

I. Introduction

A. Background

On March 4, 2011, a joint petition was filed with the New Hampshire Public Utilities Commission seeking approval to transfer assets of Granite State Electric and EnergyNorth Gas from National Grid to Liberty Energy Utilities (“Liberty Energy”) – a wholly-owned subsidiary of Algonquin Power & Utilities Corp. The petition expressly provides for all ownership – and operational responsibility – presently vested with National Grid USA to be conveyed to Liberty Energy at such time as the sale is approved by the New Hampshire Public Utilities Commission and such other regulatory agencies as may be required. The New Hampshire Public Utilities Commission subsequently accepted the submission, established a formal proceeding under which to examine the petition and set out a procedural schedule.¹

On July 17, 2011 the New Hampshire Public Utilities Commission engaged Gorham, Gold, Greenwich & Associates (“G³Associates”) to assist with Staff’s evaluation of Liberty Energy’s Information Technology plan.² G³Associates was selected for its familiarity with the issues surrounding a transaction of the type at issue here, as well as for its technical expertise in the IT area.

G³Associates was tasked in this proceeding with examining a number of selected issues related to Liberty Energy’s Information Technology (“IT”) plan. We undertook a review to assess the Joint Petitioners’ qualifications in five key areas:

- the capability of the selected technologies
- the competency of the providers, consultants and managers
- the completeness of the proposed plans

¹ Docket No. DG11-040 (hereafter termed “the Proceeding” or “the Docket”) was established on March 4, 2011. Following a pre-hearing conference on April 20, 2011 the Commission issued the associated procedural schedule (hereafter “the Schedule”) on April 25, 2011.

² G³Associates is a US-registered professional service firm specializing in the regulated utility sector. G³Associates was founded in 1989 and continues to provide a range of decision-related services around the world. G³Associates has extensive experience with mergers and acquisitions, changes in control, organizational design and regulatory compliance.

- the commitment of the partners involved in IT procurement and implementation
- the associated costs of the planned approach

On October 7, 2011 G³Associates submitted a detailed Technical Report ("October 7 Report") to Staff outlining the plans and actions taken to date by Liberty Energy and National Grid to effect an efficient transition, and effective transfer, of IT responsibilities from National Grid to Liberty Energy. Additionally, G³Associates submitted direct testimony pertaining to the IT review summarizing its principal findings and conclusions.³

In the October 7 Report we qualified our opinion of the parties' ability to effect an orderly and cost-efficient transition of responsibility for information-related systems and services on a number of recommended actions. Specifically, we noted that the likelihood of success of Liberty Energy's IT initiative, and the sustainability of the associated operating units, would be substantially improved if Liberty Energy were to:

- appoint a fully-dedicated senior executive to be responsible for transition activities associated with all of Liberty Energy's acquisitions;
- formalize a data retention agreement with National Grid that ensures the availability of, and accessibility to, historical data of importance to Granite State and EnergyNorth;
- immediately commence detailed planning to achieve full implementation of the committed IT plan;
- substantially strengthen its vendor management processes and protocols to ensure efficient implementation and full compliance; and
- augment the Transition Services Agreements to extend National Grid's commitment beyond the time frame contained in the documents.

³ Specifically, we concluded that Liberty Energy had made substantial strides in defining its Information Technology (IT) requirements and developing plans for its deployment at Granite State/EnergyNorth; that it had secured the commitments of all of the principal parties to its planned deployment; and adopted an IT provisioning strategy that meets its basic operational needs, exploits proven technologies and realizes benefits not otherwise achievable. However, we deemed Liberty Energy's timetable for achieving its IT initiative for self-sustaining operations to be very aggressive and quite optimistic.

