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Request IR-33:

Reference response to UARB IR-1,

(a) Please expand on the previous response by providing the requested breakdown of all costs related to compensation for any Emera-related employees. This should not be limited to direct compensation but should clearly itemize all costs associated with any shared services. The response should also show derivations used in determining the forecasts for each employee or category.

Response IR-33:

(a) There are no Emera employees in NS Power. There are shared service groups that have NS Power employees performing services for NS Power, Emera affiliates and Emera corporate. These are reported annually to the Board. Please refer to Appendix E of the Application for details on all costs associated with each shared service group. The groups include:

- Corporate Secretary and General Counsel (Appendix E page 5)
- Corporate Finance (Appendix E page 7)
- Human Resources (Appendix E page 11)
- Environmental Policy and Procedures (Appendix E page 21)
- Facilities, Procurement and Purchasing* (Appendix E page 13)
- Information Technology* (Appendix E page 16)

*Note: Facilities, Procurement and Purchasing and Information Technology have service level agreements that define services and charges.

For shared service groups listed above the total costs of the particular group are recorded on each account code line item in Appendix E of the Application. The recovery of costs from affiliates are recorded on account code line item 057 of Appendix E in accordance with the Affiliate Code of Conduct.

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Request IR-34:

Reference response to UARB IR-2,

(a) Please expand on the response by providing the requested breakdown of the number of employees in each category who were eligible to receive a bonus and the percentage that actually received a bonus for each of the 5 years.

(b) Did any eligible employees not receive a bonus in any of the 5 years? If so, how many?

(c) NSPI's response to IR-2 c) states that the revenue requirement for 2013 and 2014 does not include any amounts for "executive" incentives. Please provide a more complete response and state any amounts included for employees who are not in the executive category and show how those amounts were derived.

Response IR-34:

(a) Please refer to NSUARB IR-2. The table provided shows the count of all eligible employees. In the past five years all eligible employees received some portion of their incentive target. When NS Power sets compensation levels to be comparable to other employers, the total compensation including target incentive payout is set at that level. Accordingly, all employees have a portion of this compensation at risks based on personal and company performance. Employees achieving an incentive payout below target are being compensated below industry norm. This is not evident by the use of the word "bonus" as presented in the question.

(b) No, all employees deemed eligible received some portion of their incentive in all years.

(c) The overall incentive expense included in the Application for 2013 and 2014 is based on the 2012 forecast, the same labour escalations used for Salary and Benefit expense in

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Liberty IR-69 to forecast 2013 and 2014 costs. Incentive expense for 2012 is budgeted at $2.50 million. CA IR-25 Attachment 1 has the 2013 incentive compensation listed at $2.57 million. With escalation, the 2014 incentive expense is $2.64 million.

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Request IR-35:

The "Rate base" is established on numerous estimates surrounding capital expenditures.

(a) Please provide the annual projected capital expenditures and realized capital expenditures for the past five years.

(b) If the estimates are consistently under or over actual is any adjustment made to the estimate to attempt to capture this trend?

Response IR-35:

(a) Please refer to the figure below for the actual spend for each of the past five year compared to what was included in rates.

Year	Actual ($M)	Amount in Rates ($M)	Variance ($M)
2007	125.6	136.2	(10.6)
2008	167.4	0.0	167.4
2009	279.7	203.2	76.5
2010	543.6	0.0	543.6
2011	315.0	0.0	315.0

(b) Please refer to NSUARB IR-40. For the most part, actual spending exceeds the spending amounts included in rates. No adjustment is required to address differences between forecast and actual capital expenditures.

The following figure provides additional information to complement the request. It details the actual and the amount in rates for total property, plant and equipment that is represented in rate base.

Year	Actual ($M)	Amounts in Rates ($M)	Variance ($M)
2007	2,384.9	2,368.3	16.6
2008	2,422.9	2,368.3	54.6
2009	2,573.7	2,478.6	95.1
2010	3,006.4	2,478.6	527.8
2011	3,107.1	2,478.6	628.5

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Request IR-36:

With reference to UARB IR-6, where the Board requested:

Please indicate whether consideration was given to determining whether the 50th percentile of the revised comparator group remains an appropriate benchmark. If so, how does NSPI support this position?

NSPI's response explained the change in comparator group, however, did not indicate whether any considerations were made regarding whether striving to ensure its executives are compensated at the 50th percentile remains appropriate.

(a) Please respond to the question as previously requested.

(b) Within the previous comparator group NSPI's revenues did approximate the average of the comparable group. Within the new comparable group it appears NSPI is one of the smallest based on revenues; has NSPI considered reducing the goal of 50th percentile to a goal more in line with where they fit in terms of total revenue?

(c) Has NSPI considered the appropriateness of its salaries benchmarked against regulated assets of comparable groups, or any other indicators of the size and complexity of the entity?

(d) Would NSPI agree that if its revenues or assets are only 25% of the comparable entities that it would be reasonable to aim to set compensation at 25% of the comparable entities?

(e) There is insufficient data, even within the broader comparator group, to provide detail for any position except the VP Technical & Construction Services. What other information has NSPI relied upon to establish executive compensation?

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Response IR-36:

(a) A compensation structure benchmarked at the 50th percentile is the market norm. It would be by exception that a company would choose to lead (75th percentile) or lag (25th percentile) of the market. The NS Power Board of Directors and Executive Management team strive to maintain a total compensation structure benchmarked at the 50th percentile in the market and continue to consider the 50th percentile to be the appropriate target for all non-union employees for total compensation. NS Power's ability to achieve the goal of maintaining a total compensation structure benchmarked at the 50th percentile in the market requires periodic assessment of job rates relative to market and a performance based annual salary review to continue progressing employee salaries toward benchmarked job rates.

(b) NS Power does not conclude that it is one of the smallest participants in the survey based on revenues. NS Power relies on external expert consultants to advise if the survey data is reliable and sufficient to make recommendations. Due to the confidential requirements of the Towers Watson survey, NS Power is not aware of the extent of participation or the varying level of revenues for each of the survey participants within the comparator categories so we cannot comment on comparing ourselves based on revenue with the categories described in the report.

(c) NS Power has attempted to be consistent year over year in our assessment of executive compensation. The Board has reviewed (through its consultant, Kaiser Associates, Inc. during the 2009 GRA[1]) the appropriateness of the comparator groups and has accepted and confirmed that both comparator groups and the 50th percentile are appropriate as part of that review.

[1] 2009 NSPI General Rate Application, Executive Compensation Review of Nova Scotia Power Inc., prepared by Kaiser Associates, Inc., NSUARB-NSPI-P-888, June 16, 2008.

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Our external compensation experts look at a variety of comparator groups based on revenues as per their methodology. We rely on their expertise and methodology to benchmark our compensation.

(d) NS Power would not agree. Compensation recommendations are established based on professional advice from industry compensation experts and provided to the Board as part of the Executive Compensation Report on an annual basis.

