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1 **Request IR-1:**

2  
3 **Please detail efforts taken and savings achieved by Nova Scotia Power Incorporated to**  
4 **mitigate the application for an increase in rates.**

5  
6 Response IR-1:

7  
8 Nova Scotia Power remains focused on effective and efficient management in order to mitigate  
9 potential increases in customer rates. Much of Nova Scotia Powers's activity in this regard is  
10 described and reflected in the Application and Evidence in this proceeding. In addition, these  
11 efforts include:

- 12
- 13 1. Purchasing fuel in an effective manner, utilizing the fuel portfolio approach, and  
14 operating in accordance with the Fuel Manual and the Fuel Adjustment Mechanism Plan  
15 of Administration;
  - 16  
17 2. Managing the Company's controllable costs. On a per customer basis, Nova Scotia  
18 Power's requested OM&G increases from 2002 to 2012 are less than the Consumer Price  
19 Index (CPI) over the same period of time. Through effective cost control mechanisms,  
20 Nova Scotia Power has stabilized OM&G expenditure in constant dollars since 2002.  
21 UARB consultant Kaiser & Associates have confirmed that NSPI is a well run utility  
22 with low costs compared to other utilities. Please refer to Attachment 1, which shows an  
23 updated comparison that NSPI remains low cost, and was filed as Appendix B to our  
24 Direct Evidence. Please refer to the Application, Section 5.0 of Nova Scotia Power's  
25 Direct Evidence for a more detailed discussion of this topic;
  - 26  
27 3. Making necessary and prudent capital investments in a careful and planned manner. This  
28 includes investments in renewable energy which will result in less price volatility and  
29 investments in maintaining and/or improving the reliability and capability of Nova Scotia

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1           Power's thermal and hydro generating units to help preserve lower fuel prices and  
2           maintain system stability.

3  
4           In addition to the above mentioned items, Nova Scotia Power has proposed a plan to bring  
5           stability and predictability to rates over the next three years (2012-2014). We have discussed  
6           this plan with customer representatives, and will continue to do so in advance of the hearing of  
7           this Application. In the event an agreement can be reached that appropriately recovers costs  
8           while mitigating rate increases for customers, Nova Scotia Power will file the plan with the  
9           Board in advance of the hearing of this matter.



# Utility Performance Benchmarking Analysis

March 2011

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## Background

- Operating Maintenance & General (OM&G) benchmarking is valuable in assessing the performance of the Company with its peer group to identify industry trends and opportunities.
- The absolute performance values are important but require analysis to fully correlate as differences in corporate structure (vertically integrated utility vs. distribution only utility) and accounting practices (capitalization policy, pension accounting) will influence absolute operating costs. The overall trending pattern of values provides greater insight on performance management with operating costs.
- As part of an operations review in 2007, the Nova Scotia Utility and Review Board (UARB) engaged the consulting firm Kaiser Associates (KA) to complete an internal analysis of NSPI and an external benchmarking study of relevant, comparable utilities focusing on OM&G costs.

## Approach

- Overall approach of this OM&G performance benchmarking analysis was to apply the specific benchmarking metrics and comparable utilities used in the 2007 Kaiser Associates study. The three benchmarking metrics include:
  - OM&G expense as a percent of revenue
  - OM&G expense per customer
  - OM&G expense per megawatt hour (MWh)
- The analysis was based solely on public information sources including annual financial reports, regulatory filings and company annual information forms
- The aggregate reported OM&G expenses were used. Operating results for comparable companies with other operations (eg. water utility, construction or real estate subsidiary) were segregated based on the available segment financial results contained in audited financial statements.
- Information is also presented on NSPI's capital employed per customer. Capital employed is an indicator of depreciation expense which is not a component of OM&G.

# Comparables

- Kaiser Associates screened a diverse mix of potential comparables and selected four principal comparables as well as two best in class comparables. NSPI's benchmarking analysis has retained these six utility comparables for its baseline review.

## SA SASKPOWER

## ATCO

## TransAlta™

## EPCOR

## NEWFOUNDLAND POWER A FORTIS COMPANY



## Énergie NB Power

Newfoundland Power and NB Power were identified as “best in class” comparables. Both companies demonstrated characteristics in specific functional groups to lower overall OM&G expenses (eg. NBPower’s vegetation management program and NFPower’s customer service technology investments)

# Comparables Profile

- Includes Utilities and Energy operating segments. ATCO Utilities include a natural gas distribution and electric distribution & transmission operation as well as a natural gas transmission operation. The Global Enterprises and Industrials business segments were excluded from the analysis.
- 1.2 million gas distribution and electric customers with 19 generation stations totaling 4,885 MW of capacity
- Reflects electric distribution and transmission operations as well as a separate power generation business up to July 2009. The water and energy services business segments were excluded.
- 338,100 electric customers. Former generation portfolio included 3,500 MW of capacity at 31 facilities in Canada and US.
- NBPower is a vertically integrated electric utility. Cost of service regulation. Government owned and operated.
- 380,000 customers with generation capacity of 3,194 MW
- Newfoundland Power is a cost of service regulated electric distribution and transmission company. OM&G costs exclude power generation function expenses.
- 243,000 customers with 85% residential mix
- Vertically integrated electric utility. Cost of service regulation. Government owned and operated.
- 467,000 customers with 70% residential mix, 3,840 MW of generation capacity
- Merchant generation company with energy trading operations. OM&G costs exclude electric distribution and transmission function expenses.
- 8,641 MW of generation (54% coal, 25% renewable, 21% gas)



