Q.	At the November 10, 2020 Technical Conference there was a discussion of a potential phased approach to the Customer Service System Replacement Project. One potential approach is to proceed in Phase One with the work necessary to bring the project to the point of awarding the RFP for acquisition of the software and then in Phase Two seek approval for implementation. Please outline the pros and cons of such an approach and as well identify any other potential phased approaches.		
A.	A. Propo	osed Approval Approach	
	Newfoundlan	nd Power's 2021 Capital Budget Application (the "Application") proposes a	
	multi-year project to replace the Company's Customer Service System ("CSS"). ¹		
	The Application proposes the approval of all expenditures required to bring into service a		
	replacement Customer Information System. The total cost of the CSS Replacement		
	Project is estimated at \$31.6 million over 3 years.		
	Approval of all expenditures estimated to be required for the CSS Replacement Project		
	will allow all	3 stages of this project to be executed as a continuous effort without delay.	
	TI 2 (
	The 3 stages of this project are:		
	(i)	Pro implementation stage This stage involves a 2 phase producement	
	(1)	Pre-implementation stage – This stage involves a 2-phase procurement effort that includes procuring a software solution and third-party	
		implementation services for that software.	
	(ii)	Implementation stage – This stage includes designing, testing, and	
	(11)	deploying the replacement system.	
	(iii)	Post-implementation stage – This stage requires addressing any issues	
	()	necessary to stabilize the system following deployment.	
	Executing thi	s project as a continuous effort will allow the replacement system to be	
	deployed during the 3 rd quarter of 2023. ² Deployment during the 3 rd quarter reduces		
	project execution risks. This is because customer outages and related customer service		
	requirements are lowest during this time of the year.		
	Executing this project as a continuous effort will also ensure continuity in resourcing		
	over the duration of the project. Industry research indicates adequate resourcing is one of		
	the top challenges for a project of this nature. ³ Newfoundland Power's plan is structured		
	to provide continuity in resourcing across all 3 project stages. This will allow adequate		
	expertise to be available over the duration of the project. ⁴		
		potential pha One potentia the project t in Phase Tw such an apprA.A.A.PropeNewfoundlar multi-year prThe Applicat replacement of Project is estApproval of a will allow allThe 3 stages(i)(ii)(iii)(iii)Executing thi deployed dur project execu- requirementsExecuting thi over the dura the top challed to provide co	

¹ See the 2021 Capital Budget Application, Volume 1, Customer Service Continuity Plan.

² Newfoundland Power's *Customer Service Continuity Plan* targets a deployment timeframe of the 3rd quarter of 2023.

³ TMG Consulting notes that "general inadequate staffing" was the top challenge cited by utilities who have recently replaced their Customer Information System. See TMG Consulting, *CIS Replacement Risk Mitigation*, April 2016, page 7.

⁴ See the 2021 Capital Budget Application, Volume 1, Customer Service Continuity Plan, Attachment A, page 22, Figure 6.2.

1 2		Approval of the <i>CSS Replacement Project</i> as multi-year capital expenditures is consistent with past practice of the Board. For example, Newfoundland Power's 2021 Capital		
$\frac{2}{3}$		<i>Tet Application</i> includes approximately \$8.9 million in expenditures for the <i>Topsail</i>		
4				
5		<i>Hydro Plant Penstock Replacement Project</i> previously approved in Order No. P.U. 5 (2020). ⁵		
	(2020)).		
6 7	If one	around the CCC Deployment During twould be subject to established reporting and		
7		If approved, the CSS Replacement Project would be subject to established reporting and		
8		review requirements for capital expenditures. The <i>Capital Budget Application Guidelines</i>		
9	(the	'Guidelines'') establish that:		
10				
11		"Where a utility shows in each subsequent year of a multi-year expenditure that		
12		the scope, nature and amount of the capital expenditures are consistent with the		
13		original approval, further approval is not required."		
14		٨		
15		And:		
16				
17		"Expenditures in subsequent years will be subject to further review if there is a		
18		material change in the scope, nature or forecast cost of the expenditure. A change		
19 20		will be considered material if the nature or scope of the expenditure changes such		
20		that that original rationale provided is no longer applicable or where the revised		
21		forecast expenditure exceeds the approved amount by 10% or more." ⁶		
22	G			
23		Consistent with the Guidelines, changes in the scope, nature or cost of the CSS		
24		Replacement Project would be reported to the Board for review. Actual capital		
25	-	expenditures incurred will also be reported to the Board through annual capital		
26	expe	nditure reports and quarterly regulatory reports.		
27	-			
28	В.	Alternate Approval Approaches		
29				
30	B.i	Regulatory Context		
31	~			
32		Generally, Newfoundland Power's practice is to propose the approval of multi-year		
33	-	capital projects when the required work cannot be completed in a single year, and the		
34		approval of all expenditures is necessary to bring an asset to the point where it is used		
35	and u	and useful in providing service to customers. ⁷		
36		~		
37		The Company has proposed phased approaches to approving capital expenditures when		
38		approval of the total amount was <i>not</i> required to bring an asset to the point where it is		
39	used	used and useful for customers.		

⁵ See Schedule C to the 2021 Capital Budget Application.

⁶ See the Guidelines, page 8 of ll.

⁷ This approach is consistent with the Board's regulatory principles. The Board's regulatory principles establish that a utility is permitted to set rates that allow the recovery of costs for regulated operations. Among these provisions is that a cost should be prudent and used and useful in providing service. See Order No. P.U. 7 (2002-2003), page 28.