B. Subsequent Events

In the time that has elapsed since the October 7 Report was filed in this proceeding a number of discussions were held with the interested parties. In those sessions, the specific issues raised by G³Associates were clarified and addressed, and commitments were made by Liberty Energy and National Grid to review them further and prepare a response to each one.⁴

In each instance, Liberty Energy and/or National Grid proffered a course of action intended to mitigate concerns of Staff and G³Associates as to their competency, capability, commitment and/or cost of executing the transfer of IT responsibilities from one company to the other. Specifically,

- Liberty Energy designated Bob Wood as its company-wide transition officer with responsibility for ensuring the New Hampshire initiative received the fullest measure of corporate support. Mr. Pasieka will direct Liberty's Project Management Office and assume full responsibility for an effective transfer of operations from National Grid.
- Liberty Energy concluded a comprehensive data retention agreement with National Grid that accords Liberty Energy long-term rights to the information archives of National Grid, imposes certain stewardship duties and responsibilities on National Grid to preserve that information for future use by Liberty Energy and recognizes the mutual responsibility of the parties to achieve an effective transfer of all such information in the future.
- Liberty Energy has completed its initial planning cycle for IT development and deployment with the assistance of National Grid. The evidentiary record of this proceeding would be incomplete without the documented project plans Liberty has developed and is

⁴ Technical Sessions pursuant to NH PUC 203.09 (j) were conducted to address party concerns including those raised in our Technical Report and Direct Testimony

using in its deployment of its Day 1 systems and operations. Toward that end, Liberty has prepared an IT Plan and an IT Migration Plan, which are attached to the Settlement Agreement filed in this proceeding.

- Liberty Energy has adopted additional governance measures for its IT vendor management. The measures are intended to afford Liberty Energy better control over critical business relationships, impose additional compliance obligations on its vendors and raise security standards on the part of its principal IT partners and providers.
- Liberty Energy has performed a thorough review of its Transition Services Agreements and modified its contractual relationship for services with National Grid to reflect better information, the experience of earlier acquisitions and the augmented support of National Grid to the transition process.

C. Supplemental Review Process

At the direction of Staff, G³Associates endeavored to provide the applicants such advice and counsel as possible to achieve an acceptable set of commitments without infringing upon their respective fiduciary duties, regulatory obligations and managerial discretion. In each instance, G³Associates applied the same design methodology, evaluative measurements and approval standards employed previously in the October 7 review – neither increasing nor decreasing the threshold requirements we considered critical to a successful transfer of responsibility.

In conducting the review detailed in our October 7 report, a set of eight hypotheses were established to serve as a framework for examining the IT-related activities of both Liberty Energy and National Grid. The hypotheses drew upon the Commission's prescribed Scope of Work and our experience in similar matters. Inherent within the construct of the hypotheses is the need for an efficient means to

fairly assess a wide range of processes, practices and plans. Here we update our conclusions, based on our latest discussions and analyses.

Hypothesis I. Liberty Energy exercised reasonable decision-making when selecting its IT systems and organization operations supported by IT systems.

In the period of time since issuance of the October 7 Report, we have re-visited a number of concerns that were identified in the initial review. We have conducted a number of discussions with the Petitioners' representatives, further scrutinized their chosen "partners" and considered the concurrent efforts of several other investor-owned utilities seeming to follow the same IT systems development path as Liberty Energy. While we remain of the opinion that Liberty Energy's approach to designing its IT systems may seem unorthodox to traditional IT planning, particularly those efforts typically found in regulated utility enterprises, we find nothing to suggest that the approach Liberty Energy is taking effectively reduces its ability to serve its customers and comply with its regulatory obligations.

It is apparent from subsequent review that Liberty Energy's earlier decision-making processes reflected its best effort to balance capability and cost of meeting its IT requirements. Liberty Energy lacked the resources necessary to replicate and maintain National Grid's IT environment and its scale obviated the need to do so. Instead, Liberty Energy elected to pursue a "green field" approach to meeting its IT requirements and did so in a manner that it thought applicable, available and affordable.

Hypothesis II. Liberty Energy's plans for proving and testing the systems it intends to implement are sufficient for their intended purposes.

At the time G³Associates prepared its October 7, Report Liberty Energy had little that it could show to support this hypotheses. Liberty Energy was at a formative stage in planning for the initial systems and applications prescribed by its IT plan. Lacking any relevant experience that might demonstrate the capability and suitability of the selected applications it was not possible at the time the October 7 Report was issued to render a supportive opinion on their efficacy.

Since issuance of the October 7 Report Liberty Energy has explained that it has methodically pursued its scheduled deployment of a set of financial and managerial applications deemed critical for Day 1 operations. It has asserted that the applications have been thoroughly tested and subjected by Liberty Energy management to periodic verification exercises to ensure their integrity and accuracy with the results of those tests meeting previously established expectations.