Énergie NB Power



# Comparables Profile

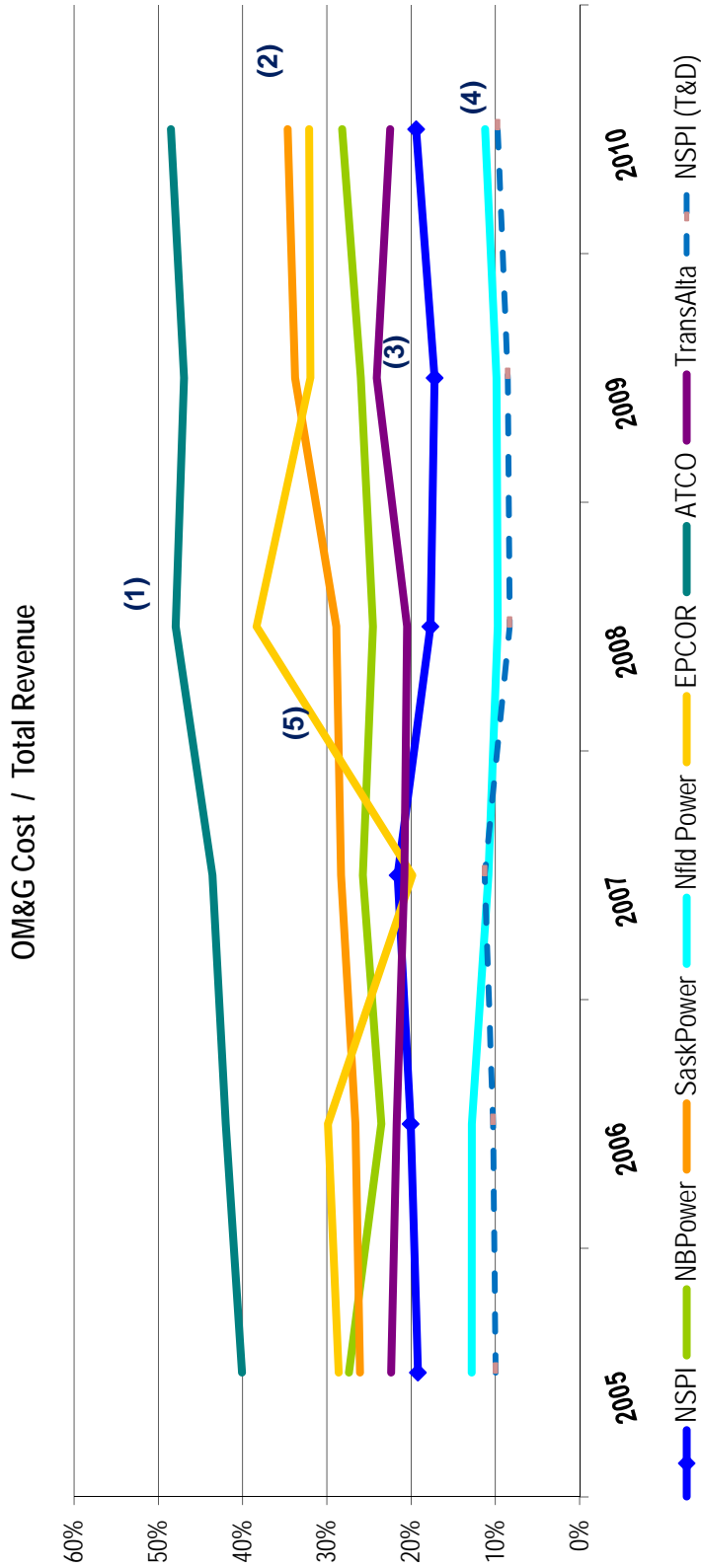
Company	Net Assets (\$ Billion)	Number of Customers	Utility Type	Generation Capacity (MW)	Transmission Line (Kms)	Distribution Line (Kms)
ATCO	\$10 Billion	1,294,528	Pipes, Wires, and Generation	4,885 MW	10,000 km	63,000 km
EPCOR	\$1 Billion <sup>(1)</sup>	338,100 <sup>(1)</sup>	Wires Only <sup>(1)</sup>	n/a	203 km	5,548 km
NB Power	\$5 Billion	383,896	Vertically Integrated	3,194 MW	6,841 km	20,595 km
Newfoundland Power	\$1 Billion	243,000	Wires Only	140 MW	11,000 kms of both T&D	
NSPI	\$3 Billion	489,429	Vertically Integrated	2,368 MW	5,000 km	29,000 km
SaskPower	\$5 Billion	467,329	Vertically Integrated	3,840 MW	12,404 km	145,169 km
TransAlta	\$9 Billion	n/a	Merchant Generation	8,641 MW	n/a	n/a

(1) Statistics for EPCOR in the table above include distribution and transmission business only.



# OM&G Expense vs. Revenue

NSPI has demonstrated a favourable trend in OM&G/Revenue in the period. NSPI's revenues have increased at a higher rate than increases in actual OM&G expenses based on the recovery of increased fuel costs. The NSPI (T&D) benchmark provides a position that is more comparable to wires only utilities such as Newfoundland Power.



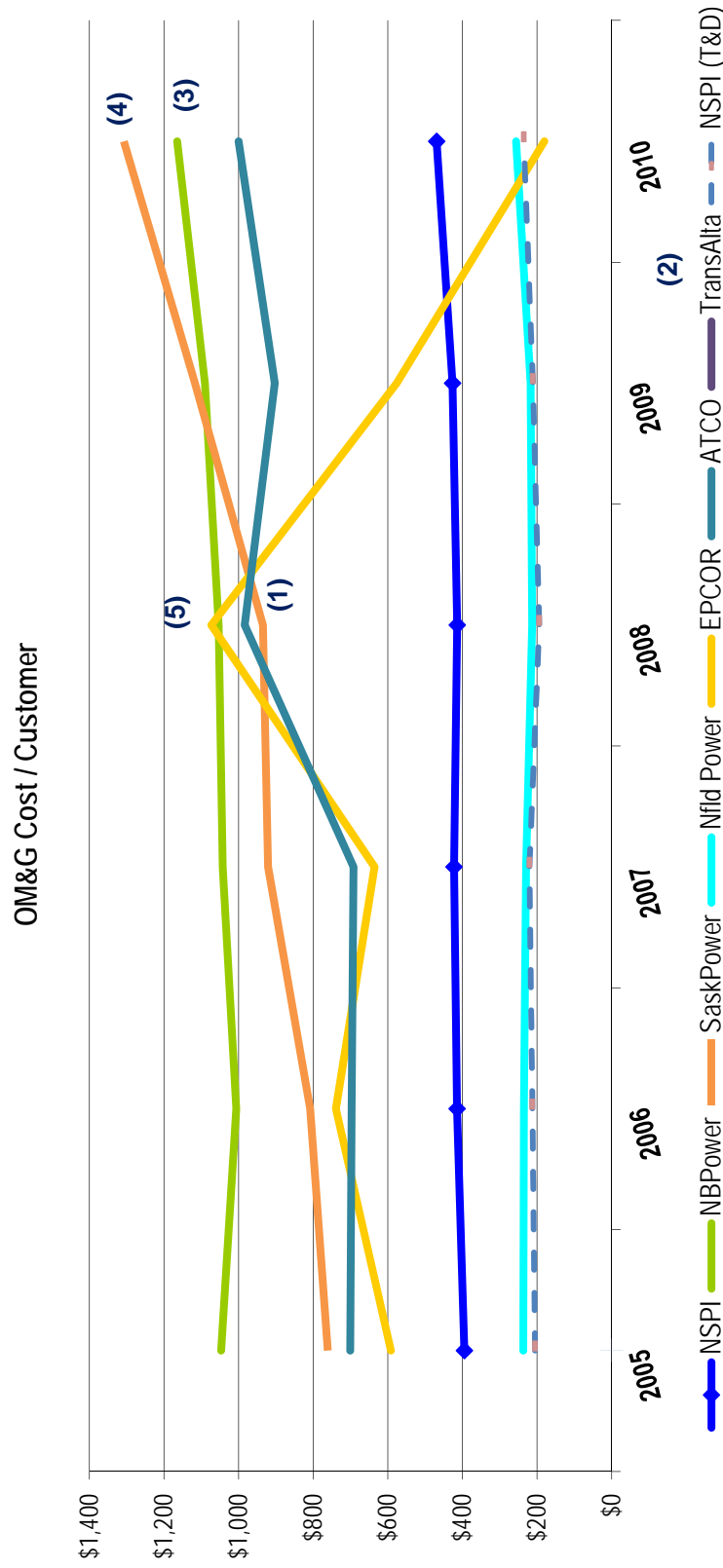
NSPI (T&D) is represented with Customer Operations, Customer Service, 50% of Corporate and Technical & Construction Service Groups and 70% of Corporate Adjustments including applied overhead credit.

## OM&G Expense vs. Revenue

- Comparable trending observations:
  - 1) ATCO experienced increased OM&G costs relative to increases in revenues largely within its power production group that includes 69% natural gas fired plants.
  - 2) SaskPower has experienced increased OM&G costs at an annual average of 11% based on increased maintenance and pension benefit costs. Results for 2010 reflect forecast values as actual results are not available at this time.
  - 3) TransAlta's increase in plant maintenance and depressed market prices influenced the 2009 position.
  - 4) Newfoundland Power's OM&G expense has remained stable with an increase in 2010 associated with storm restoration with Hurricane Igor and increased pension expense. The downward trending with OM&G/Revenue is based on increased revenue recoveries associated with higher purchased power expense.
  - 5) EPCOR's lower operating costs in 2007 related to timing of major plant maintenance cycles is a large factor in the annual trending. Included in 2008 OM&G were major maintenance costs at the Genesee facility. The 2009 results include six months of operations related to the generation segment as it was sold to Capital Power.

