CI# 34583

Transportation Vehicle Replacements

REDACTED

April 30, 2010

NOVA SCOTIA POWER
An Emera Company

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UARB APPROVAL SHEET

Project Title: **Transportation Vehicle Replacements**

CI Number: 34583

- [x] Capital Project Authorization
- [ ] ATO
- [ ] Final Cost

Head Office Use:

Project Number:

Date: April 30, 2010

Location:			Division:	
Expenditure Profile			**Schedule**	
YEAR	Budget Estimate	Project Estimate		
2010	1,723,031	1,723,031	Estimated Start Date	2010-09
2011	1,723,300		Estimated In-Service Date	2010-09
			Estimated Close Date	2010-12
Total	$3,446,331	$1,723,031		

COMMENTS

Submitted on behalf of NOVA SCOTIA POWER INCORPORATED		Approved on behalf of NOVA SCOTIA UTILITY AND REVIEW BOARD	
[signature]	April 28/2010		
Authorized Signatory Mark Savory VP Technical and Construction	DATE		DATE

CI Number :	34583	- Transportation Vehicle Replacements	Project Number
Parent CI Number :		-	
Cost Centre :	800	- 800-Services - Admin.	Budget Version - 2010 04/08 Forecast

	Forecast
Start :	09/01/2010
Operational :	09/30/2010
Final Cost :	12/31/2010
2010	$1,723,030.87
Total :	$1,723,030.87
Original Cost :	$1,601,542.00

This project provides for costs associated with the purchase of 64 transportation vehicles. Included in the cost is commissioning, accessories, and the salvage value of retired vehicles.

Summary of Related CI's +/- 2 years
2008 - 28490 2007 & 2008 Transportation Vehicle Replacement $3,096,483
2009 - 33642 2009 Transportation Vehicle Replacement $1,259,968

CI Number : 34583 - Transportation Vehicle Replacements

Project Number

Parent CI Number : -

Approved Date

Cost Centre : 800 - 800-Services - Admin.

Budget Version 2010 03/09 Forecast

Capital Item Accounts

Acct	Actv	Account	Activity	Forecast Amount	Amount	Variance
092		092-Vehicle T&D Reg. Labour AO		212	0	212
095		095-COPS Regular Labour AO		732	0	732
001	065	001 - T&D Regular Labour	065 - GP - Transp.Vehicles	925	0	925
002	065	002 - T&D Overtime Labour	065 - GP - Transp.Vehicles	0	0	0
011	065	011 - Travel Expense	065 - GP - Transp.Vehicles	0	0	0
012	065	012 - Materials	065 - GP - Transp.Vehicles	1,872,962	0	1,872,962
098	065	098 - Salvage	065 - GP - Transp.Vehicles	(151,800)	0	(151,800)
			Total Cost:	1,723,031	0	1,723,031
			Original Cost:	1,601,542		

CI Number	: 34583	- Transportation Vehicle Replacements	**Project Number**
Parent CI Number	:	-	**Approved Date**
Cost Centre	: 800	- 800-Services - Admin.	

Capital Item Justification

Justification Criteria : WORK SUPPORT FACILITIES

Sub-Criteria : VEHICLES

Name of Report :

Document Location :

Person Responsible :

Why do this project?

This project is required to maintain NSPI's service level commitments.

Why do this project now?

Without these vehicles, NSPI will not have the required equipment for employees (meter readers, wiring inspectors, etc.) to perform their daily duties.

Why do this project this way?

The life cycle costing model concludes that it is beneficial to replace these vehicles before major maintenance is required.

CI Number	: 34583	- Transportation Vehicle Replacements	**Project Number**
Parent CI Number	:	-	**Approved Date**
Cost Centre	: 800	- 800-Services - Admin.	

Reason for Variance / Over Expenditure / Final Costing

14329952

The variance between ACE 2010 and the revised submission is due to this project now being a one year project instead of a two year project.

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General Plant Responses

Request IR-GP15:

With respect to page 254, CI# 34583, Transportation Vehicle Replacements,

a) Please provide the average number and the average age of vehicles of this type in service for each year from 2005 to 2009.

b) Please provide the actual operating and maintenance costs for vehicles of this type, for each year from 2005 to 2009.

c) Provide the report and analysis that justifies this transportation vehicle replacement program and supports the need to carry out the 2010 program.

d) Please provide a list of vehicles that are being purchased. Include detail as follows:

i) Type of vehicle, class of vehicle and cost.

ii) Detail the additional equipment that will be mounted or added to the vehicles in i) above.

e) List of spares and other additional information that assists and clarifies in explaining the purchase.

f) Provide a list of vehicles that will be retired and replaced by the new work vehicles in a) above. For each vehicle class or type describe the vehicle/equipment type, year purchased, present kilometer reading, and the average maintenance expenditure per vehicle for each of the past 3 years.