NS Power competes for talent from other organizations who target and pay at the 50th percentile when endeavoring to recruit and maintain the best talent.

(e) In addition to Towers Watson, NS Power reviewed information and recommendations provided by Mercer to establish executive compensation.

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Request IR-37:

In response to UARB IR-8 a), Confidential attachment 2, Note 4 indicates expenses were incurred that were subsequently reimbursed by Emera.

(a) Please provide an estimate of the amount of time executive team members and employees spent on Emera activities in 2011.

(b) What portion of salary was covered to compensate rate payers for time NSPI executives and employees are performing affiliate business?

(c) Has any adjustment been made to salaries in the application for affiliate activities? If so, please provide details.

Response IR-37:

(a) Please refer to the Affiliate Code of Conduct Report filed on April 30, 2012 for details respecting all affiliate transactions in 2011 including shared executives, shared resources, and loans of NS Power personnel to an affiliate.[1]

(b) All transactions involving shared executives, shared resources, or loans of NS Power personnel to an affiliate are done in accordance with the Affiliate Code of Conduct. Work or projects determined to be an affiliate transaction are fully allocated. All direct costs are charged for services provided, including materials and labour. Direct labour amounts include salary plus fringe benefit costs. A 50 percent overhead allocation is added to direct labour costs to ensure that all employee-related costs are included in the amount charged to an affiliate. Please refer to the Affiliate Code of Conduct Report filed April 30, 2012.

[1] NS Power 2011 Affiliate Code of Conduct Report, P-167, M04649, April 30, 2012.

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(c) The labour amounts included in the Application represent NS Power's forecast labour associated with NS Power business only.

Request IR-38:

The FAM and surrounding processes were established just a few years ago, please explain:

(a) How NSPI envisions the FAM proceedings occurring in the years up to and including 2015.
(b) What benefits, outside of the smoothing effect, inclusion of the FAM in the proposed rate stabilization plan has for rate payers.
(c) Does the rate stabilization plan function as intended absent the consolidation of FAM?

Response IR-38:

(a) Please refer to Liberty IR-44.

(b) Please refer DE-03–DE-04, page 23-33 of the Application for a full description of the benefits that the Rate Stabilization Plan has for ratepayers. The advantages listed include;

- Predictability, customers and business can plan to adjust to rate changes

- Time to adjust to decreasing load and lost fixed cost recovery from the pulp and paper sector

- Orderly, planned adjustment of the power system to lower load and changes in generation mix

- Uniform increases across all customer classes for the Rate Stabilization Plan period

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(c) Please refer to DE 03-04, page 29, line 10 of the Application. The Rate Stabilization Plan includes the application of the FAM and is an integral component of the plan.

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Request IR-39:

Reference response to UARB IR-10 Attachment 1,

(a) Five 2012 projects totaling $3,187,080 are listed as "Cancelled" or "Deferred". Please explain why this amount should be included in the rate base total.

(b) Eight projects are listed with an approval submission date of "TBD". These projects total $12,484,979 in 2012, $16,381,548 in 2013, and $22,695,588 in 2014. Please explain why each of those amounts should be included in the rate base totals.

(c) Please provide a description, explanation, and preliminary justification for the ACE 2014 project #40553 -- Wind Farm #2 (100MW) with an estimated cost of $28,097,454.

(d) Please provide a description, explanation, and preliminary justification for the ACE 2013 project #42397-- 2013 Transmission Reinforcements with an estimated cost of $40,462,286.

(e) Please provide a description, explanation, and preliminary justification for the ACE 2014 project #42398 -- 2014 Transmission Reinforcements with an estimated cost of $28,920,805.

(f) Please provide a description, explanation, and preliminary justification for the ACE 2013 project #42486 -- GRA Fast Acting Generation with an estimated cost of $5,322,506 in 2013 and $16,400,122 in 2014.

(g) Attachment 1 contains several items listed as

i) GRA LIN0 Sustaining…

ii) GRA LIN1&2 Sustaining…

iii) GRA Hydro Administration…

Please explain each of these items and comment on the level of expenditures listed for Lingan, given the limited future of those generating units.

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Response IR-39:

(a) Where projects are not advanced as outlined in the Plan, it is likely these will be replaced by projects not anticipated at the time of filing and the overall effect on revenue requirement will be minimal.

(b) While an exact date has not yet been determined, NS Power intends to file the eight projects in 2012 for Board approval.

(c) The Wind Farm #2 investment of approximately $28 million in 2014 reflects the first year of investment in a 100 MW wind farm, should it be determined that it is required to meet Renewable Electricity Standard (RES) compliance targets.

(d-e) Specific projects which will be identified as transmission reinforcement investments in 2013 and 2014 are currently under development. The forecast for this investment category reflects additional investment required to maintain the reliability of the transmission system. Projects included in this category have historically included refurbishing, or purchasing new transformers and the purchase of spare transformers.

(f) 'Fast-acting generation' refers to the generation source required to match supply with demand when a portion of demand is being served from non-dispatchable and intermittent renewable energy production. The justification for this investment in 2013 and 2014 will be developed when the results of the NS Power Wind Integration Study currently underway, are available.

(g) The capital forecast included in this rate application for 2013-2014 reflects the best information available at the time of the filing.

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(i-ii) Despite the seasonal nature and future plans for the Lingan 1 and 2 units, there still remains requirements for sustaining investments in order to maintain safe and reliable operations.

(iii) The Hydro Administration investment represents Hydro Infrastructure Renewal investments that have not been identified by specific Hydro units at this time.

As the estimates are refined and specific projects identified throughout 2013 and 2014, these investments will be brought forward for Board approval for the respective years.

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Request IR-40:

Many of the projects outlined in response to UARB IR-10 are not scoped or authorized yet. Please explain:

(a) Why should the Board approve the inclusion in rate base of projects such as LED Street Light Conversion or Wind Farm #2 which may not be realized during the test years.

(b) Would it be more appropriate to limit rate base increases to verifiable information or historical experience?

Response IR-40:

(a-b) NS Power general rate applications employ a forward looking test-year. This applies to all elements of the revenue requirement, including rate base.

The capital forecast included in this rate application for 2013-2014 reflects the best information available at the time of the filing. NS Power's forecast assumes achievement of the capital plan included in the rate filing. While there may be projects that get delayed or deferred as outlined in the Plan, there are also projects such as unplanned and unforeseen (U&Us) that were not anticipated at the time of filing and not included in the Plan. Because of these increases and decreases, NS Power believes the overall effect on the capital plan, and therefore on revenue requirement, will be minimal.

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Request IR-41:

Reference response to UARB IR-11,

(a) Part b) of that IR requested individual depreciation and ROE amounts that were included in the GRA for each of the projects in rate base which have not received Final Cost approval from the UARB. NSPI declined to provide this information, stating that it does not track ROE by asset and that its accounting system does not calculate depreciation by project. Please provide a calculation of NSPI's best estimate of depreciation and ROE for the combination of projects listed in Attachment 1 as being "In Service".