# OM&G Expense per Customer

NSPI has a lower OM&G expense per customer than its vertically integrated comparables and has demonstrated a constant trend profile over the period. Increased OM&G costs for 2010 are evident for NSPI and its peers.

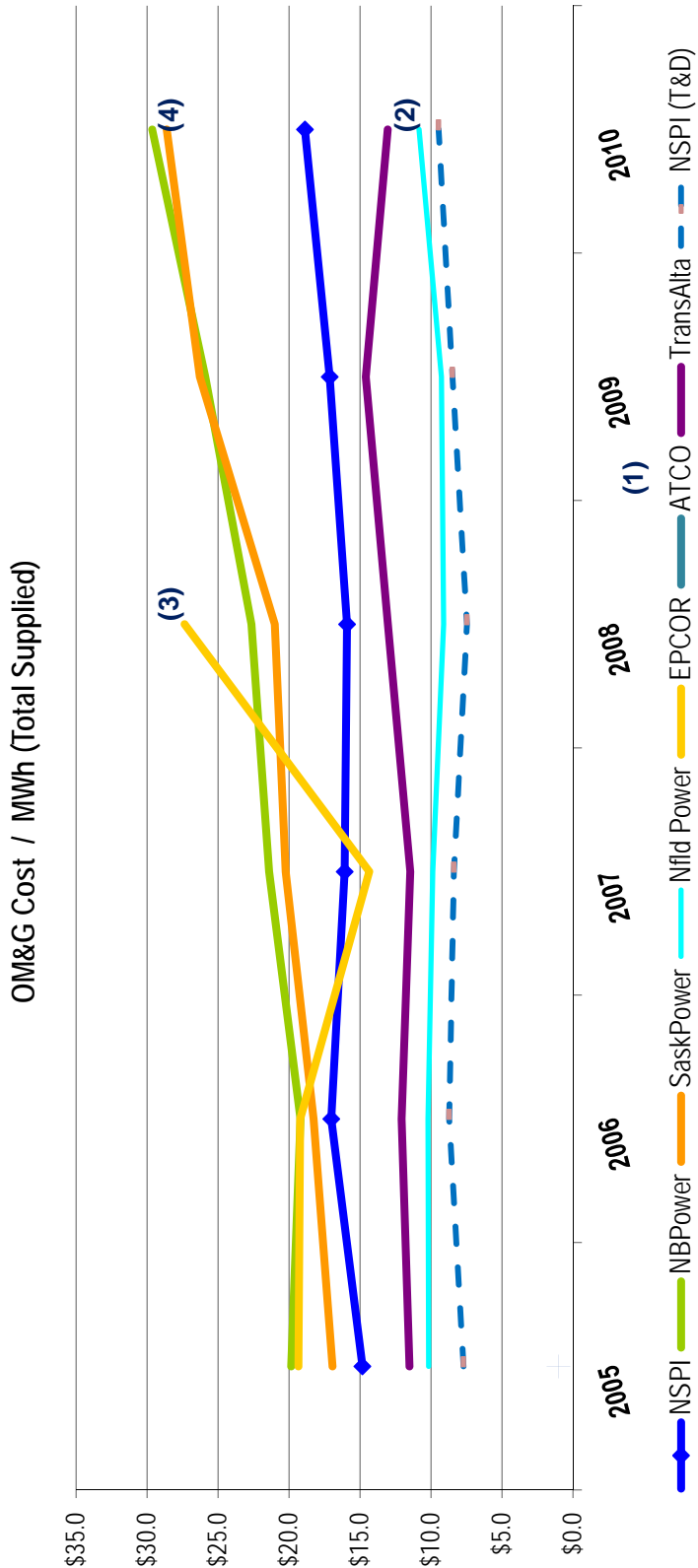


## OM&G Expense per Customer

- Comparable trending observations:
  - 1) ATCO experienced increased OM&G costs relative to increases in customers largely within its power production group.
  - 2) Customer information was not available for TransAlta. As a merchant generation company, the OM&G expense per customer metric is not meaningful as it sells power to other utilities and larger users.
  - 3) NBPower has one of the highest OM&G expense per customer with an upward trending profile.
  - 4) The operating costs pressures resulting from increased maintenance and pension benefit costs at SaskPower are most evident on a per customer basis. Results for 2010 reflect forecast values as actual results are not available at this time.
  - 5) Timing of plant maintenance at EPCOR as noted earlier is the key factor with its results. Included in 2008 OM&G were major maintenance costs at the Genesee facility. The 2009 results include six months of operations related to the generation segment as it was sold to Capital Power.

# OM&G Expense per MWh

Relative to its vertically integrated utility peers, NSPI has the lowest OM&G expense per MWh and has demonstrated a more favourable trend profile.

