500.00	\$ 200,000.00
	Dev / Sandbox / DevOps setup & POC	\$ 40,000.00	\$ 60,000.00	\$ 200,000.00
	Change Management	\$ 40,000.00	\$ 60,000.00	\$ 200,000.00
	Total	\$ 285,000.00	\$ 427,500.00	\$ 1,825,000.00

Implementation (Phase 2) 2027	Detailed Design	\$ 75,000.00	\$ 112,500.00	\$ 200,000.00
	Integration Development	\$ 250,000.00	\$ 375,000.00	\$ 1,200,000.00
	Testing (SAT, SIT, UAT, Test Cases, Defect Management, Test Automation)	\$ 250,000.00	\$ 375,000.00	\$ 800,000.00
	Deployment Planning, Cutover, Mock Runs, and DR / Failover Support	\$ 150,000.00	\$ 225,000.00	\$ 400,000.00
	Training and Organizational Change Management	\$ 75,000.00	\$ 112,500.00	\$ 300,000.00
	Hypercare and Knowledge Transfer	\$ 50,000.00	\$ 75,000.00	\$ 250,000.00
	Total	\$ 850,000.00	\$ 1,275,000.00	\$ 3,150,000.00

Phase 1 & 2	\$ 1,135,000.00	\$ 1,702,500.00	\$ 4,975,000.00
------------------------	------------------------	------------------------	------------------------