(b) Please provide descriptions and explanations of the expenditures associated with the following projects in Attachment 1 which are included in the rate base but are listed as "Projects Not Approved by the UARB":

i)	**CI41537**	**Amherst 138kV Substation**	**$498,050**
ii)	**CI38868**	**HYD Marshall Falls Hydro Station**	**$377,396**
iii)	**CI40314**	**Main Computer Centre Upgrade**	**$254,893**

Response IR-41:

(a) Please refer to Attachment 1 for NS Power's best estimate of depreciation and return on equity (ROE) for each in-service project not final costed for both 2013 and 2014. The depreciation estimate applies the pooled depreciation rate associated with the project multiplied by the gross plant value for each project. The ROE estimate applies the average net book value of each project for the period with 37.5 percent common equity and 9.2 percent ROE.

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(b) Project descriptions and explanations are below:

(i) Please refer to CI 41537 Amherst 138kV Substation filed with the Board in June, 2012.[1]

(ii) CI 38868 Marshall Falls Hydro Station pertains to a new hydro plant development at the existing Marshall Falls dam. It includes the preparation of the technical specifications for the mechanical equipment, the detailed civil and structural design. This project has not been fully developed at this time. Complete project descriptions and explanations of expenditures will be provided when the project is submitted for approval.

(iii) Please refer to CI 40314 Main Computer Centre Upgrade filed with the Board in April, 2012.[2]

[1] NSPI CI 41537 Amherst 138kV Substation, Capital Work Order Application, NSUARB-NSPI-P128.12, June 28, 2012.
[2] NSPI CI 40314 Main Computer Centre Upgrade, Capital Work Order Application, NSUARB-NSPI-P-128.12, April 2, 2012.

Estimated Depreciation and ROE					
CI	Project	2013 Depreciation	2014 Depreciation	2013 ROE	2014 ROE
20280	LIN, INSTALLATION OF A WASTEWATER TREATMENT FACILITY	$229,308	$229,308	$132,871	$124,960
25918	LM6000 TUC #5 TRANSMISSION	15,756	15,756	18,714	18,171
19753	ANN - UNIT OVERHAUL	54,458	54,458	82,671	80,792
14366	SHH- DIB PIPELINE REPLACEMENT	105,069	105,069	116,853	113,228
14719	POT - CONDENSER TUBE REPLACEMENT	51,174	51,174	63,209	61,443
28293	Cowie Hill Modified Underground Replacement	53,567	53,567	38,997	37,149
28345	LIN-REPLACE ROTARY DUMPER	209,787	209,787	142,931	135,693
25588	SCADA Replacement	28,867	28,867	59,568	58,572
28609	91H-GT3 TRANSFORMER REFURBISHMENT - TUC	53,970	53,970	76,524	74,662
29982	TUC Unit #3 Turbine IP Blade Tenon	20,864	20,864	29,868	29,148
10900	HYD DEB # 10 - Generator Rewind	31,846	32,801	35,079	33,963
25210	TRE5 Bag House Addition	870,751	870,751	861,156	831,115
25566	REPLACE DNR MICROWAVE CIRCUITS	96,590	96,590	62,295	58,963
28295	CONSTRUCT 137H-HAMONDS PLAINS RD. 138/25 KV SUBSTATION	94,091	94,091	125,287	122,041
28474	ST CROIX INSTALL NEW TRANSFORMER & BUS	95,656	95,656	127,371	124,071
28488	2007 & 2008 Work Vehicle Replacement	655,684	655,684	117,369	94,748
28490	2007 & 2008 TRANSPORTATION VEHICLE	282,394	282,394	50,549	40,807
28552	TRE5 Replace Trenton 5 Generator	476,626	476,626	471,374	454,930
28702	REPLACE BRIDGEWATER TRANSFORMER 89W	41,667	41,667	55,482	54,045
28727	GREAT BARREN DAM SAFETY	40,738	40,738	74,497	73,091
28865	POT-UNIT#2 LOW NOX COMBUSTION FIRING	87,298	87,298	110,852	107,841
29822	Pt. Tupper Relocate Port Malcolm Rd	39,989	39,989	50,778	49,398
31203	HYD Toms Lake Dam Safety Remedial W	55,242	55,242	62,824	60,918
33542	Upgrade L-8002	51,351	51,351	34,958	33,187
28413	Work Management System Replacement	1,653,188	1,653,188	373,750	316,715
28570	HYD Hollow Bridge Generator Rewind	59,102	59,102	46,509	44,470
28752	LM6000 - Overhaul TUC #5 Engine	31,426	31,426	29,305	28,221
28788	3RD PARTY HIGH VOLUME CALL ANSWER SYSTEM	267,325	267,325	23,550	14,328
29012	UPGRADE L6537	52,512	52,512	71,704	69,892
29013	82V Elmsdale Transformer Addition	68,633	68,633	93,716	91,349
37609	LIN - Unit #1 Rotor Rewind	138,444	138,444	108,410	103,634
38362	TUC U&U #1 GEN ROTOR RESTORE	149,521	149,521	112,247	107,089
38402	CT U&U LM#4 Engine Refurbish	143,771	143,771	134,071	129,111
38442	LIN-U&U Unit#2 ESP Flow Modification	67,649	67,649	52,974	50,640
38834	TRE5 - Turbine Upgrades - LP/IP/HP	178,320	178,320	183,877	177,725
38888	50N-412 Targeted Replacements	48,696	48,696	38,446	36,766
38942	TUC #3 GENERATOR ROTOR REWIND	30,364	30,364	46,217	45,170
38943	LIN1 - Boiler Refurbishment	66,070	66,070	51,737	49,457
32442	HYD Ridge Spillway Refurbishment	24,633	24,633	51,760	50,910
31244	HYD Paradise Wood Stave Pipeline R	166,149	166,149	308,402	302,669
33642	2009 Transportation Vehicle Replace	110,183	110,183	25,475	21,673
33766	11S-411 Targeted Replacements	39,368	39,368	31,082	29,724
33942	U&U Coon Pond Pipeline Replacement	39,692	39,692	51,506	50,137
35642	2009 Recloser Additions	52,027	52,027	48,574	46,779
11004	Canaan Rd Circuit Breaker Additions	50,046	50,046	70,033	68,307
29131	FAC Space 2011	1,697,449	1,697,449	1,940,252	1,881,690
28726	HYD Carlton Lake Dam Refurbishment	145,389	145,389	208,652	203,636
34582	Class 3 Light Work Vehicles	89,452	89,452	25,351	22,265
34583	Transportation Vehicle Replacements	138,330	138,330	39,203	34,431
34602	25 kV Feeder Extension Bissett Road	50,011	50,011	41,006	39,280

