## A. INTRODUCTION

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## A.1 Executive Summary

- 4 During the period January 2-8, 2014, the Island Interconnected System which provides electrical
- 5 service to the vast majority of Newfoundlanders and Labradorians came under significant
- 6 distress. This, in turn, translated into significant distress for the customers of Newfoundland
- 7 Power Inc. ("Newfoundland Power" or the "Company").

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- 9 Commencing on January 2<sup>nd</sup>, shortages in available generation resulted in rotating power outages
- 10 to customers which continued throughout the period. A blizzard which commenced on January
- 3<sup>rd</sup> also contributed to service disruptions for customers served by the Island Interconnected
- 12 System. Finally, a series of major electrical system disruptions commencing on January 4<sup>th</sup> had
- an even more dramatic impact on customers.

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- 15 Approximately 75% of Newfoundland Power's customers lost electrical service during the
- January 2-8, 2014 period. On average, Newfoundland Power customers were without power for
- about 12 hours over this time span. In total, almost 80% of the time customers of Newfoundland
- Power were without service was due to the major electrical system disruptions; 15% was due to
- rotating power outages; and just over 5% was due to damage caused by the blizzard.

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- 21 Severe weather events such as blizzards are routine occurrences on the island of Newfoundland.
- 22 They typically occur every year. Major disruptions on the bulk electrical system are less routine
- but not unknown. Shortages in available generation on the Island Interconnected System
- 24 requiring the rotation of electrical service to customers are unprecedented.

- A year prior to the events of January 2014, a major disruption on Newfoundland and Labrador
- 27 Hydro's ("Hydro") bulk electrical system caused an extended outage for Newfoundland Power's
- 28 customers. Following this January 2013 event, reserve margins on the Island Interconnected
- 29 System were reduced due to damage to a generating unit at Hydro's Holyrood Thermal
- 30 Generating Station ("Holyrood").

January 2<sup>nd</sup>, 2014 was the first time Newfoundland Power was required to conduct rotating 1 2 power outages on a sustained basis to respond to a *forecast* generation shortfall on the Island 3 Interconnected System. These outages would be required throughout the January 2-8, 2014 4 period. Newfoundland Power has assessed its performance in conducting rotating power outages. The Company's rotating outage performance improved through the period due to a 5 6 combination of better management of the process and experience. The Company identified changes to its electrical system to improve future performance should further rotating power 7 8 outages be necessary to maintain stability on the Island Interconnected System. 9 10 Newfoundland Power distributes electricity to the vast majority of customers served by the Island Interconnected System.<sup>1</sup> Communication with customers is most critical in situations of 11 12 electrical system distress. For this reason, following major electrical system disruptions, it is typical for Newfoundland Power to reassess its performance to identify areas of potential 13 14 improvement. The reassessment following the electrical system events of January 2013 resulted in changes to the Company's customer communication technology, overall outage response 15 processes, and human resource deployment. The Company's customer service performance in 16 17 the January 2-8, 2014 period was improved as a result of these changes. 18 19 Newfoundland Power is the primary distribution utility and Hydro is the primary generation utility on the Island Interconnected System. Routine operational coordination between the 20 21 utilities is good. However, the events of December 2013 to January 2014 were not routine. Newfoundland Power assessed its coordination with Hydro during the period and has concluded 22 23 that improved information flow between the utilities would allow the Company to better serve its customers in situations of electrical system distress. 24 25 26 Planning responsibility for reliable generation supply on the Island Interconnected System 27 clearly rests with Hydro under the existing regulatory framework. The Board of Commissioners 28 Public Utilities of Newfoundland and Labrador (the "Board") has oversight responsibility in

respect of this; however, this oversight responsibility can be limited by Provincial Cabinet

Newfoundland Power

Of the approximately 280,000 customers served by the Island Interconnected System, approximately 255,000 receive their service from Newfoundland Power.