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Request IR-GP15: (cont'd)

g) Please describe the process used to acquire new vehicles of this type.

h) Describe the process for disposal of the vehicles being retired.

Response IR-GP15:

a-b) The number, age, and operating/maintenance costs are indicated below:

Transportation Vehicles Replacements			
Year	**Average #**	**Average Age**	**Actuals - Maint. & Operating ($)**
2005	324	2002	1,151,576
2006	329	2003	1,522,620
2007	366	2004	2,144,618
2008	343	2004	2,669,295
2009	374	2006	2,358,706

c) The Life Cycle Costing for vehicles > 30k km per year is included in Attachment 1. For those < 30k km per year the Life Cycle Costing is included in Attachment 2.

d) i) Please refer to Confidential Attachment 3. The 2010 contract cost to purchase these transportation vehicles is confidential. Suppliers seek to keep the terms and conditions of their supply arrangements confidential from their other customers or potential customers and from their competitors so that their information cannot be used by others for a competitive advantage. This is equally true for NSPI, which desires to protect its ability to acquire capital equipment on the most competitive terms. Those "best" terms may not be available if there is a risk that they will be disclosed to the customers or competitors of the supplier.

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Response IR-GP15: (cont'd)

Release to the public domain of supplier contracts which contain information on term, price and other conditions would therefore be detrimental to NSPI's suppliers, to NSPI and to its customers. This specific and direct harm will in most cases outweigh the public interest in disclosure.

ii) Beacons and racks are included in the purchase price and NSPI installs radios in the vehicles. There are no spare vehicles.

e) There are no spares. There is no other information to assist and clarify the purchase.

f) Please refer to Attachment 4.

g) NSPI has an alliance with Ford Canada to purchase all transportation vehicles. Ford's dealer network, fleet rebates, and mechanical have remained positive.

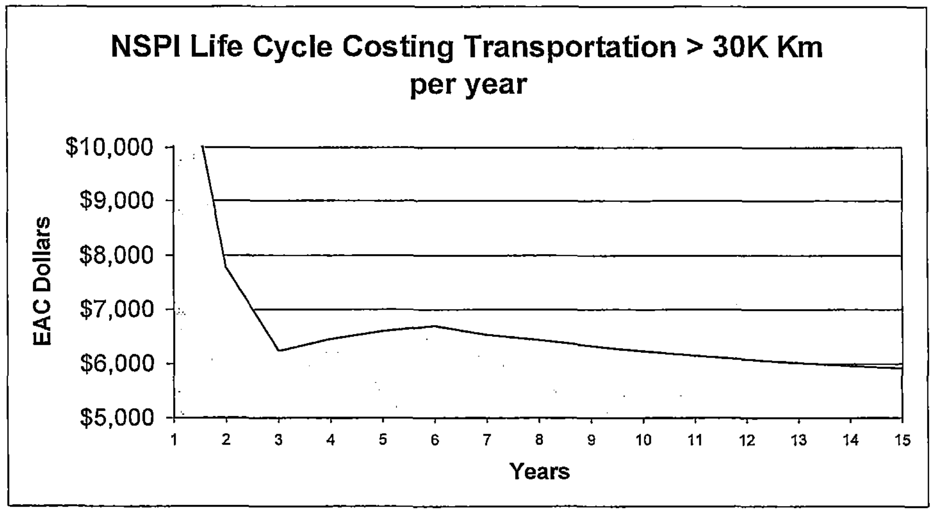
h) NSPI disposes of these vehicles through ADESA auctions – Enfield, Nova Scotia.