Estimated Depreciation and ROE					
CI	Project	2013 Depreciation	2014 Depreciation	2013 ROE	2014 ROE
36942	1H-B62 Bus Replacement Water St U&U	22,514	22,514	34,675	33,898
38022	2010 Recloser Additions	63,976	63,976	52,456	50,249
38024	2010 Dist. Cutout Replacements	76,361	76,361	62,610	59,976
38027	2010 Trans Switch & Breaker Upgrade	44,082	44,082	67,893	66,372
38062	2010 Off Road to Roadside	43,600	43,600	35,749	34,245
38110	2010 Tx Line Insulator Replacement	35,262	35,262	49,345	48,129
38122	2010 PCB Equip. Removal/Destruction	38,496	38,496	53,870	52,542
38732	1H Water St Replace 138 kV GIS	202,265	202,265	283,045	276,067
38819	51V Tremont Circuit Breaker & Bus	175,170	175,170	245,129	239,085
38826	POT - DCS upgrade	46,558	46,558	43,771	42,165
38852	Work Vehicle Replacement	578,893	578,893	164,062	144,090
38856	L7011 Deteriorated Replacements	41,272	41,272	57,755	56,331
38857	L7004 Deteriorated Replacements	57,556	57,556	80,543	78,557
38878	2010 Subs Cutout and Insul. Replace	21,110	21,110	15,487	14,759
33525	Canaan Rd 43V to Tremont 51V Line	171,136	171,136	239,484	233,579
34843	Oracle NLA License	54,331	54,331	14,716	12,842
40425	Kempt Road Transformer	22,518	22,518	34,682	33,905
40763	LIN4 U&U ESP Flow Mod	31,523	31,523	48,400	47,313
39529	POT - Turbine Major 2011	178,765	178,765	168,066	161,899
40280	2011 Trans Switch & Breaker Upgrade	89,227	89,227	124,863	121,784
40281	2011 Tx Line Insulator Replacement	93,685	93,685	131,101	127,868
40288	2011 PCB Equipment Removals	43,083	43,083	60,290	58,804
40327	Glen Dhu 138 kV Substation	80,063	80,063	112,038	109,276
28098	TUC 6 Waste Heat Recovery	2,814,870	2,814,870	3,107,937	3,010,824
38182	2010 Backup Control Centre	81,277	81,277	95,584	92,780
28487	LIN Supplemental Water Supply	142,323	142,323	96,966	92,056
34182	LIN Unit #1 Mercury Abatement	81,851	81,851	64,095	61,271
34202	LIN Unit #2 Mercury Abatement	78,978	78,978	61,845	59,120
34203	LIN Unit #3 Mercury Abatement	103,871	103,871	155,851	152,267
34222	LIN Unit #4 Mercury Abatement	42,546	42,546	63,837	62,369
34223	POT Mercury Abatement Project	97,912	97,912	90,466	87,088
34224	TRE Unit#5 Mercury Abatement	56,429	56,429	58,187	56,240
34242	TRE Unit #6 Mercury Abatement	46,329	46,329	68,574	66,976
36882	Nuttby Mountain Wind Project Dev	4,439,433	4,439,433	3,312,095	3,158,934
37942	Nuttby Mountain Wind Project Substation	69,087	69,087	94,336	91,953
39084	Point Tupper Wind Project	1,029,083	1,029,083	767,760	732,257
39323	Digby Wind Project	2,575,739	2,575,739	2,032,741	1,943,878
39626	Digby Wind Project Substation	101,508	101,508	142,049	138,547
39627	Digby Wind Project Trans Line	98,133	98,133	137,326	133,940
39628	Digby Wind Project Interconnect	91,536	91,536	128,094	124,936
40103	U&U Load Control Demo	79,260	79,260	45,941	43,207
41005	Parrsboro Tidal Interconnection	35,456	35,456	50,830	49,607
29010	Install 138-25KV Transformer At 22C	38,488	38,488	52,555	51,227
28678	HYD Renewable In-Stream Tidal Gen	74,351	74,351	112,376	109,810
14371	HYD - AVO #2 PIPELINE REPLACE	100,559	100,559	125,462	121,993
17830	HYD - STM Big Indian Lake Dam Safety	77,269	77,269	102,418	99,752
38859	HYD Big Falls Headgate Replacement	169,021	174,091	195,029	189,111
34622	Upgrade L-8002	56,803	56,803	79,489	77,529
29008	Construct 139H Dartmouth Crossing Substn	110,007	110,007	150,211	146,416

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Request IR-42:

With reference to DE-03 – DE-04, Appendix C, the RES Compliance identifies the Maritime Link in 2020 as NSPI's primary response to renewable requirements.

(a) What considerations has NSPI given to alternatives?

(b) NSPI included in UARB IR-10 project spending in 2014 on Project #40553 - Wind Farm #2. Where does that flow into the RES Compliance at Appendix C?

Response IR-42:

(a) The Nova Scotia Government released draft regulations[1] under the *Maritime Link Act*[2] on July 16, 2012, which set out the process for review of the Maritime Link project. The Act and the draft Regulations provide for a review of the Maritime Link, and in particular require the Board to be satisfied that the Maritime link project represents the lowest long-term cost alternative to meet current and pending legislated environmental requirements. We expect that any application will address the requirements of the Act and the associated regulations. There are no costs associated with the Maritime Link included in this Application.

(b) Please refer to Avon IR-28 Attachment 1 which reflects updates to the Renewable Electricity Standard (RES) Compliance Plan (Appendix C of the Application) since the time of filing. The forecast spending in 2014 relates to the possibility that additional wind capacity which NS Power might develop may be required between 2015 and 2020.

[1] http://www.gov.ns.ca/energy/publications/MLARegs-and-Backgrounder.pdf
[2] *Maritime Link Act*, (2012) R.S.N.S. c. 9.

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Request IR-43:

In UARB IR-22 NSPI responds that there are no redundant assets on the system, and that all units are required to service the required load.

(a) Please provide analysis that supports the decision to run Lingan seasonally as opposed to shutting down another unit.

(b) Does the analysis NSPI performs on such decisions include the impact of the cost of the continued return on these assets when an asset is idled as opposed to shut down?

Response IR-43

(a) NS Power is required to supply firm load as per the Northeast Power Coordinating Council criteria. This criteria can be met by maintaining a planning reserve of 20 percent above the forecasted peak firm load demand. NS Power can only retire a unit when this criteria is able to be met without one its existing generating units. Please refer to Avon IR-6 Attachment 1, Multeese IR-6, and Multeese IR-62. Generating units provide a number of services including: energy, load following, regulation, and system inertia. A requirement for one or more of these services may justify the Operating & Maintenance and Capital Expenditures required to keep unit operating, even if planning reserve needs were met.