In addition to its financial and managerial applications, Liberty Energy will be introducing a range of operational systems that likewise have testing obligations associated with them. At the time the October 7 Report was issued, these systems (viz., customer support, work management, system operations, etc.) had for many reasons received less attention and, as such, were not available to G³Associates for review according to our engagement parameters. In each instance, the application represents a functional requirement that will be met by National Grid at a prescribed milestone – each following a period of time that will permit Liberty Energy to properly define its user requirements, adapt the necessary software to meet those user requirements, test its operational capabilities, train end-users and integrate the application to a common technology platform.

Since October 7 Liberty Energy and National Grid have constructed a comprehensive program intended to achieve these objectives and ensure an efficient transfer of responsibility from National Grid to Liberty Energy. The program has been thoroughly reviewed by G³Associates and detailed discussions were had with representatives of both companies. It is our opinion that the additional effort made by the parties reflects the fact that the planning and execution of the IT transfer must be regarded as an iterative process with some modification to be expected during the implementation period. However, we believe the subsequent efforts to solidify the Petitioners' commitment to testing and monitoring represent tangible indication that the systems and applications deployed by Liberty Energy will be sufficient to meet their intended purposes.

Hypothesis III. Liberty Energy's planned support systems are adequate to meet the identified needs.

As noted in the October 7 Report, Liberty Energy expressed a relatively limited commitment to testing its various applications. In part, that viewpoint reflected the fact that its software applications were commercially-designed, widely-used and proven capable of meeting the needs identified by Liberty Energy and its advisors. The need for additional testing was not viewed as critical to achieving Liberty's stated goals.

Subsequent to issuance of the October 7 Report Liberty Energy agreed to conduct additional quality assurance testing of its systems and software prior to general deployment that G³Associates believes is sufficient to the immediate need. Liberty Energy maintains that with the "virtual" IT environment it is deploying there is less need for stress testing of its systems than in a traditional IT environment. Upon further review of Liberty Energy's approach to delivering IT services to end-users we find little reason to challenge any representation that stress-failure risks are mitigated by the IT hosting environment it uses, quality assurances its application vendors provide, and the relatively smaller set of system users and customer-affecting transactions it will experience. We do, however, remain of the opinion that stress testing certain systems can be beneficial to ensuring operations integrity. We believe Liberty's subsequent commitment to conduct broader testing than it originally conceived necessary provides a meaningful framework for further negotiation during the implementation period between Staff and Liberty Energy on this issue.

Hypothesis IV. Liberty Energy's post-close operations are reasonably efficient and effective compared to those of National Grid.

As referenced in our original report, the information needed to draw a fair conclusion in this instance was limited at the time the October 7 Report was issued. In the months following, Liberty Energy provided additional data that afforded G³Associates opportunity to better assess the cost and capability of Liberty Energy's post-close IT operations. In our discussions with Liberty Energy and National Grid we asserted that the cost of designing and deploying the envisioned IT environment would take longer to implement and cost more than

represented in any of the filings made in this case. Furthermore, we suggested that the ongoing costs of sustaining Liberty Energy's IT environment may prove to be higher than those currently incurred under National Grid's approach but the lack of scale economies comparable to those of National Grid made any such comparison irrelevant.

In subsequent discussions with Liberty Energy, it has been agreed that the capital cost of deploying the IT systems and software will be "capped" for purposes of determining Liberty Energy's rate base in New Hampshire.⁵ The amount agreed upon reflects some revisions on the part of Liberty Energy to its initial estimates, a provision for additions and/or changes to specific software and hardware investment, and exogenous costs not recognized in the original figures. G³Associates concurs with Staff's treatment of Liberty Energy's capital expenditures and holds the opinion that this provides a reasonable approach to addressing any uncertainties that may remain in Liberty's IT plans. Furthermore, it is our opinion that these financial measures will contribute significantly to the cost-effectiveness of Liberty Energy's IT support to the New Hampshire operations.

