1 2	Q.	On page 2 of the report, "support risk" is rated "moderate" and "reliability and security risk" is rated "low-moderate".		
3 4 5 6 7 8 9 10 11		a)	With respect to "support risk" EY states "When we decompose CSS we find that each of the foundational technologies is supported by only one or two employees judged to have a high-level of proficiency (a total of four employees over five technologies). This level of support is lean but representative of how Newfoundland Power has supported its CSS for many years." Does NP conclude from this statement that "support risk" is no different than it has been for the past 30 years, and if NP implements a training program, "support risk" would be expected to be less than it has been for the past 30 years? Please explain.	
13 14 15		b)	Has NP decided that it would rather replace the existing CSS than implement a training program? What is the cost of a training program?	
16 17 18 19		c)	Further on page 2 of the report, with respect to "reliability and security risk", EY states "The system is stable, unplanned outages are infrequent, and there were no apparent security issues associated with the foundational technologies noted during our research or our interviews."	
20 21 22 23 24			i) Has there been any change in the number of unplanned outages? Please undertake to provide a list of all unplanned outages along with reasons over the past 10 years.	
25 26 27 28			<ul> <li>ii) Have any security issues come up in the past 2 years that did not exist in 2018? Please undertake to provide a list of security violations in the past 10 years along with reasons.</li> </ul>	
29 30 31	А.	a)	No, Newfoundland Power does not conclude that the support risk facing CSS is no different than it has been for the past 30 years.	
32 33 34 35 36			CSS is highly complex and unique to Newfoundland Power. The system has been supported using internal resources since 1998. This requires the Company to maintain a small team with highly specialized skills in the areas of software design and computer programming.	
<ul> <li>37</li> <li>38</li> <li>39</li> <li>40</li> <li>41</li> <li>42</li> </ul>			The specific computer programming languages used to support and maintain CSS were industry standard 30 years ago. Training in these programming languages is no longer offered as part of postsecondary programs or by the software vendor. As a result, individuals with the skills necessary to support CSS are no longer commonplace in the labour market.	
42 43 44			Approximately <sup>1</sup> / <sub>2</sub> of Newfoundland Power's employees with expertise in supporting and maintaining CSS are eligible to retire by 2027. Labour market	

1 2		conditions and the highly complex nature of CSS pose material barriers to replacing those resources. This, in turn, increases the support risk for CSS.
3 4 5		For more information, see response to Request for Information PUB-NP-014.
6 7 8	b)	Newfoundland Power determined, based on a comprehensive assessment, that replacement of CSS with a modern solution is the only viable option to ensure continuity in its customer service delivery.
9 10 11		Newfoundland Power evaluated options for training programs. See response to Request for Information CA-NP-143.
12 13 14	c)	<ul> <li>Newfoundland Power does not maintain a record of unplanned outages to CSS. In the Company's experience, CSS operates reliably. This is consistent with EY's findings.</li> </ul>
16 17		In Newfoundland Power's experience, examples of CSS failures include: (i) failures in automated batch billing processes due to data or software issues;
18 19 20		2020 in the disaster recovery environment; and (iii) errors resulting from system changes. These failures do not typically result in unplanned outages to
20 21 22		CSS. The last unplanned outage to CSS occurred in 2018 due to network connectivity issues.
23 24 25		ii) There have been no security violations for CSS within the last 10 years. This is consistent with EY's finding that the system operates securely.