1 For example, the LED Street Lighting Replacement Plan proposes the annual approval of 2 capital expenditures to install LED street light fixtures for customers. This approach is 3 reasonable as execution of the full plan is not required in order to result in assets that are 4 used and useful for customers. Rather, individual street light fixtures are used and useful 5 for customers upon installation. 6 7 This is not the case for the Customer Service System ("CSS") Replacement Project. Execution of all stages of the CSS Replacement Project is required to result in an asset 8 9 that is used and useful in providing service to customers. 10 11 B.ii **Phased Approval of CSS Replacement Project** 12 13 A phased approval approach whereby expenditures for a software solution are approved, 14 followed by approval of expenditures for implementation, is not reasonable for this 15 project. 16 17 This project requires the procurement of vendors to provide a software solution and implementation services. A specific software solution for this project can only be 18 19 assessed as viable if adequate, least-cost implementation services exist for that solution.⁸ 20 As such, the procurement of both specific software and implementation services are 21 interconnected. It is not reasonable to proceed with the independent selection and 22 approval of software and implementation services. 23 24 A phased approval approach for this project would therefore require: (i) obtaining 25 approval of expenditures required to procure software and implementation services; (ii) undertaking a procurement process to identify preferred vendors for both software and 26 27 implementation services; (iii) completing a second approval process for costs associated with implementing and stabilizing the system; (iv) finalizing contract negotiations; and 28 29 (v) executing the remainder of the project. 30 31 In Newfoundland Power's assessment, there are no pros associated with adopting this 32 phased approval approach for the CSS Replacement Project. 33 34 A phased approval approach is not necessary to determine whether replacement of CSS is 35 necessary to continue providing reliable service to customers at least cost. 36 37 Fulsome information has been provided on the record of this proceeding that replacement 38 of CSS is the only viable option to ensure continuity in Newfoundland Power's customer service delivery.⁹ This determination was based on an assessment of all available 39 40 alternatives.

⁸ The estimated cost of software is \$2.1 million. The estimated cost of implementation services is \$17.2 million. As such, a software solution can only be assessed as least cost once the cost of implementation has been determined. See the 2021 Capital Budget Application, Volume 1, Customer Service Continuity Plan, Attachment A, page 23, Figure 6.3.

⁹ See the 2021 Capital Budget Application, Volume 1, Customer Service Continuity Plan, Attachment A, pages 7 to 11.

1 Conceptually, a phased approval approach, whereby preferred vendors are identified prior 2 to approval, may provide greater certainty in cost and scope for certain capital projects. 3 This is not the case for the CSS Replacement Project. 4 5 The scope and cost estimate for this project are based primarily on an assessment by 6 Ernst and Young LLP ("EY"). EY is an industry leader in Customer Information 7 Systems. EY's recommended scope and cost estimate were based on: (i) a 8 comprehensive assessment of Newfoundland Power's operations; (ii) assessments of 9 market trends and industry best practices; and (iii) EY's experience in undertaking 10 similar projects for other utilities. These assessments have resulted in a detailed scope 11 and cost estimate tailored to Newfoundland Power's requirements. 12 13 Competitive tendering processes, including the process planned for this project, typically 14 require the submission of vendor proposals, followed by detailed contract negotiations. 15 Final cost estimates are only determined upon the conclusion of contract negotiations. 16 Given the magnitude of this project, contract negotiations with vendors are anticipated to 17 require a significant effort and guidance from a third-party Procurement Advisor. As vendor contracts are legally binding agreements, they are generally completed for capital 18 19 projects following Board approval. As a result, a final cost estimate for this project 20 cannot practically be determined prior to obtaining Board approval of this project. 21 22 Consistent with past practice, any changes in project scope or costs following contract 23 negotiations or project execution would be reported to the Board through established 24 regulatory processes. 25 26 In Newfoundland Power's assessment, there are 2 principal cons associated with adopting 27 a phased approval approach for the CSS Replacement Project. 28 29 First, a phased approval approach would increase project execution risks. 30 31 Executing all stages of this project as a continuous effort is necessary to ensure 32 deployment of the replacement system during a low risk time of the year. A phased 33 approval approach would practically extend this schedule. This would result in either: (i) deploying the replacement system during a higher risk time of year; or (ii) deferring 34 deployment to the following year. Each of these scenarios increases risks to customers.¹⁰ 35 36 37 Executing all stages of this project as a continuous effort will permit adequate resourcing 38 over the duration of the project. As described above, resources established during the 39 pre-implementation stage will provide expertise over the duration of the CSS Replacement Project. Consistency in resources works to mitigate what industry research 40 41 describes as a common execution risk for projects of this nature. 42 43 Second, a phased approval approach would increase project costs.

¹⁰ For information on the risks associated with project deferral, see response to Request for Information PUB-NP-014.

1 A project team will be established during the pre-implementation stage to work with a 2 Procurement Advisor throughout the selection of software and implementation vendors. 3 A phased approval approach would require either: (i) maintaining this project team over a 4 longer period of time while a second approval process unfolds; or (ii) disbanding and re-5 establishing the project team, which would result in lost capacity and duplicating 6 employee recruitment and training efforts. Each of these scenarios increases costs to 7 customers. 8 9 Additionally, a phased approval approach would create a degree of uncertainty in project 10 scope and timing for vendors. It is reasonable to expect this uncertainty would impact the level of contingency included with vendors' cost estimates. 11 12 13 C. Conclusions 14 15 Newfoundland Power's proposed approach for approving the CSS Replacement Project 16 as a multi-year project is consistent with past practice of the Board and the Guidelines. 17 18 As with other multi-year projects, existing reporting requirements will ensure full 19 visibility for the Board throughout the execution of this project. 20 21 There are no pros associated with adopting an alternate, phased approval approach. 22 Rather, adoption of a phased approach would increase project execution risks and overall 23 costs to customers.