Corporate Tax Rate %	38.12%
Interest/Discount Rate %	7.00%
CCA Rate %	30.00%
Acquisition cost $$	$28,000
Truck Type	Transportation

No of years we keep the equipment(k)=	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
Resale value after k years since acquisition time ($k)	12,200	10,840	9,600	7,680	5,400	4,240	3,520	2,500	2,100	1,500	1,200	1,000	800	750	500
Total maintenance cost for one year when the equipment is k years old	445	1,344	2,320	8,700	8,700	9,950	7,500	7,500	7,500	7,500	7,500	7,500	7,500	7,500	7,500
PV of Tax saving on acquisition =	8,371	8,371	8,371	8,371	8,371	8,371	8,371	8,371	8,371	8,371	8,371	8,371	8,371	8,371	8,371
PV maintenance cost taking into account tax effect=	257	984	2,156	6,263	10,101	14,204	17,094	19,795	22,320	24,679	26,884	28,944	30,870	32,670	34,352
PV of tax saving lost due to resale of asset =	3,524	2,926	2,422	1,811	1,190	873	678	450	353	236	176	137	103	90	56
PV of proceeds of reselling the equipment	11,402	9,468	7,836	5,859	3,850	2,825	2,192	1,455	1,142	763	570	444	332	291	181
NPV of the total cash flow if the equipment replaced after k years NPV(k)=	12,008	14,071	16,370	21,843	27,070	31,881	35,208	38,419	41,159	43,781	46,119	48,266	50,270	52,098	53,856
Equivalent Annual cost if the equipment replaced after k years EAC(k)=	12,849	7,783	6,238	6,449	6,602	6,688	6,533	6,434	6,317	6,233	6,150	6,077	6,015	5,957	5,913

NSPI Life Cycle
Transportation Vehicle > 30K Km per year
Numeric View

Replacement Policy (Years)	EAC	Changes in EAC
1	$12,849	
2	$7,783	(5,066)
3	$6,238	(1,545)
4	$6,449	211
5	$6,602	153
6	$6,688	86
7	$6,533	(155)
8	$6,434	(99)
9	$6,317	(117)
10	$6,233	(84)
11	$6,150	(83)
12	$6,077	(73)
13	$6,015	(62)
14	$5,957	(58)
15	$5,913	(44)



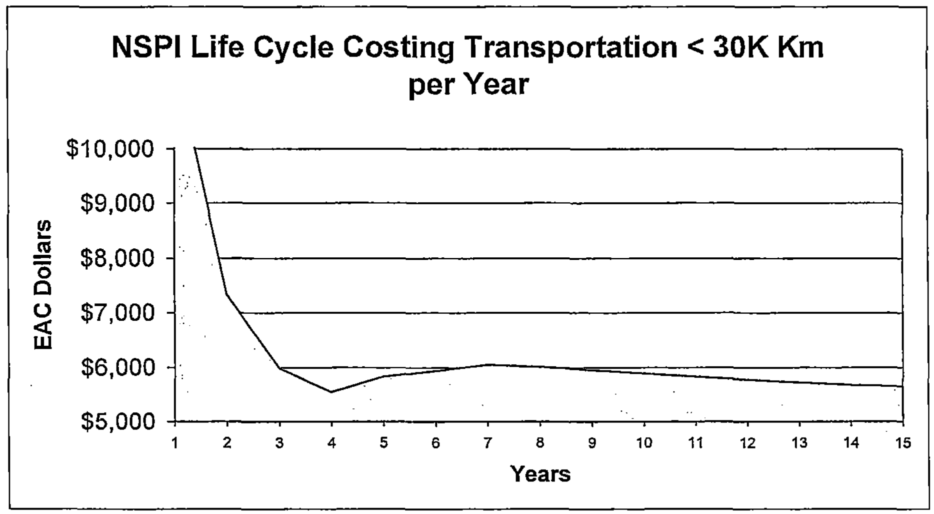
Corporate Tax Rate %	38.12%
Interest Discount Rate %	7.00%
CCA Rate %	30.00%
Acquisition cost $	$28,000
Truck Type	Transportation

No of years we keep the equipment(k)=	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
Resale value after k years since acquisition time (Sk)	13,725	12,195	10,800	8,640	6,075	4,770	3,960	2,813	2,100	1,500	1,200	1,000	800	750	500
Total maintenance cost for one year when the equipment is k years old	445	1,344	2,320	3,282	8,075	8,700	9,950	7,500	7,500	7,500	7,500	7,500	7,500	7,500	7,500
PV of Tax saving on acquisition =	8,371	8,371	8,371	8,371	8,371	8,371	8,371	8,371	8,371	8,371	8,371	8,371	8,371	8,371	8,371
PV maintenance cost taking into account tax effect=	257	984	2,156	3,705	7,268	10,855	14,689	17,390	19,915	22,274	24,479	26,540	28,465	30,265	31,947
PV of tax saving lost due to resale of asset =	3,965	3,292	2,725	2,037	1,339	982	762	506	353	236	176	137	103	90	56
PV of proceeds of reselling the equipment	12,827	10,652	8,816	6,591	4,331	3,178	2,466	1,637	1,142	763	570	444	332	291	181
NPV of the total cash flow if the equipment replaced after k years NPV(k)=	11,024	13,253	15,693	18,780	23,904	28,288	32,614	35,888	38,754	41,376	43,714	45,862	47,885	49,693	51,451
Equivalent Annual Cost if the equipment replaced after k years EAC(k)=	11,795	7,330	5,980	5,544	5,830	5,935	6,052	6,010	5,948	5,891	5,830	5,774	5,727	5,682	5,649