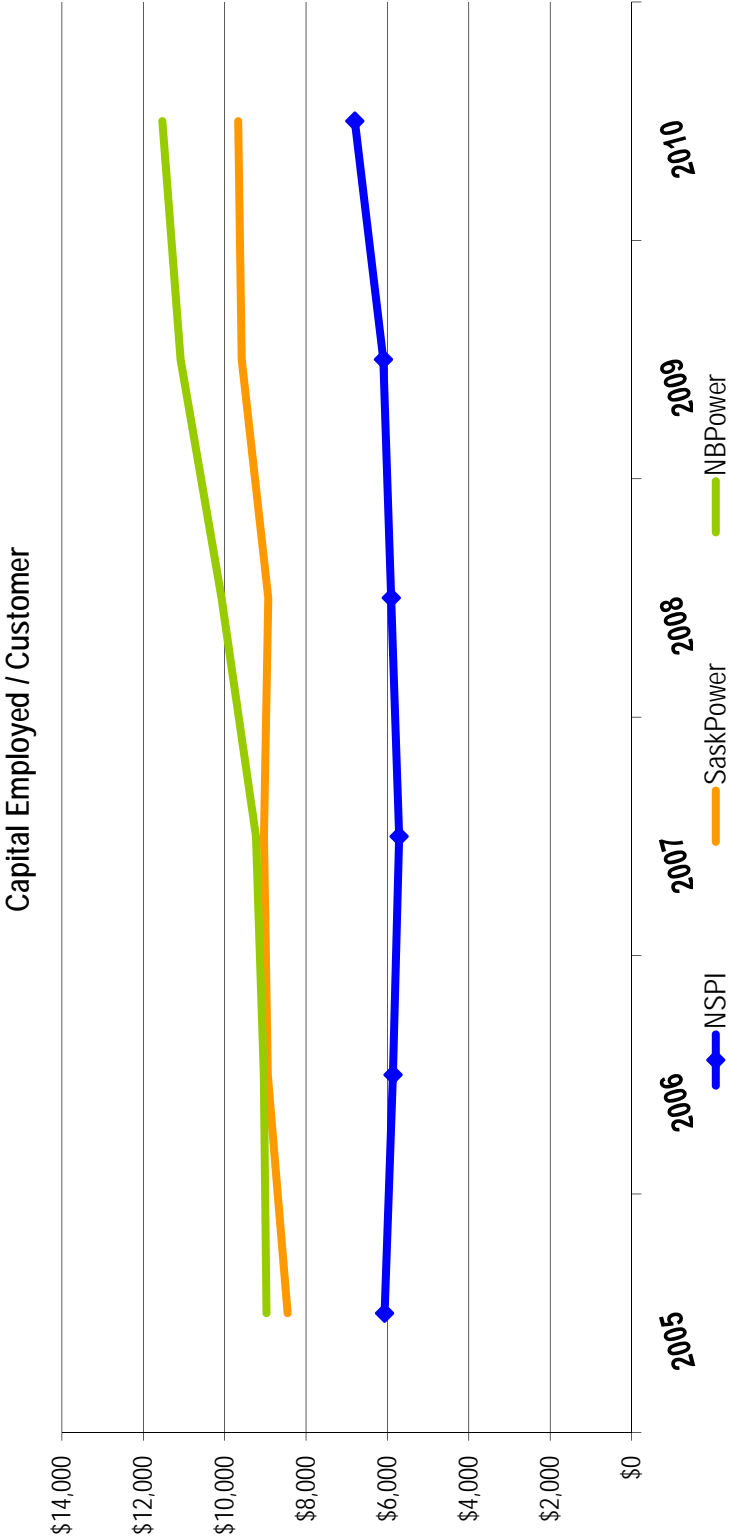


## OM&G Expense per MWh

- Comparable trending observations:
  - 1) ATCO metrics were not included as a large portion of its operating costs include natural gas distribution operations that is benchmarked with gigajoules of natural gas. The utility segment reporting within the public financial reports includes both natural gas distribution and electricity distribution & transmission operations together.
  - 2) Newfoundland Power is a distribution and transmission company and therefore has a lower OM&G expense per MWh as the operating costs associated with the production of electricity is reflected in the purchased power costs.
  - 3) EPCOR sold its major generation assets (Capital Power) in 2009 and reported MWh's for 2009 and beyond were not available through annual financial reports.
  - 4) SaskPower results for 2010 reflect forecast values as actual results are not available at this time.

# Capital Employed per Customer

*NSPI has the lowest capital employed per customer among its vertically integrated peers. NSPI is achieving low operating costs relative to its peers without a higher level of investment in plants, wires, equipment and other assets.*



*The capital employed per customer was not a metric adopted in the Kaiser Report. However, it provides useful insight to asset management and operating practices when applied to directly comparable organizations.*



Notes

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1 **Request IR-2:**

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3 **Nova Scotia Power Incorporated has indicated it benchmarks itself to other comparable**  
4 **utilities. What are these comparable utilities?**

5

6 Response IR-2:

7

8 Please refer to the Application, DE-03 – DE-04, Appendix B.

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1 **Request IR-3:**

2

3 **Previously, Nova Scotia Power Incorporated indicated that their rate of return was in the**  
4 **middle of the pack for similar and comparable utilities. This application seeks an increase**  
5 **in that rate of return. Where does Nova Scotia Power Incorporated feel its rate of return**  
6 **should be in relation to other comparable utilities?**

7

8 Response IR-3:

9

10 Comparable Canadian utilities now have ROEs that are higher than Nova Scotia Power's and  
11 certain Canadian utilities have recently been granted improvements to their ROE and percentage  
12 of common equity invested. Please refer to the evidence of Kathleen McShane at Appendix F of  
13 Nova Scotia Power's Direct Evidence for more details in this regard. Please also refer to Nova  
14 Scotia Power's Direct Evidence at Section 6.3.

15

16 Although Ms. McShane's evidence supports a ROE of 10.6 percent, Nova Scotia Power has  
17 requested that the ROE for rate setting purposes be 9.6 percent.

18

19

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1 **Request IR-4:**

2

3 **Nova Scotia Power has previously been criticized for an apparent unwillingness to place a**  
4 **proportionate amount risk for projects on shareholders. How does Nova Scotia Power**  
5 **Incorporated plan to change its balance of risk against shareholders versus ratepayers**  
6 **should an increase in the rate of return be approved?**

7

8 Response IR-4:

9

10 Nova Scotia Power's view of risk is reflected in the Application, and described in the evidence  
11 of our consultant Kathleen McShane.

12

13 The company's Application proposes a change in Return on Equity (ROE) that reflects the  
14 current risk profile of the company. ROE is to be reflective of the level of overall risk faced by a  
15 business. Nova Scotia Power has proposed an ROE that is commensurate with the level of risk  
16 that it faces as a vertically integrated utility.

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1 **Request IR-5:**

2  
3 **Please list any audits performed on Nova Scotia Power Incorporated operations over the**  
4 **past five years (excluding fuel cost audits previously filed with the board). Please note**  
5 **whether the audit was internal or external, what operations were covered, and whether**  
6 **those audits were performance, financial reporting, or value for money audits.**

7  
8 Response IR-5:

9  
10 The following audits have been undertaken in the past five years:

- 11
- 12 1. An external financial reporting audit is performed annually and reported publicly as part  
13 of NSPIs annual financial statement reporting.  
14
  - 15 2. NSPIs Internal Audit department undertakes several audits each year in a variety of areas  
16 of the company's operations. For example, in the past five years, operational audits have  
17 been undertaken in respect of revenue protection, business continuity, and inventory.  
18 Compliance audits have been undertaken in areas such as affiliate transactions, expense  
19 policy, and health and safety. Financial audits of significant matters such as treasury  
20 services and large customer billing have also been undertaken. Internal Audit has  
21 completed more than twenty audits in the past five years.  
22
  - 23 3. As part of our Environmental Management System (EMS), NSPI has a formal  
24 environmental audit program that reviews how well we comply with the criteria set out in  
25 our EMS as well as our environmental regulatory requirements. Environmental audits  
26 are conducted annually.  
27
  - 28 4. External Affiliate Code of Conduct audits.  
29

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1 5. Northeast Power Coordinating Council (NPCC) audit related to NERC reliability  
2 standards

3

4 In addition to these audits, the UARB engaged an external consultant to review NSPI's OM&G  
5 costs and related operating processes.

6

7 As part of the audit process, operating areas within NSPI are audited on a regular cycle, normally  
8 every three years. The audits are conducted by internal NSPI staff.

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1 **Request IR-6:**

2

3 **What steps has Nova Scotia Power Incorporated taken to find efficiencies which would**  
4 **result in improved service or costs savings to ratepayers?**

5

6 Response IR-6:

7

8 Please refer to Liberal IR-1.

9

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1 **Request IR-7:**

2

3 **Where savings have resulted from activities described in IR-5, how have those savings been**  
4 **applied to the rate? Have the savings been distributed equally across rate classes or in**  
5 **another manner? If in a manner other than equally, please describe.**

6

7 Response IR-7:

8

9 Nova Scotia Power allocates costs, which reflect achieved savings, over all rate classes in  
10 accordance with the UARB-approved Cost of Service Study (COSS). Many factors bear on the  
11 cost of providing electricity to different categories of customers. In the cost of service  
12 methodology, revenue to be recovered through rates is intended to reflect the costs of serving  
13 each class, as measured by the revenue-to-cost (R/C) ratio.