In our October 7 report we provided an in-depth analysis of the transition services Liberty was expecting to purchase from National Grid to facilitate the first several years of operations. In subsequent discussions related to transition services, planned periods of utilization, service administration, and costs for the transition services have produced broader understanding of the role these will play in the first years of Liberty's operation of the utilities. The Joint Petitioners also agreed to make substantive changes to the specifics of the Transition Service Agreements to ensure that they effectively facilitate (1) management of the transition services, (2) evaluation of the services provided and performed, and (3) dispute resolution through escalation procedures in the case of problems. Agreement has been reached that transition services will be a major element of the monitoring process.

Liberty's commitment to continue measuring results of operations with the existing Service Quality Metrics for both Granite State Electric and EnergyNorth Gas is a

⁵ IT implementation costs are discussed in the Hypothesis VI section.

tangible effort to assuring that service quality and trends of operations quality can be evaluated in a transparent manner.

Hypothesis V. Liberty Energy's IT staffing proposals for IT systems and for its operations supported with IT systems, including recruitment, training, capabilities, and coverage are reasonable.

Evident in our October 7 Report was the observation that Liberty Energy's staffing levels and training regimens were inadequate to ensure an efficient and effective transfer of responsibility from National Grid. In fairness, much of that deficiency related to timing and not to any lack of commitment on the part of Liberty Energy. The October 7 Report acknowledged that Liberty Energy was actively working to populate critical management positions in its IT Department and elsewhere in preparation for assuming operational responsibility for Granite State Electric and EnergyNorth. Subsequently, many of those senior positions have been filled with qualified executives. In the interim technical sessions, it has become apparent that Liberty has provided additional focus on the needs for user training, in particular for its customer-facing operations, in large part based on its experience in implementing its CalPeco⁶ operations

Hypothesis VI. Liberty Energy's budget and financing plans for the development and implementation of IT systems is reasonable.

The October 7 Report challenged the reliability of Liberty Energy's estimated IT budget. Specifically, we questioned the range of possible expenditures that Liberty Energy considered in making its estimates. In subsequent discussions with representatives of Liberty some modification was made to the projected costs but even so any calculation at this stage of implementation remains imprecise and questionable. Original IT implementation cost estimates were agreed to be

⁶ In 2010, Liberty Utilities purchased the assets and operations of the Sierra Pacific Power Company and currently operates that utility as California Pacific Electric Company ("CalPeco"). This was Liberty's first acquisition of an electric operation; Granite State Electric is its second. EnergyNorth Gas is Liberty Energy's initial entry into the gas distribution sector. The New Hampshire acquisitions, like the CalPeco acquisition, utilize similar IT development and deployment approaches.

considered preliminary and those discussed in our October 7 report have been supplemented in IT planning information provided by Liberty. As Liberty has been able to do more detailed analysis of the work required to implement its IT suite, the cost estimates have increased considerably for the period through 2013. The chart below shows there is a nearly 30% increase in cost estimates and the periods in which the expenses are planned has shifted from beginning in 2011 and has been extended for 2 additional quarters during which more than \$1 million is forecast.

IT Implementation Cost Estimates by Quarter												
	Q211	Q311	Q411	Q112	Q212	Q312	Q412	Q113	Q213	Q313	Q413	Total
Feb 2012 IT Plan Estimate	-	-	-	-	1,302	1,252	1,490	1,482	1,506	756	311	8,099
Data Request TS 2-16 Estimate	36	361	397	1,361	1,041	836	757	519	1,078	-	-	6,386

Without benefit of better forecasting methods and more reliable cost data from which budget projections can be made, it is difficult to provide any better estimate than those presented by Liberty Energy to date. Lacking greater confidence in the cost projections that have been provided in this proceeding it will be incumbent upon NHPUC Staff to closely monitor Liberty Energy's implementation program and progress to ensure all expenditures meet recognized prudence tests.

Hypothesis VII. Liberty Energy's transition planning is comprehensive, collaborative and compliant.

The October 7 Report questioned the relatively limited scope and scale of transition planning that had to date been undertaken by Liberty Energy. Liberty asserted that its planning efforts were ongoing and the conditions that were observed represented inchoate systems and operations planning but should not be judged as final. In the months following issuance of the October 7 report, Liberty Energy has

solidified its planning processes, strengthened its oversight and deepened its relationship with National Grid. Additionally, Liberty Energy has intensified its IT and related planning activities, expanded its operational planning programs and augmented its planning staff.