NSPI Life Cycle

Transportation Vehicle < 30K Km per year
Numeric View

Replacement Policy (Years)	EAC	Changes in EAC
1	$11,795	
2	$7,330	(4,465)
3	$5,980	(1,350)
4	$5,544	(436)
5	$5,830	286
6	$5,935	105
7	$6,052	117
8	$6,010	(42)
9	$5,948	(62)
10	$5,891	(57)
11	$5,830	(61)
12	$5,774	(55)
13	$5,727	(47)
14	$5,682	(45)
15	$5,649	(33)



Transportation Vehicles to be Purchased 2010

Old Veh #	Type	Cost
1264	ESCAPE	[redacted]
2221	ESCAPE	[redacted]
2223	F150 EXT	[redacted]
2236	ESCAPE	[redacted]
2264	RANGER EXT	[redacted]
2265	ESCAPE	[redacted]
2275	EXPLORER 4X4	[redacted]
2277	EXPLORER 4X4	[redacted]
2291	RANGER EXT 4X4	[redacted]
2292	E350 VAN	[redacted]
2293	E350 VAN	[redacted]
2294	RANGER EXT	[redacted]
3224	F150 EXT	[redacted]
3225	ESCAPE	[redacted]
3227	E350 VAN	[redacted]
3247	F150 EXT	[redacted]
4200	RANGER EXT	[redacted]
4215	F150 EXT	[redacted]
4219	RANGER EXT 4X4	[redacted]
4228	E350 VAN	[redacted]
4230	RANGER EXT	[redacted]
4239	RANGER EXT	[redacted]
4241	E350 VAN	[redacted]
4281	F150 EXT 4X4	[redacted]
4232	F150 EXT 4X4 8' box	[redacted]
5203	ESCAPE	[redacted]
5214	F150 EXT 4X4	[redacted]
5218	F150 EXT 4X4	[redacted]
5233	F150 EXT	[redacted]
5234	F150 EXT 4X4	[redacted]
5235	F250HD REG	[redacted]
5238	F150 EXT 4X4	[redacted]
5296	E350 VAN	[redacted]
7234	F150 EXT	[redacted]
7292	E350 VAN	[redacted]
8220	RANGER EXT 4X4	[redacted]
8221	F150 EXT 4X4	[redacted]
8222	F150 EXT	[redacted]
8224	F150 4X4	[redacted]
8225	RANGER EXT 4X4	[redacted]
8233	F150 4X4	[redacted]
8268	F350 CC 4X4	[redacted]
8283	F250 4X4(plow)	[redacted]
8287	F150 EXT 4X4	[redacted]
8288	F150 4X4	[redacted]
9221	F150 EXT 4X4	[redacted]
9225	F150 EXT	[redacted]
17245	F250 REG CAB	[redacted]
Rental	F150 EXT 4X4	[redacted]
Rental	F150 EXT 4X4	[redacted]
Rental	F150 EXT 4X4	[redacted]
Rental	F150 EXT 4X4	[redacted]
Rental	F150 EXT 4X4	[redacted]
Rental	F150 EXT 4X4	[redacted]
Rental	F150 EXT 4X4	[redacted]
Rental	F150 EXT 4X4	[redacted]
Rental	F150 EXT 4X4	[redacted]
Rental	F150 EXT 4X4	[redacted]
Rental	F150 EXT 4X4	[redacted]
Rental	F150 EXT 4X4	[redacted]
Rental	F150 EXT 4X4	[redacted]
Rental	F150 EXT 4X4	[redacted]
Rental	RANGER EXT	[redacted]
Rental	E350 VAN	[redacted]
	Total	**1,872,962**
	Salvage	**-151,800**
	Expenses	**1,869**
	Total Project	**1,723,031**