1 directives. Recent regulatory practice has not provided an opportunity for Newfoundland Power, 2 or the public, to participate meaningfully in matters related to overall supply planning on the 3 Island Interconnected System. This practice may not have had a direct impact on, or been a root 4 cause of, the events of January 2-8, 2014; however, it forms part of the public policy context of the Board's investigation into those events. 5 6 7 Newfoundland Power has undertaken a preliminary assessment of real-time and forecast 8 electrical system information availability in other jurisdictions. This assessment indicates that 9 the provision of industry standard forward-looking information regarding supply and demand on 10 the Island Interconnected System will contribute to improved transparency. This will also allow 11 Newfoundland Power to better inform its customers in situations of possible system generation 12 shortage. 13 14 The Company has also undertaken a preliminary assessment of regulatory protocols in other jurisdictions relating to customer notice in situations of possible system generation shortage. 15 16 This assessment indicates that the establishment of clear regulatory guidelines governing when 17 and how customers will be advised of the adequacy of forecast generation supply would be 18 consistent with sound public utility practice in North America. 19 20 The events of January 2-8, 2014 on the Island Interconnected System were extraordinary. The 21 Company has assessed its performance and completed or initiated near-term actions that would benefit customers if similar circumstances were to occur in the 2014-2015 winter season. 22 23 However, these actions will not directly affect the reliability of generation supply on the Island Interconnected System. 24 25 26 The events of January 2-8, 2014 raises questions concerning the reliability of generation supply 27 on the Island Interconnected System for the longer term. The adequacy and location of 28 generation supply, including backup generation, is a long-term issue. The effectiveness of

protection and control systems in ensuring the continued integrity of the Island Interconnected

System is also a prominent issue.

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## A.2 Scope and Organization of Interim Report

- 2 On January 17<sup>th</sup>, 2014, Newfoundland Power was informed by the Board that sufficient grounds
- 3 existed to warrant an investigation and hearing into the supply issues and power outages on the
- 4 Island Interconnected System in late December 2013 and early January 2014 (the
- 5 "Investigation"). The Board also informed Newfoundland Power that it would be considered a
- 6 party to this investigation and hearing.

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- 8 In Order No. P.U. 3 (2014), the Board established a procedure for the Investigation (the
- 9 "Procedural Order"). The Procedural Order outlined the issues to be addressed in the Board's
- interim report (the "Interim Issues") and established a process for the Investigation which
- included a requirement for Newfoundland Power to file a report addressing the Interim Issues by
- March 24<sup>th</sup>, 2014 (the "Interim Report"). By letter of February 28<sup>th</sup>, 2014, the Board informed
- 13 Newfoundland Power of a list of issues to be addressed by the Company in the Interim Report.
- 14 This report is filed in compliance with the Procedural Order and, to the extent Newfoundland
- Power is able, addresses the Interim Issues identified in that Order.

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- 17 The primary subject matter of the Investigation is generation supply and bulk transmission
- operations on the Island Interconnected System. These matters are principally the responsibility
- of Hydro. Newfoundland Power has limited knowledge of the details surrounding Hydro's
- 20 current generation supply planning and bulk transmission operations. Hydro, which is also a
- 21 party to the Investigation, and The Liberty Consulting Group ("Liberty"), which is providing the
- 22 Board with expertise and assistance in the Investigation, are in a better position to inform the
- 23 Board of how these matters affected the supply issues and power outages on the Island
- 24 Interconnected System in late December 2013 and early January 2014. Accordingly, the Interim
- 25 Report of Newfoundland Power will not consider Hydro's generation supply planning and bulk
- transmission operations in any detail.

- 28 This Interim Report will be primarily concerned with (i) an explanation of the events of, and
- leading to, the supply issues and power outages of December 2013 January 2014, including the
- 30 customer impacts; and (ii) Newfoundland Power's customer communications and response to the
- 31 supply issues and power outages, including the rotating power outages which took place over the

- January 2-8, 2014 period. In addition, this Interim Report will consider the operational
- 2 relationship between Newfoundland Power and Hydro and how this relationship impacted
- 3 Newfoundland Power and its customers during the period. Section B of this Interim Report
- 4 specifically addresses each of these issues.

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- 6 One of the Interim Issues identified by the Board in the Procedural Order was the evaluation of
- 7 possible Island Interconnected System changes to enhance preparedness for 2014-2016. Section
- 8 C of this Interim Report specifically addresses this Interim Issue.

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- 10 Newfoundland Power is in a unique position in the Investigation. Newfoundland Power is the
- primary distributor of electrical service on the Island Interconnected System. So, the Company's
- 12 conduct is a subject matter of the Investigation. Newfoundland Power accepts that it is required
- to account publicly to its customers for its response to the events of December 2013 January
- 14 2014. The Company's participation in the Investigation, including its Interim Report, is part and
- parcel of that public accountability.

- 17 Newfoundland Power and its customers are both dependent upon the reliability of electricity
- supplied by Hydro. This, combined with the Company's limited knowledge of the details
- surrounding Hydro's supply planning and bulk transmission operations, also places
- Newfoundland Power in the practical position of being a party inquiring into the causes and
- 21 circumstances of December 2013 January 2014. Given this, the Company expects that it shall
- be given a reasonable opportunity to inquire into and comment upon the Interim Reports of both
- 23 Hydro and Liberty once they become available.