(b) The item noted in the question does not enter into this analysis; the analysis described relates to technical criteria of the electrical grid. NS Power notes that shutting down a generating unit that is not fully depreciated would not relieve customers of the cost of the unit; consider for example the continued cost recovery on the Glace Bay Generating Station after the unit was shut down.

Request IR-44:

Reference response to Liberty IR-79 Attachment 1,

(a) Please explain how 2011 data was used in the calculations.

(b) Has any savings been achieved to date in 2012? If so, please state the amount and separately state any estimated savings for the remainder of 2012.

(c) Why has the Volume increased significantly beginning in 2012?

(d) How will these volumes be affected by the seasonal operation of LIN 1 & 2 and by future closure of Lingan generation?

(e) How will these volumes be affected by Muskrat Falls energy?

(f) Please explain "Savings w. RES".

(g) Please produce an updated table using latest assumptions regarding Lingan and Muskrat Falls.

Response IR-44:

(a) The 2011 volume that was scheduled to arrive at the International Pier from Colombia and the United States Atlantic Coast was averaged together with 2010 actual volume and the 2012 forecasted volume to generate the yearly forecasted volume for 2013-2020.

(b) No savings have been achieved in 2012 to date as NS Power is waiting for approval from the Atlantic Pilotage Authority. The approval is dependent on the updating of electronic marine charts. The approval is expected by end of August.

(c) At the time of the calculation, the solid fuel generating units were forecasted to be base loaded in 2012 compared to 2011 where the natural gas units were base loaded and solid fuel consumption was forecast to be lower. Reduced volumes were forecasted to be received in 2011 in order to maintain appropriate inventory.

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(d-e) This information will be available in the fuel forecast update at the end of August with data updated as of June 30, 2012.

(f) At the time Liberty IR-79 Attachment 1 was generated, a Renewable Electricity Standards (RES) factor was applied to the volume calculation to account for the displacement of solid fuel by renewable sources of electricity.

(g) Please refer to response (d).

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Request IR-45:

NSPI has indicated in response to UARB IR-17 & IR-18 that the cost associated with various deferrals is interest or carrying costs, with the estimated balances provided in Liberty #39 Attachment 1.

(a) Please confirm the total of each years costs outlined is approximately $54 million.

(b) Please confirm the deferral is not expected to exceed $110.236 million.

(c) If the balances provided are correct, please explain how doubling what rate payers will have to pay is a benefit to those rate payers.

Response IR-45:

(a) Confirmed, the total cost over the two year period is $54 million.

(b) Please refer to Multeese IR-63.

(c) Any deferral, like a personal mortgage on your home, requires the payment of carrying costs; and, like a home mortgage, those costs are made higher by a higher amount of principal mortgaged (deferred) or a longer period of payment (amortization). NS Power has proposed a deferral amount and recovery period that is similar to past deferrals, and that can be incorporated into rates at the time that a prior similar deferral is coming out, thereby minimizing the rate impact for customers. The benefits of the Rate Stabilization Plan to customers are detailed in DE-03-DE-04, Section 2, beginning on page 23 of 159 of the Application. Please also refer to NSUARB IR-18.

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Request IR-46:

Referencing UARB IR-24 and vegetation management costs,

Please provide a table and graph showing the following from 2000 to 2014 inclusive:

i) Amount included in rates

ii) Amount budgeted in OM&G

iii) Actual or forecast spend.

Response IR-46:

(i-iii) Please refer to the figure below.

Year	Actual Expenditures ($M)	Amount Budgeted ($M)	Amount Included in Rates ($M)
2000	$4.3	$3.0	See Note 1
2001	$5.4	$3.0	See Note 1
2002	$4.7	$2.9	See Note 1
2003	$6.9	$4.5	See Note 1 ($2.6 for distribution management)
2004	$5.2	$6.3	See Note 1 ($2.6 for distribution management)
2005	$5.4	$5.4	$5.2
2006	$7.8	$6.8	$6.8
2007	$6.5	$6.8	$6.8
2008	$9.2	$6.8	$6.8 (an additional $2.0 was approved to be spent in 2008 but deferred for recovery)
2009	$12.7	$10.4	$10.4

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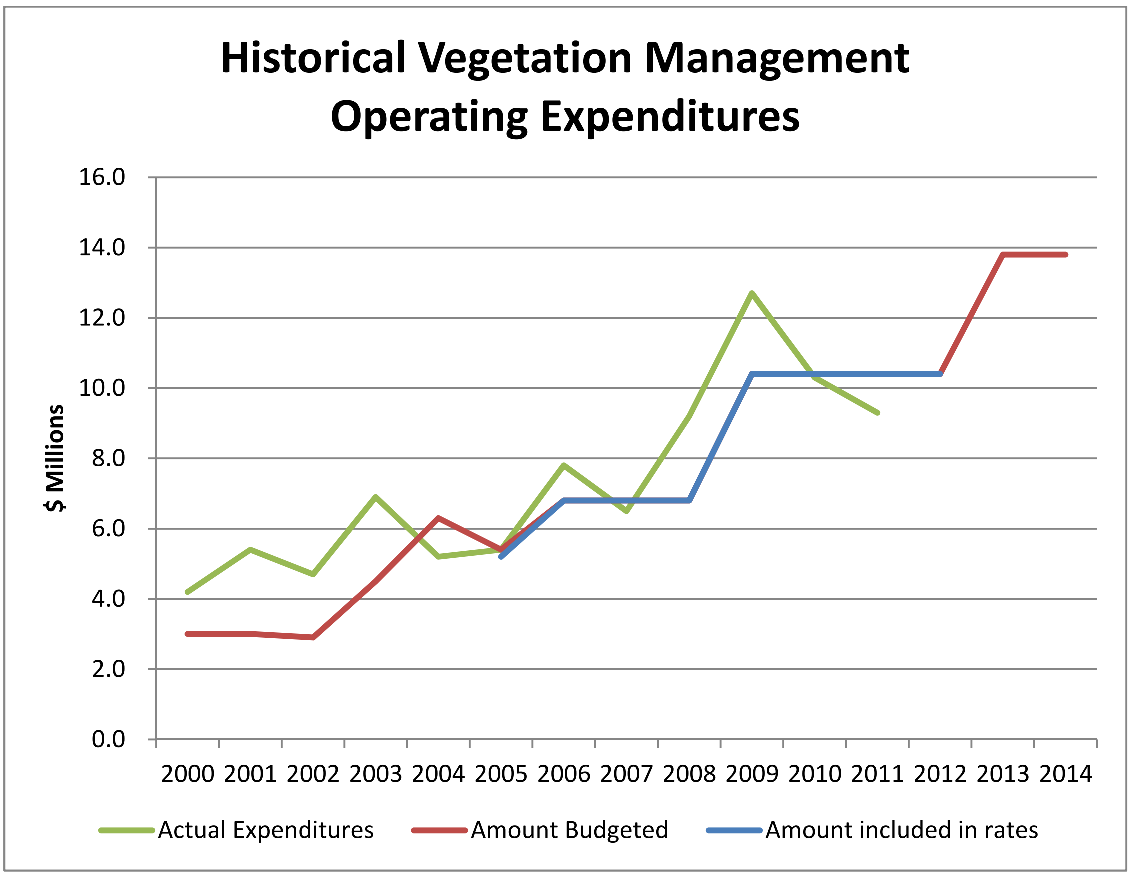
Year	Actual Expenditures ($M)	Amount Budgeted ($M)	Amount Included in Rates ($M)
2010	$10.3	$10.4	$10.4
2011	$9.3	$10.4	$10.4
2012		$10.4	$10.4
2013		$13.8	TBD
2014		$13.8	TBD

Note 1: Prior to the 2005 hearing on vegetation management[1], vegetation management was not tracked in the same way as they are today. Rates included amounts within the Customer Operations function for this activity but it was not separated out and as easily ascertainable. Amounts for 'distribution management' have been identified, however, this would not represent the total amount in rates for vegetation management.