Liberty Energy's early planning activity was, expectedly, directed at establishing the appropriate organizational design and governance structure for the yet to be acquired entities. Considerable effort was made to ensure the organization's financial and managerial framework was put in place, leadership positions were filled and initial regulatory requirements were met. As those objectives have been largely met, Liberty Energy has adjusted its transition planning to the operational requirements of Granite State Electric and EnergyNorth Gas.

With the shift in focus to meeting the operational requirements of Granite State Electric and EnergyNorth Gas, we have seen substantive resource commitments by both Liberty Energy and National Grid. Since issuance of our October 7 Report, we conducted numerous discussions with both Liberty Energy and National Grid on the need to pursue a joint planning and management approach to their respective responsibility in this transaction. Representatives of the parties acknowledged their commitment to doing so and, subsequently, Liberty Energy acquired an experienced executive to lead its IT Department; supplemented his abilities with a highly-respected senior IT executive from National Grid; and rounded out the group with the commitment of a competent and capable transition officer to assist them both.

Collectively, we view this as a material improvement in program governance and a significant infusion of strength to Liberty's IT planning efforts. Benefits of this collaborative effort are evident in improved project schedules, greater end-user involvement, disciplined planning processes and formal control systems to ensure budget and schedule commitments are met. Additionally, the parties have agreed to comply with formal regulatory reporting mechanisms to ensure the NHPUC Staff is fully apprised of the status of the implementation, including material differences in cost and schedule. We believe these measures are substantive improvements to the governance structure of the transaction and will significantly

improve Liberty Energy's ability to assume operation responsibility of Granite State Electric and EnergyNorth Gas in New Hampshire.

Hypothesis VIII. National Grid is fully cooperative in the transition process with respect to providing adequate training, facilitating transfer of data, etc. as regards the IT systems for Liberty Energy

The October 7 Report failed to offer any conclusive opinion on this subject. In part, that reflected the limited timeframe that was available to pursue this matter in any depth and the lack of any relevant evidence presented by the Joint Petitioners. Brief discussions related to this matter with both Liberty Energy and National Grid, however, pointed to the need to ensure archived information currently controlled by National Grid remains available to Liberty Energy for some indeterminable period of time. Furthermore, it was apparent that accessing such information needed to be on terms and conditions that were fair and reasonable.

In a technical session, we recommended a formal data retention agreement between the Petitioners that recognized the legal rights of Liberty Energy to the information and respected the limited duties and obligations of National Grid. Both parties recognized the value of such an agreement and immediately constructed a workable arrangement that has been adopted for use by the parties and is proposed as part of the settlement agreement.

It is our opinion that the steps taken in this matter are a significant improvement and afford both Liberty Energy and the NHPUC a measure of confidence that any critical data currently held by National Grid will not be lost, compromised and/or withheld from future use.

D. Conclusions

We affirm with some modification the conclusions and recommendations made in the October 7 Report and state that Liberty Energy and/or National Grid USA have, subsequent to issuance of that Report, agreed to comply with all of the recommended actions made therein with only minor modification. Furthermore, we

note that Liberty Energy has fully agreed to cooperate with Staff in monitoring the implementation of the terms and conditions set forth in the agreement referenced above.

With acceptance by Liberty Energy of the recommendations we have greater confidence in their ability to execute a successful deployment of its IT support systems and to sustain those systems in the future than expressed in our October 7 Report and associated Direct Testimony. With continued involvement by the NHPUC Staff in the implementation period and the Joint Petitioners' cooperation in supplying requested information on a timely and complete basis, we expect Liberty Energy will be positioned to introduce its IT systems and works in New Hampshire successfully.

Upon further review of the actions taken – and planned – by the applicants we find no reason to conclude Liberty Energy and National Grid are incapable of achieving an efficient transfer of responsibility for Granite State Electric and EnergyNorth Gas, that Liberty Energy is incapable of meeting its operational requirements in the manner it proposes to do so or that its approach to doing so presents any extraordinary risk to the public. Accordingly, we support the conditions imposed upon the parties by the proposed settlement agreement, believe them sufficient to ensure a beneficial outcome to all interested parties and essential to satisfy the Commission's responsibilities in this matter.