14

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1 **Request IR-8:**

2

3 **If savings or efficiencies described in IR-5 were delivered through partnership or**  
4 **cooperation with other Emera utilities, please describe what audit controls are in place to**  
5 **ensure that costs are appropriately divided between the benefitting parties and only costs**  
6 **reasonably attributable to Nova Scotia Power Incorporated are charged to ratepayers.**

7

8 Response IR-8:

9

10 Transactions between Nova Scotia Power and its affiliates are governed by the UARB-approved  
11 Affiliate Code of Conduct. The primary purpose of the Affiliate Code of Conduct is to ensure  
12 that all transactions entered into between Nova Scotia Power and affiliates are carried out in a  
13 manner reasonably expected to produce demonstrable benefit to NSPI customers, when  
14 compared with all other available options.<sup>1</sup> The Affiliate Code of Conduct prohibits subsidy by  
15 Nova Scotia Power of the costs, revenues or activities of affiliates.<sup>2</sup>

16

17 The Affiliate Code of Conduct requires that Nova Scotia Power submit a detailed annual report  
18 to the UARB on its affiliate transactions.<sup>3</sup> It further provides that Nova Scotia Power shall be  
19 subject to audit of its affiliate transactions from time to time as the UARB determines  
20 appropriate.<sup>4</sup>

21

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<sup>1</sup> NSPI Revised Code of Conduct Governing Affiliate Transactions, NSUARB – NSPI – P-882, UARB Order, February 24, 2009, Section 1.0 (“Affiliate Code of Conduct”).

<sup>2</sup> Affiliate Code of Conduct, Section 6.0.

<sup>3</sup> Affiliate Code of Conduct, Section 7.1.

<sup>4</sup> Affiliate Code of Conduct, Section 7.2.



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1 **Request IR-9:**

2

3 **Other than through review by the Nova Scotia Utility and Review Board, please describe**  
4 **how shared expenses with other Emera utilities are audited.**

5

6 Response IR-9:

7

8 Nova Scotia Power is subject to regulatory oversight by the UARB, which oversight includes  
9 review and audit of its transactions with other Emera companies. Please refer to Liberal IR-8.  
10 NSPI related party disclosure are audited as part of its external financial reporting audit  
11 performed annually and reported publicly.

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1 **Request IR-10:**

2  
3 **Does Nova Scotia Power Incorporated regularly benchmark itself against other utilities for**  
4 **outages and service levels? If so, what utilities does Nova Scotia Power Incorporated**  
5 **benchmark itself against and how does it compare?**

6  
7 Response IR-10:

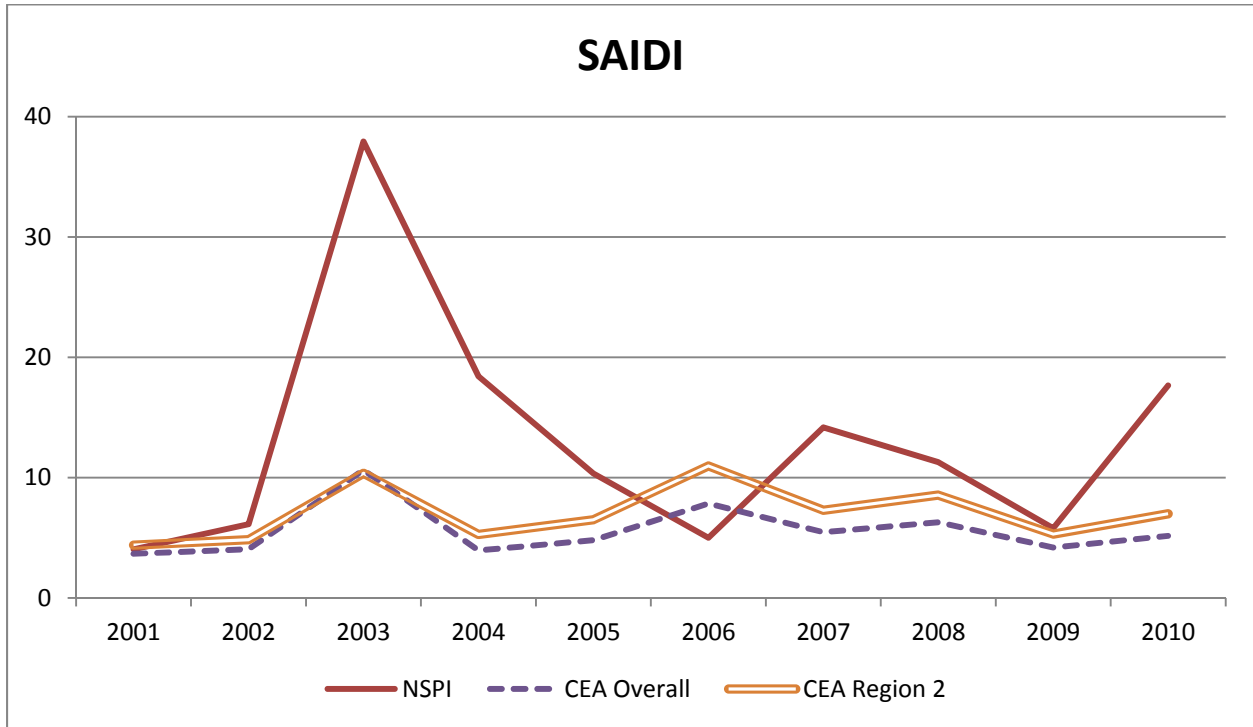
8  
9 NSPI regularly compares itself against other utilities for system outage performance via our  
10 participation in the Canadian Electrical Association (CEA) “Service Continuity Committee”. The  
11 CEA groups the member utilities as either those utilities which are exclusively urban in nature,  
12 or Region 2 utilities that serve a mix of urban and rural customers. Since NSPI serves a mix of  
13 urban and rural customers, it is included in the Region 2 group of utilities (please see the list of  
14 Region 2 companies below).

15  
16 **Region 2 Utilities:**

- 17  
18 • ATCO Electric  
19 • B.C. Hydro  
20 • BELCO (Bermuda)  
21 • BELIZE  
22 • FortisAlberta  
23 • FortisBC  
24 • Hydro One  
25 • Manitoba Hydro  
26 • Maritime Electric Company  
27 • New Brunswick Power  
28 • Newfoundland & Labrador Hydro  
29 • Newfoundland Power  
30 • Nova Scotia Power Inc.  
31 • Oakville Hydro Electricity Distribution  
32 • SaskPower  
33 • St. Lucia Electricity Services  
34 • Veridian Connections