[1] 2006 NSPI Request for Approval of Distribution Vegetation Management Program November Power Outage Review Decision Reports, P-401.32.

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Request IR-47:

Referencing UARB IR-25 and storm costs,

Please provide a table and graph showing the following from 2000 to 2011 inclusive:

i) Amount included in rates

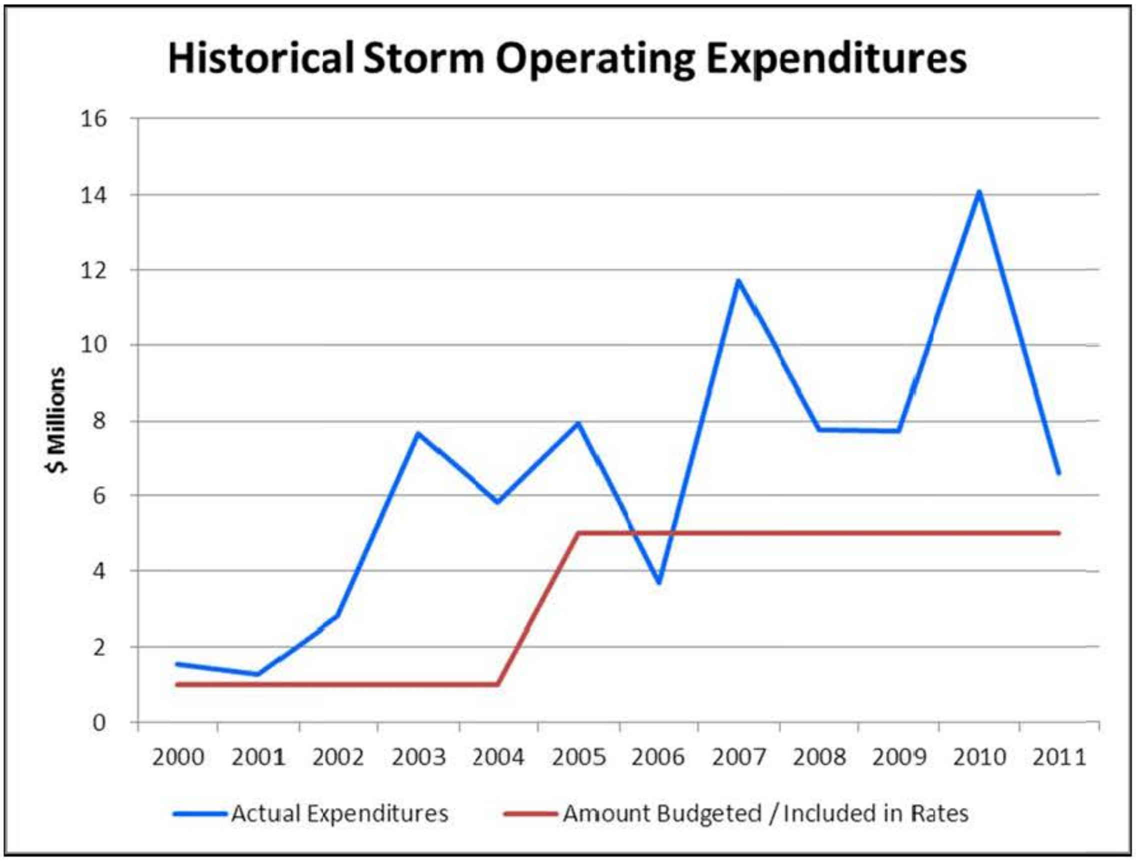
ii) Amount budgeted in OM&G

iii) Actual or forecast spend.

Response IR-47:

(i-iii) Please refer to the figures below. The amount budgeted in each year was equal to the amount included in rates.

Year	Actual Expenditures ($M)	Amount Budgeted/ Included in Rates ($M)
2000	1.6	1.0
2001	1.3	1.0
2002	2.8	1.0
2003	7.7	1.0
2004	5.8	1.0
2005	7.9	5.0
2006	3.7	5.0
2007	11.7	5.0
2008	7.8	5.0
2009	7.7	5.0
2010	14.1	5.0
2011	6.6	5.0

1 
Historical Storm Operating Expenditures
$ Millions
16
14
12
10
8
6
4
2
0
2000
2001
2002
2003
2004
2005
2006
2007
2008
2009
2010
2011
Actual Expenditures
Amount Budgeted / Included in Rates

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Request IR-48:

Referencing Liberty IR-59 and the vegetation management program, please explain how NSPI estimates the annual number of customer hours of interruption (ACHI) that will be avoided through completion of specific work activities.

Response IR-48:

Please refer to SBA IR-30.

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Request IR-49:

With respect to NSPI's response to UARB IR-12(d), that in the last ten years, there were four years where tax amendments for prior years were recorded and, of those four years, only two years where the rate of return was achieved partially due to including the results of amended tax filings. Please identify which four years and which two years, respectively?

Response IR-49:

The four years where NS Power recorded tax amendments for prior years were 2007, 2008, 2009, and 2011. The results of recording the amendments in 2009 and 2011 contributed to NS Power earning within the approved band.

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Request IR-50:

With respect to DE-03 - DE-04 of the Application, respecting proposed changes to the Open Access Transmission Tariff (OATT), are any other future changes contemplated to the OATT as a result of the completion of the Muskrat Falls-Maritime Link project? If so, what is the nature of any changes?

Response IR-50:

NS Power has not determined the effect of the Maritime Link on the Open Access Transmission Tariff.

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Request IR-51:

With respect to NSPI's response to Board IR-19 and the province's unsettled economic climate resulting in a 400 GWh reduction during 2013 and 2014,

a) Please confirm that the load reduction does not include the indefinite closure of the Bowater mill announced in June 2012.

b) Please identify the amount of Bowater load (demand and energy) that will be removed from the grid due to the closure.

c) Please prepare an estimate of the amount of residential and non-residential load that may be reduced as a result of the closure.

d) Please prepare updated tables regarding renewable energy sources for 2013, 2015, and 2020 with availability of the Mersey Hydro system for loads other than Bowater.

e) Please describe any impact that the Bowater closure, relevant to the Brooklyn biomass facility, may have on NSPI's renewable energy determinations.