Transportation Vehicle Retirements 2010

Veh	Equip Type		Kms	Maint 2007	Maint 2008	Maint 2009	Total
1264	ESCAPE	2004	158,367	$1,343	$2,969	$793	$5,105
2221	ESCAPE	2004	165,300	$2,298	$7,004	$9,386	$18,687
2223	F150	2004	169,879	$6,926	$3,760	$9,951	$20,637
2236	ESCAPE	2004	162,165	$3,967	$6,897	$5,643	$16,506
2265	ESCAPE	2004	203,099	$1,489	$3,410	$1,618	$6,516
2275	EXPLORER 4X4	2004	196,216	$5,478	$7,215	$3,711	$16,403
2277	EXPLORER 4X4	2004	169,199	$4,229	$3,832	$5,102	$13,163
2291	RANGER EXT 4X4	2003	179,002	$13,162	$19,082	$12,999	$45,243
2292	E150 VAN	2003	159,526	$3,852	$3,738	$6,814	$14,405
2293	E150 VAN	2003	162,660	$1,957	$7,453	$5,501	$14,911
2294	RANGER	2003	150,147	$3,426	$3,031	$6,806	$13,264
3224	F150 EXT	2004	147,381	$3,205	$3,076	$4,104	$10,385
3225	ESCAPE	2004	179,686	$2,634	$1,472	$7,217	$11,323
3227	E350 VAN	2004	151,001	$3,110	$3,169	$3,589	$9,869
3247	F150 EXT	2003	156,868	$2,155	$1,633	$2,033	$5,821
4200	RANGER EXT	2004	120,841	$1,647	$2,783	$9,243	$13,672
4215	F150	2004	161,645	$3,653	$2,644	$2,215	$8,511
4219	RANGER EXT	2004	182,529	$3,124	$2,585	$6,044	$11,754
4228	E350 VAN	2004	144,683	$1,920	$2,572	$1,075	$5,567
4230	RANGER EXT	2004	137,738	$1,399	$1,907	$3,186	$6,491
4239	RANGER EXT	2004	158,530	$2,758	$2,669	$3,382	$8,809
4241	E350 VAN	2005	171,058	$3,686	$3,121	$6,709	$13,516
4281	F150 EXT 4X4	2004	199,433	$3,694	$8,004	$13,528	$25,225
4283	F150 EXT 4X4	2005	191,153	$1,386	$3,455	$2,418	$7,259
5203	ESCAPE	2005	212,345	$80	$7,082	$9,178	$16,339
5214	F150 EXT 4X4	2005	192,260	$3,350	$5,460	$8,239	$17,049
5218	F150 EXT 4X4	2005	181,155	$6,568	$8,730	$5,493	$20,790
5233	F150 EXT	2005	176,374	$3,117	$13,544	$17,906	$34,567
5234	F150 EXT 4X4	2005	241,235	$6,547	$6,470	$3,709	$16,726
5235	F250HD REG	2005	179,125	$5,764	$15,939	$19,211	$40,915
5238	F150 EXT 4X4	2005	182,683	$9,603	$14,747	$11,952	$36,302
5296	E350 VAN	2003	170,800	$4,008	$2,337	$3,218	$9,563
7234	F150	2003	150,776	$2,478	$2,639	$3,472	$8,589
7292	E350 VAN	2003	153,671	$1,298	$3,201	$1,260	$5,758
8216	250EXT4X4	2000	169,511	$5,386	$2,170		$7,557
8220	RANGER EXT 4X4	2001	140,855	$3,754	$5,088		$8,842
8221	F150 EXT 4X4	2003	184,896	$3,960	$2,972	$4,464	$11,396
8222	F150 EXT	2004	174,400	$2,060	$2,706	$3,557	$8,323
8224	F150 4X4	2004	170,111	$3,009	$2,665	$3,369	$9,043
8225	RANGER EXT	2004	144,156	$1,894	$5,825	$1,439	$9,158
8233	F150	2004	164,042	$2,178	$2,271	$1,853	$6,302
8268	F350 CC 4X4	2000	141,453	$6,125	$1,958	$6,656	$14,739
8283	F250 4X4	2003	-	$4,680	$4,186	$4,447	$13,314
8287	F150 4X4	2003	205,596	$2,755	$5,364	$5,979	$14,098
8288	F150 4X4	2003	174,660	$5,747	$4,383	$3,046	$13,176
9221	F150 EXT	2003	161,023	$2,544	$1,959	$1,664	$6,167
9225	F150 EXT	2003	220,990	$3,119	$1,388	$2,470	$6,976
			Total	**$172,523**	**$230,561**	**$255,644**	**$658,729**