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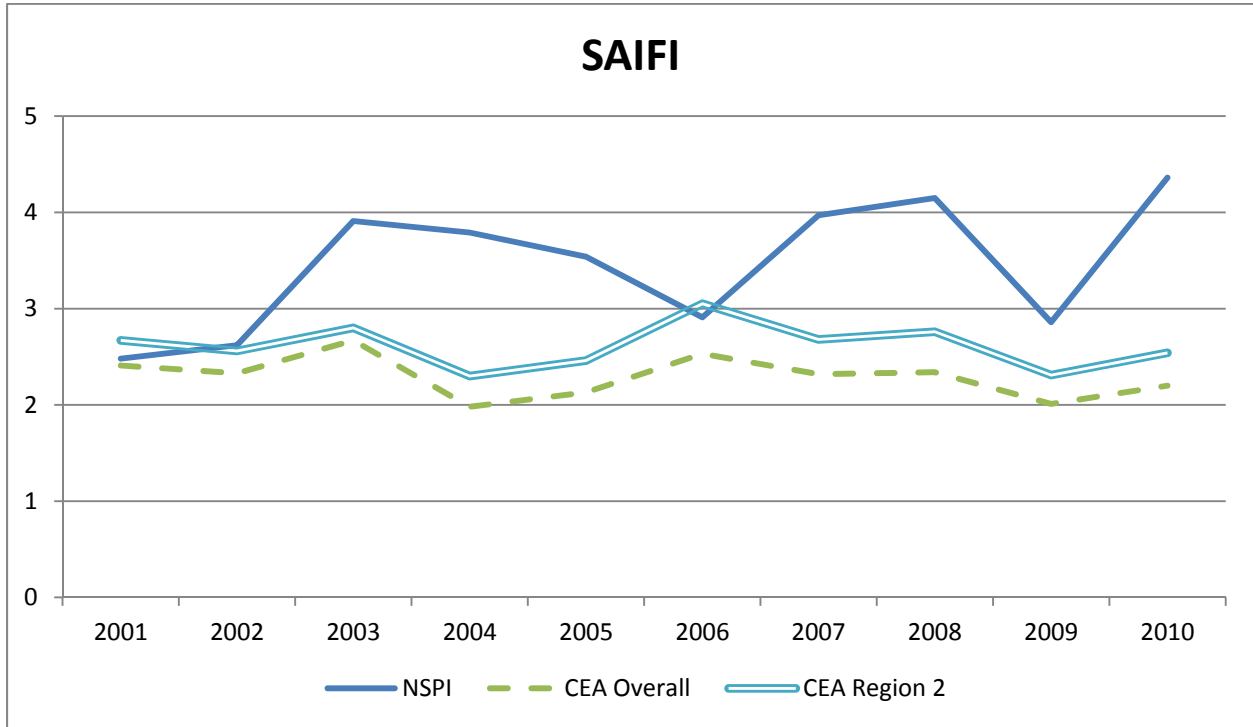
1 The two key industry standard metrics that are used are System Average Interruption Frequency  
2 Index (SAIFI) and System Average Interruption Duration Index (SAIDI). The results of the  
3 previous ten years for each of these metrics can be seen in the graphs and table below.



4  
5

2012 General Rate Application (NSUARB P-892)  
 NSPI Responses to Liberal Information Requests

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1  
2

YEAR	NSPI		CEA OVERALL		CEA REGION 2	
	SAIFI	SAIDI	SAIFI	SAIDI	SAIFI	SAIDI
<b>2001</b>	2.48	4.05	2.41	3.67	2.67	4.39
<b>2002</b>	2.62	6.13	2.33	4.06	2.56	4.85
<b>2003</b>	3.91	37.94	2.67	10.65	2.80	10.36
<b>2004</b>	3.79	18.42	1.98	3.95	2.30	5.28
<b>2005</b>	3.54	10.35	2.13	4.80	2.46	6.51
<b>2006</b>	2.91	5.00	2.53	7.85	3.05	10.97
<b>2007</b>	3.97	14.18	2.32	5.47	2.68	7.29
<b>2008</b>	4.15	11.29	2.34	6.29	2.76	8.56
<b>2009</b>	2.86	5.80	2.01	4.20	2.31	5.31
<b>2010</b>	4.36	17.67	2.20	5.17	2.54	7.00

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1 **Request IR-11:**

2

3 **Does Nova Scotia Power Incorporated regularly benchmark itself against other utilities for**  
4 **rates in each class? If so, what utilities does Nova Scotia Power Incorporated benchmark**  
5 **itself against and how does it compare?**

6

7 Response IR-11:

8

9 Nova Scotia Power monitors industry trends including rates by customer class. Please refer to  
10 OP-11 of the Application for Hydro Quebec's most recent "Comparison of Electricity Prices in  
11 Major North American Cities".

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1 **Request IR-12:**

2

3 **What provisions has Nova Scotia Power Incorporated made to address expected federal**  
4 **government requirements to phase out coal fired generating stations? Based on the**  
5 **current understanding of the federal government plan, what year would each of the plants**  
6 **need to be decommissioned?**

7

8 Response IR-12:

9

10 The regulations under the framework announced by Environment Canada to reduce carbon  
11 dioxide emissions from the coal portion of the electricity sector have not been finalized.

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1 **Request IR-13:**

2

3 **If the federal regulations regarding coal plants remain the same as they are currently**  
4 **understood to be, what operational costs will Nova Scotia Power Incorporated incur? Will**  
5 **staff levels and position requirements of Nova Scotia Power Incorporated be impacted?**

6

7 Response IR-13:

8

9 Please refer to Liberal IR-12.

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1 **Request IR-14:**

2

3 **Does Nova Scotia Power Incorporated currently have difficulty filling specific types of**  
4 **vacant positions within the organization? If so, what types of positions and are these**  
5 **challenges specific to certain geographic locations?**

6

7 Response IR-14:

8

9 NSPI does have difficulty filling some specific positions. These positions include First Class  
10 Power Engineers, Journeyman Powerline Technicians and Operations Supervisors.



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1 **Request IR-15:**

2

3 **What is the state of pension funds which are the responsibility of Nova Scotia Power**  
4 **Incorporated? Does Nova Scotia Power Incorporated anticipate any significant**  
5 **requirement for payments by the company into the pension fund(s) it has responsibility**  
6 **for? If so, have these costs been factored into the current rate application?**

7

8 Response IR-15:

9

10 Please refer to NPB IR-99 Attachment 1 for the most recently filed funding valuation report for  
11 the pension plans. Please refer to Liberty IR-80 Attachment 1 for the Accounting Valuation  
12 Report as at December 31, 2010, Appendix D, for an estimate of the cash requirements for the  
13 pension plans for the year 2011. Please refer to the Application, RB-02 - RB-16, Attachment 2,  
14 Appendix B, for an estimate of the cash requirements for the pension plans for the years 2012 to  
15 2016. Please also refer to Liberty IR-86.

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1 **Request IR-16:**

2  
3 **How has Nova Scotia Power Incorporated factored in the cost of managing power delivered**  
4 **by power produced through the COMFIT program? What is the cost of managing power**  
5 **delivered through this program? What is the anticipated annual impact on the fuel and**  
6 **operational costs to Nova Scotia Power Incorporated and to ratepayers?**

7  
8 Response IR-16:

9  
10 Nova Scotia Power has not assumed fuel costs associated with the COMFIT program in its  
11 Application. 2012 test year fuel costs are forecast as of December 31, 2010. The COMFIT  
12 rates have been set by the UARB by Decision dated July 4, 2011.<sup>1</sup> Some rates may be subject to  
13 change following the Board Counsel consultant's compliance filing on August 2, 2011.

14  
15 Nova Scotia Power has not performed the above-referenced analysis in preparation of this  
16 Application.

17

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<sup>1</sup> NSPI 2011, UARB Decision, NSUARB-BRD-E-R-10, July 4, 2011.

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1 **Request IR-17:**

2

3 **Are there any increased maintenance or transmission upgrading requirements expected to**  
4 **meet the demands of participants in the COMFIT program? If so, who will bear these**  
5 **costs and what is the expected impact?**

6

7 Response IR-17:

8

9 Nova Scotia Power has not assumed increased maintenance or transmission upgrading  
10 requirements for COMFIT in its Application.