Response IR-51:

(a) Confirmed.

(b) NS Power's load forecast included 690 GWh annually of Bowater load, comprised of 29 MW of firm demand and 55 MW of interruptible demand.

(c) This information will be available in the load and fuel forecast update at the end of August with data updated as of June 30, 2012.

(d) Please refer to Attachment 1. NS Power has always included the Mersey system in its Renewable Electricity Standard (RES) Compliance Plan.

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(e) NS Power is not aware that the closure of the former Bowater mill will affect the Brooklyn facility.

RES 2013, 2015 and 2020 Compliance Forecast

All units in GWh

ELI Load Assumptions		Bowater off, PH Mill off				Bowater off; PH Mill PM2 on (PM2 ~1 TWh)		
Compliance Year		**RES 2013**	**RES 2015**	**RES 2020**		**RES 2013**	**RES 2015**	**RES 2020**
Net System Requirement (GWh)		10,031	10,584	11,232		11,031	11,584	12,232
DSM effects		(DSM included)	528	1,263		(DSM included)	528	1,263
NSR less DSM		10,031	10,056	9,969		11,031	11,056	10,969
Sales (Assume 7% Losses)		9,375	9,398	9,317		10,309	10,332	10,251
RES %		10%	25%	40%		10%	25%	40%
RES Requirement (GWh)		**937**	**2349**	**3727**		**1031**	**2583**	**4100**
NSPI Wind		254	254	254		254	254	254
Post 2001 IPPS		742	742	742		742	742	742
PH Biomass Project		323	418	418		269	388	388
COMFIT		0	100	300		0	100	300
Small Hydro - Marshall Falls		0	0	15		0	0	15
Distribution Connected IPP's Committed		0	80	80		0	80	80
Eligible Pre 2001 IPPS		0	156	156		0	156	156
Eligible NSPI Legacy Hydro		0	985	985		0	985	985
Maritime Link		0	0	1102		0	0	1102
REA procurement in process		0	300	300		0	300	300
Total Renewable Energy (GWh)		**1319**	**3034**	**4351**		**1265**	**3004**	**4321**
Surplus or Deficit		**275-475**	**525-825**	**425-825**		**125-325**	**275-575**	**25-425**

Notes:
2012 Load Forecast, April 2012
NSPI Wind and IPP Wind as per 2013/2014 GRA assumptions
PH Biomass project output is dependent on whether the PH Paper Mill is operating
Assumes no alteration in ENSC's DSM Program despite ELI Load Reductions
The projected surplus/deficit is shown as a range representing potential variability in supply and demand versus the point estimate type forecast shown for each line item. The size of the range increases with the time horizon of the forecast to reflect the greater uncertainty associated with longer views.
Specifically a band of plus/minus 100 GWh, 150 GWh and 200 GWh has been applied for 2013, 2015 and 2020 respectively.

CONFIDENTIAL (Attachment Only)

Request IR-52:

Reference NSPI Response to Avon IR-65,

(a) With respect to each of the Key Performance Indicators (KPIs) referenced in the Response to Avon IR-65, please provide the actual results for the three most recent complete years.

(b) Are any KPIs used in other OM&G categories outside of Power Production? If so, in which other areas and which KPIs are used?

Response IR-52:

(a) Please refer to Confidential Attachments 1 and 2.

(b) Other areas of the business track various metrics including:

- customer service levels
- distribution feeder, transmission line and padmount transformer inspection completion rates
- system reliability and safety statistics
- vehicle maintenance service cycles
- newly redeveloped field worker productivity metrics such as work order completion, efficiency and work plan compliance rates

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Request IR-53:

Reference NSPI's response to CA IR-32 with respect to bad debt costs. Please explain the disproportionate increase in Recoveries (Line 062) for 2013 and 2014 (versus 2010 and 2011 actuals) relative to the increase in Commissions (line 060).

Response IR-53:

NS Power began changing its approach to the collection of delinquent accounts late in 2011. Previously, a significant proportion of collections activity was done using in-house staff. As of early 2012 the transition to a new process was completed whereby a much larger proportion of collections activity is conducted by third party collection agents. Consequently, the amount of money collected was projected to increase, as was the amount of commissions that will need to be paid to the third party collection agents.

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Request IR-54:

In the 2012 GRA, NSPI filed Undertaking U-4 outlining the process NSPI will undertake to minimize costs/impacts to customers if NewPage remains shutdown.

(a) Please outline all steps taken pursuant to the items described in Undertaking U-4. Provide copies of any reports produced by the Project Team for consideration by Management, including but not limited to any projections related to short and long term fuel and OM&G impacts of lengthened or permanent outages.

(b) Has the process been widened to include the indefinite closure of the Bowater plant? If not, why not?

Response IR-54:

(a) NS Power has taken the steps listed in Undertaking U-4:[1]

(1) Establish Project Team Governance, Structure and Membership

- Establish Executive Sponsor and Project Manager
- Identify Subject Matter Experts
- Determine Project Team Members
  - o The following functional groups will participate in this project
- Plant Operations Management
- Fuels, Energy and Risk Management
- Generation Services
- Finance

[1] NSPI 2012 General Rate Application, Undertaking U-4, NSUARB-NSPI-P-892, September 28, 2011.

- HR
- Regulatory Affairs
- Others

(2) Screening

- Identify who is affected and what is important to them
- Develop Project and Stakeholder Objectives
- Determine Scope
- Develop Decision Criteria
- Identify the Issues of Concern

(3) Frame Alternatives

- Develop Potential Solutions
- Identify how the potential solution should be compared including the facts and uncertainties that must be taken into account
- Identify the sources of information for both facts and uncertain variables
- Develop Evaluation Model (Strategist/GenOps)

(4) Evaluate and Select the Optimum Alternative

- Assess range of possible outcomes for uncertain variables
- Conduct Financial Analysis on Main Criteria
  - Fuel
  - Operating Expenses
  - Capital
- Assess Risks Associated with Alternatives
- Identify means to optimize value
- Select Alternative that optimizes the decision criteria

- Develop Risk Mitigation Plan

(5) Review fuel related items with FAM Small Working Group, as required

(6) Implement and Monitor

- Develop Implementation Plan
  - Establish Change Management Process
  - Revise Asset Management and Capital Plans
  - Identify Implementation Resource Needs and make Assignments
  - Establish Project Schedule and Budgets
- Monitor Performance
  - Establish Review Criteria
  - Establish Triggering Criteria

A project team has been established and preliminary modeling and screening of alternatives is in progress. Specific activities to date include:

- examining the relative fuel and OM&G impacts of running units at reduced capacity factors versus idling units
- examining the change in fuel and OM&G costs related to the selection of different idle periods
- examining the relative fuel and OM&G impacts of lengthening annual outages

Please refer to Avon IR-6 for the resulting report to management by the project team.