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1 **Request IR-18:**

2

3 **Has Nova Scotia Power Incorporated examined the cost of converting the diesel generating**  
4 **facility in Burnside, Dartmouth, to Natural Gas? If so, what are the costs? If a business**  
5 **case has been developed please provide this information.**

6

7 Response IR-18:

8

9 Nova Scotia Power originally filed a capital work order application respecting this project in  
10 August, 2000. Subsequently, Nova Scotia Power requested the application be placed on hold  
11 pending further examination of the scope of the project. The application was reactivated with  
12 revisions in August 2004 (CI #16968). By letter dated November 25, 2004, the UARB advised  
13 that it was unable to approve the project at that time as based upon the economic justification  
14 information before the Board, it determined that if the project were approved, the practical result  
15 would be to place further upward pressure on Nova Scotia Power's rates. At that time, the  
16 UARB stated that it was open to reconsideration of the project should circumstances change and  
17 the project becomes economically justifiable.

18

19 Nova Scotia Power continues to evaluate the business case for this opportunity. Additional work  
20 related to wind integration will help determine if the role for these generators will continue as  
21 predominantly limited-use, peaking and reserve units or whether increase demands for fast acting  
22 generation will result in higher utilization in the future. These considerations would heavily  
23 influence any future investment plans for these units. If Nova Scotia Power is able to determine  
24 that the project has become economically justifiable, Nova Scotia Power would bring forward  
25 the appropriate application with supporting documents for UARB approval.

26

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1 **Request IR-19:**

2  
3 **Work at Tufts Cove was recently reported as being over budget. What steps has Nova**  
4 **Scotia Power Incorporated taken to ensure that future capital projects are appropriately**  
5 **estimated and delivered within budget and scope?**

6  
7 Response IR-19:

8  
9 Before undertaking a capital project, Nova Scotia Power undertakes a rigorous engineering,  
10 scoping and estimating exercise, engaging design engineers, operating engineers, suppliers,  
11 technical staff, and others as appropriate. Nova Scotia Power's goal is to select designs and  
12 equipment to provide the best value over the life of the project, to deliver the lowest overall  
13 operating costs and greatest benefits to customers. During planning and construction, Nova  
14 Scotia Power takes reasonable and prudent steps to deliver projects on time and within budget to  
15 preserve value for Nova Scotia Power customers.

16  
17 Despite best efforts, a project can encounter cost overruns due to unforeseen circumstances. In  
18 these cases, Nova Scotia Power may make a request for Authority to Overspend (ATO) to the  
19 UARB. In requesting an ATO, Nova Scotia Power must show that it acted prudently and with  
20 due diligence and that the project remains economically justified and in the best interests of  
21 customers. With respect to Nova Scotia Power's ATO for the Tufts Cove 6 Waste Heat  
22 Recovery Project, the UARB found as follows:

23  
24 The Board understands that this is the first Project of this type undertaken  
25 by NSPI. Despite this large ATO request, the evidence filed by NSPI supports the  
26 position that it appropriately dealt with the design problems and changes as they  
27 occurred. There is no evidence of any imprudent behaviour on the part of NSPI.  
28 The Board concludes that NSPI appears to have made the best decisions based on  
29 the evidence before it at the time.<sup>1</sup>

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<sup>1</sup>ATO for TUC6 Waste Heat Recovery Project – CI# 28098, NSUARB-NSPI-P-128.07, UARB decision, November 22, 2010, at paragraph 59.

**NON-CONFIDENTIAL**

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1 **Request IR-20:**

2

3 **What steps has Nova Scotia Power Incorporated taken to examine the potential for life-**  
4 **cycle cost savings by undergrounding power lines in densely serviced areas?**

5

6 Response IR-20:

7

8 Nova Scotia Power has reviewed opportunities for trench sharing costs with Halifax Regional  
9 Municipality (HRM) on an occasional opportunity basis, but has not specifically examined the  
10 potential for lifecycle cost savings by undergrounding power lines in densely serviced areas. For  
11 instance, Nova Scotia Power, HRM and a developer are currently engaged in a pilot project in  
12 Bedford West to examine trenching opportunities.

13

14 HRM has recently requested Nova Scotia Power to initiate a study to determine the costs  
15 associated with expanding the current pole free area in Downtown Halifax and with expanding  
16 the Downtown Dartmouth underground system. This request is in the study stage and a draft  
17 report has been prepared. Should this project proceed, there could also be the potential to  
18 examine life cycle cost savings by undergrounding power lines in densely serviced areas.

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1 **Request IR-21:**

2

3 **Has Nova Scotia Power Incorporated taken any steps to test actual costs associated with**  
4 **undergrounding power lines in densely serviced areas?**

5

6 Response IR-21:

7

8 Some experience of the actual costs associated with “re-undergrounding” power lines was gained  
9 in the Cowie Hill area of Halifax Regional Municipality.

10

11 Please refer to Liberal IR-20.

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1 **Request IR-22:**

2

3 **Nova Scotia Power Incorporated is involved in a partnership on tidal power. Are the costs**  
4 **of this research being borne by ratepayers or by shareholders? How are costs shared**  
5 **between Nova Scotia Power Incorporated and its partners?**

6

7 Response IR-22:

8

9 A portion of the capital costs for tidal energy development are supplied through NS Power's  
10 capital program and approved by the UARB in ACE item 28678. The remainder of the capital  
11 costs are funded through in-kind contributions from Open Hydro and Federal contributions from  
12 NRCan.



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1 **Request IR-23:**

2

3 **While the Nova Scotia government relaxed mercury emission requirements, it is expected**  
4 **that future emission requirements will still require Nova Scotia Power Incorporated to**  
5 **make up for the mercury emissions at some point. What steps is Nova Scotia Power**  
6 **Incorporated taking to address current and future mercury emission requirements? What**  
7 **costs are anticipated?**

8

9 Response IR-23:

10

11 NSPIs mercury emission reduction strategy consists of the utilization of Powder Activated  
12 Carbon (PAC) technology, combined with concurrent emission reductions achieved by meeting  
13 provincial renewable energy standards. The Nova Scotia Renewable Energy Standard (RES),  
14 requires that, by 2015, 25 percent of electricity generation in Nova Scotia be produced by  
15 renewable generation. A further increase to 40 percent by 2020 is also anticipated. NSPIs  
16 strategy for RES compliance combined with PAC technology will help NSPI meet future  
17 mercury emissions requirements.

18

19 The cost of reducing mercury emissions has been optimized to achieve total reductions that align  
20 with lower coal consumption as renewable energy alternatives are developed.

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1 **Request IR-24:**

2

3 **Has Nova Scotia Power Incorporated discussed loan guarantees for construction financing**  
4 **with the Government of Nova Scotia in order to reduce costs to ratepayers for construction**  
5 **and other costs?**

6

7 Response IR-24:

8

9 Nova Scotia Power has not discussed loan guarantees for its construction financing with the  
10 Nova Scotia Government.

11

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1 **Request IR-25:**

2  
3 **Nova Scotia Power Incorporated has said it foresees the need for rate increases in 2013 to**  
4 **2015. Why would further increases be necessary? What costs are increasing? Why are**  
5 **such increases predicted and what is being done to mitigate or prevent the need for these**  
6 **increases?**

7  
8 **Response IR-25:**

9  
10 Nova Scotia Power and the province of Nova Scotia are in a period of transition. We are  
11 investing in Nova Scotia to expand the use of renewable energy, reduce air emissions and  
12 maintain and improve plant efficiency. Please refer to Nova Scotia Power's 5 Year Plan, as  
13 contained in the 2011 ACE Plan filing.

14  
15 During this time, Nova Scotia Power expects to continue to experience fuel cost increases due to  
16 volatility of foreign coal, as well as increases in OM&G costs. Please refer to the Application,  
17 Section 5.5 and Appendix E of Nova Scotia Power's Direct Evidence for Nova Scotia Power's  
18 Five Year OM&G Forecast.

19  
20 In addition, prior to filing this Application, Nova Scotia Power held public meetings with  
21 customer representatives to discuss cost pressures it is facing over the next several years. Nova  
22 Scotia Power has proposed a multi-year approach that will provide more stable and predictable  
23 rates and intends to continue these discussions with our customers and their representatives.  
24 Nova Scotia Power will continue to work constructively and collaboratively to try to find a  
25 solution that will provide more stable electricity prices in the short term, and lower than might  
26 result from the traditional rate-making process.

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1 **Request IR-26:**

2

3 **What services does Nova Scotia Power Incorporated believe customers expect that it would**  
4 **not be able to provide without the increase applied for? How does the company define**  
5 **customer expectations?**

6

7 Response IR-26:

8

9 Nova Scotia Power has put forward an Application which requests recovery of the revenue  
10 necessary to meet its obligation to serve customers, including programs to enhance reliability,  
11 and which will recover costs relating to transformation of our generation mix. Nova Scotia  
12 Power defines customer expectations based upon feedback we receive from them during the  
13 course of their day to day interactions with us, and in customer surveys conducted for us by a  
14 third party research company.

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1 **Request IR-27:**

2  
3 **Nova Scotia Power Incorporated has indicated in its application that it strives to ensure**  
4 **rates are manageable. How does the company measure manageability of rates for**  
5 **ratepayers?**

6  
7 **Response IR-27:**

8  
9 Nova Scotia Power recognizes that customers determine the manageability of rates. In general,  
10 Nova Scotia Power's efforts to ensure rates are manageable for customers include three key  
11 areas:

- 12
- 13 1. Keeping costs as low as possible, while still meeting customers' service expectations.  
14 Since 2002, Nova Scotia Power's requested OM&G spending on a per customer basis is  
15 less than the Consumer Price Index over the same period. Please refer to Section 5.0 of  
16 Nova Scotia Power's Direct Evidence.  
17
  - 18 2. Working with stakeholders and customer representatives with respect to the timing of  
19 including costs in rates. The recent depreciation and ROE settlements are examples. In  
20 addition, Nova Scotia Power has proposed a plan to bring stability and predictability to  
21 rates over the next three years (2012-2014). We have discussed this plan with customer  
22 representatives, and will continue to do so in advance of the hearing of this Application.  
23 In the event an agreement can be reached that appropriately recovers costs while  
24 mitigating rate increases for customers, Nova Scotia Power will file the plan with the  
25 Board in advance of the hearing of this matter.  
26
  - 27 3. Working with individual customers who find their bills unmanageable. This includes  
28 working out flexible payment arrangements, as well as assisting them to take advance of

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1 energy efficiency and conservation programs, including Efficiency Nova Scotia programs  
2 designed especially for low income households.

3  
4 [http://www.energycns.ca/for\\_homes/energy\\_savings\\_programs/low\\_income\\_homeowners/](http://www.energycns.ca/for_homes/energy_savings_programs/low_income_homeowners/)  
5

6 Nova Scotia Power also established the Good Neighbour Energy Fund in partnership with  
7 the Salvation Army to assist low income Nova Scotians in paying their winter electricity  
8 bills. Emera shareholders provide money to the fund through Nova Scotia Power. Please  
9 refer to the below link for more information:

10  
11 <http://www.salvationarmy.ca/maritime/gnef/>  
12

13 Approximately three years ago, the Government of Nova Scotia contributed \$800,000 for  
14 the Salvation Army to use over several years. Some heating oil companies have also  
15 contributed. Nova Scotia Power, on an annual basis, provides:

- 16
- 17 a. \$100,000 to the fund
  - 18
  - 19 b. \$30,000 for Salvation Army administration
  - 20
  - 21 c. Additional 1/3 matching funds for donations to the Good Neighbour Energy Fund  
22 made by NS Power employees or customers.

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1 **Request IR-28:**

2

3 **Nova Scotia Power Incorporated has indicated a recognition that rate pressure is a concern**  
4 **of ratepayers. What provisions has the company made to address inability of ratepayers to**  
5 **pay their bills? What funding, if any, is the company allocating to support low income**  
6 **ratepayers?**

7

8 **Response IR-28:**

9

10

11 Please refer to Liberal IR-27.

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1 **Request IR-29:**

2

3 **Some businesses located in Nova Scotia could close as a result of rate pressure. For larger**  
4 **operations this could result in a decreased load. Has Nova Scotia Power Incorporated**  
5 **made assumptions of customer loss in its load estimates for future years?**

6

7 Response IR-29:

8

9 The load forecast included in Nova Scotia Power's Application is for the 2012 test year. Please  
10 refer to Section 8.0 of Nova Scotia Power's Direct Evidence for a discussion of the various  
11 assumptions made in the load forecast for the various customer classes. NSPI's proposal for a  
12 multi-year rate plan may provide some assistance to businesses in Nova Scotia, which may  
13 appreciate the predictability inherent in the proposal.

14



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1 **Request IR-30:**

2

3 **Nova Scotia Power Incorporated has indicated this application is in the public interest in**  
4 **addition to being in the company's interest. In what ways is this application in the public**  
5 **interest?**

6

7 Response IR-30:

8

9 Nova Scotia Power's Application and Direct Evidence describes throughout the many  
10 improvements and benefits for customers as a result of the effort of Nova Scotia Power's  
11 employees. Approval of this Application will allow Nova Scotia Power to:

12

- 13 • Continue to transform the generation mix of the utility, delivering more clean renewable  
14 energy to our customers;
- 15
- 16 • Take the necessary steps to add renewable generation that will, over time, lead to more  
17 stable and predictable electricity rates;
- 18
- 19 • Continue to invest in Nova Scotia, building infrastructure and creating jobs for Nova  
20 Scotians, at the lowest reasonable cost over the long term;
- 21
- 22 • Improve reliability of service to customers, including during extreme weather.
- 23

24 There are many other examples of how a financially healthy utility is in the public interest. The  
25 UARB has recognized the importance of this principle in past decisions. For example:

26

27 The Board recognizes that the interests of customers and shareholders of  
28 Nova Scotia Power are not mutually exclusive. They both benefit from a

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1 financially sound utility.<sup>1</sup>  
2  
3

4 As Nova Scotia Power stated at page 160 of its Direct Evidence:  
5

6 We believe our customers are buying a better product today than they bought three years  
7 ago. They are buying electricity that is cleaner and more sustainable. It will become even  
8 cleaner and more reliable in the years ahead.  
9

10 Approval of this Application will allow Nova Scotia Power to achieve these shared goals, which  
11 are in the public interest.

---

<sup>1</sup> NSPI 2006 Rate Case, UARB Decision, NSUARB – NSPI – P-882, March 10, 2006, paragraph 662.

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1 **Request IR-31:**

2

3 **What does Nova Scotia Power expect the operational costs to be with respect to bringing**  
4 **online power from Lower Churchill?**

5

6 Response IR-31:

7

8 Please refer to EAC IR-22.

9

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1 **Request IR-32:**

2

3 **What transmission system improvements will be required to support power from Lower**  
4 **Churchill and what are the cost estimates of these projects?**

5

6 Response IR-32:

7

8 Please refer to EAC IR-22.

9

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1 **Request IR-33:**

2

3 **What is the expected rate impact to deliver power from Lower Churchill?**

4

5 Response IR-33:

6

7 Please refer to EAC IR-22.

8