(b) NS Power considered the Bowater closure as part of the work associated with U-4.

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Request IR-55:

Reference DE-03 - DE-04, Appendix C. Do the figures in the RES Compliance tables in Appendix C include the 300 GWh resulting from the 2012 Request for Proposals by the Renewable Energy Administrator? If so, please reconcile Appendix C with the table in the response to 2011 ACE Plan UARB IR-5 Attachment 1.

Response IR-55:

Please refer to Avon IR-28 Attachment 1, which reflects updates to the Renewable Electricity Standard (RES) Compliance Plan (Appendix C of the Application) since the time of filing. The 300 GWh that is being solicited by the Renewable Electricity Administrator (REA) is listed under the heading "Options for 2015 and Beyond Renewable Energy Supply" on the line that reads, "Wind – The Government appointed REA has issued an RFP for 300 GWh of RES qualifying energy".

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Request IR-56:

Reference DE-03 - DE-04, Appendix G and Appendix E (page 19 of 57). If the Board approves NSPI's application, eliminating the need for a rate application for 2014, why is there no corresponding reduction in the cost amount projected for Regulatory Affairs in 2013 and/or 2014?

Response IR-56:

Please refer to Liberal IR-15 for a list of NS Power applications that have occurred during the period of 2010 to 2012. In addition to the Company's direct regulatory costs for these applications, NS Power's Regulatory Affairs budget has been the source of funding for the Board's consultants, the Consumer Advocate and the Small Business Advocate and their consultants for those applications for which the Board has initiated formal proceedings. NS Power's regulatory budget has also funded the Board's oversight of the development of the Community Feed-in Tariffs and the costs of the Renewable Electricity Administrator.

NS Power has applied for a two year test period. If approved by the Board, this would allow NS Power, the Board and intervenors to avoid a general rate proceeding in 2013. Recent history would suggest that any savings arising from avoidance of a general rate application during 2013, are likely to be consumed by pending regulatory activities (such as the 2012/13 Cost of Service Study, a new Integrated Resource Plan process, FAM processes) and unforeseen regulatory proceedings.

Consistent with this, please refer to the figure below which shows Regulatory Affairs' actual Operating, Maintenance and General (OM&G) costs compared to amounts included in rates in the 2010 to 2012 period. As can be seen from the table, Regulatory Affairs' costs are often driven by Regulatory initiatives either not contemplated or under-estimated at the time of the Application filing.

Year	Compliance ($M)	Actual[1] ($M)	Variance ($M)
2010	5.3	5.3[2]	0.0
2011	5.3	6.5	1.2
2012	5.9	7.2[3]	1.3[3]

[1] Includes external costs for the Board Assessment, as well as the Board, CA, SBA, and the REA consultants.
[2] no general rate application proceeding in that year
[3] current forecast

In total, annual amounts paid to the Board for its direct costs and its consultants and those of the Consumer Advocate, Small Business Advocate and the Renewable Energy Administrator are as follows: 2010 - $3.1 million; 2011 - $3.0 million; 2012 - $1.5 million (YTD). These amounts broken out by Board costs (exclusive of the annual assessment), the Consumer Advocate, Small Business Advocate and Renewable Electricity Administrator are presented in the figure below. Note, because the figure above reflects accrued amounts and the external amounts referenced in the annual totals and the figure below are compiled on as-paid basis, differences arise due to timing differences.

External Consulting Costs				
Year	**Board ($)**	**Consumer Advocate ($)**	**Small Business Advocate ($)**	**Renewable Electricity Administrator ($)**
2010	934,911	315,750	N/A	N/A
2011	1,102,132	445,391	121,560	N/A
2012 to date	251,954	157,396	63,073	105,420

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Request IR-57:

Reference DE-03 - DE-04, Appendix E, page 7 of 57, Corporate Finance, line 011. What is the basis for the increase in Travel Expense over 2012 C?

Response IR-57:

The Corporate Finance travel expense increase from 2012C is primarily due to increased travel requirements of the Internal Audit operating group. Internal Audit performs work for NS Power and affiliate companies. A portion of the costs on Internal Audit are recovered through Corporate Support transfers in account code 057.

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Request IR-58:

Reference DE-03 - DE-04, Appendix E, page 24 of 57, Sustainability, line 040. What is the basis for new expenses for Advertising over 2012 C? What is the new initiative referenced on page 25?

Response IR-58:

Please refer to Liberty IR-169.

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Request IR-59:

Reference DE-03 - DE-04, Appendix E, page 26 of 57, Power Production Head Office, line 013. What is the basis for the increase for Contracts over 2012 C? What is "strategic asset planning" referenced on page 27?

Response IR-59:

Contracted expert resources are being used for the implementation phase of these elements, hence the increase in Contracts.

Strategic asset planning refers to aligning the asset management function with the maintenance program and business objectives. NS Power is implementing an Asset Management process which is focused on maintenance strategy, reliability processes, fleet monitoring and asset planning. Some of the key activities include:

- Deployment and management of a comprehensive fleet predictive maintenance program (PdM).

- Fleet monitoring utilizing advanced technology tools (including predictive pattern recognition and performance monitoring).

- Ongoing condition assessment of major assets.

- Ongoing assessment of fleet to determine suitability for low load operation and two-shifting.

These activities are necessary as follows:

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- The PdM program introduces more detailed condition assessment of many plant components and forms a critical element in NS Power maintenance strategy as it moves to a more proactive maintenance approach. There are increased operational costs as the size and scope of the PdM program is greater than historical.

- Advanced technologies being deployed also support a move toward a more proactive and planned work environment. Early identification of equipment health issues support a more proactive and planned approach to maintenance. There will be ongoing costs associated with these technologies including software maintenance costs.

- NS Power utilization of its fossil fleet continues to change. In order to understand condition impacts, modify maintenance strategy and conduct asset planning activities, NS Power will continue to engage industry experts to analyze, test and plan for different operating modes for its steam fleet. These activities represent new costs to the business.

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Request IR-60:

With respect to NSPI's application for an additional $5.5 million in OM&G costs for Storm Response, is the entire $5.5 million included in the categories noting an "increase due to storm costs" listed on DE-03 - DE-04, Appendix E, page 43 of 57?

Response IR-60:

Confirmed.

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Request IR-61:

Reference DE-03 - DE-04, page 93, what is the basis for using a five year reference period for storm costs instead of a longer period?

Response IR-61:

Please refer to Liberty IR-64 for a full description with respect to storm amounts. As indicated in Liberty IR-62, the severity of Nova Scotia's weather has been increasing over the past several years; it was determined that using a longer time frame would not reflect the increase in the severity that has been experienced in the past five years.