

500 Consumers Road
North York, ON M2J 1P8
P.O. Box 650
Scarborough, ON
M1K 5E3

Stephanie Allman
Regulatory Coordinator
Tel 416-495-5499
Fax 416-495-6072
Email: egdregulatoryproceedings@enbridge.com



December 16, 2014

Ms Kirsten Walli
Board Secretary
Ontario Energy Board
2300 Yonge Street, Suite 2700
Toronto, Ontario
M4P 1E4

Dear Ms Walli:

**Re: Enbridge Gas Distribution Inc. ("Enbridge")
Ontario Energy Board File No. EB-2014-0277
2013 Demand Side Management ("DSM") Clearance of Variance
Accounts Application - Enbridge Interrogatory Responses**

In accordance with the Ontario Energy Board's (the "Board") Procedural Order issued for the above noted proceeding, enclosed please find the interrogatory responses of Enbridge.

This submission was filed through the Board's RESS and will be available on the Company's website at www.enbridgegas.com/ratecase.

Please contact the undersigned if you have any questions.

Yours truly,

(Original Signed)

Stephanie Allman
Regulatory Coordinator

cc: Mr. D. O'Leary, Aird & Berlis LLP
All Interested Parties in EB-2014-0277

BOARD STAFF INTERROGATORY #1

INTERROGATORY

Ref: Decision and Order dated May 1, 2014, page 3 (EB-2013-0352)

In the Decision and Order in the application by Enbridge for approval of the final balances and for clearance of certain Demand Side Management ("DSM") Variance Accounts, the Board found that a persistence study in regard to large custom commercial and industrial programs would be useful and should be used to inform the next DSM framework which starts in 2015. A persistence study of DSM savings takes into account how long a DSM measure is kept in place relative to its useful life, the net impact of the DSM measure relative to the base case scenario, and the impact of technical degradation.

a) Please provide an update on the status of the persistence study.

RESPONSE

Given the allocation of budget and committed focus on evaluation priorities for 2014 at the time of the EB-2013-0352 Decision and Order, Enbridge has not commenced a persistence study with respect to its large custom commercial and industrial DSM Programs. It is Enbridge's intention to raise this as a priority for consideration during budget allocation discussions in 2015.

Witnesses: S. Moffat
F. Oliver-Glasford
R. Sigurdson

BOARD STAFF INTERROGATORY #2

INTERROGATORY

Ref: Exhibit A, Tab 1, Schedule 3, page 4

Enbridge notes that for the purposes of calculating and evaluating its 2013 DSM program results, Enbridge commenced work on its 2013 DSM Draft Evaluation Report and retained two engineering firms, MMM Group Ltd., and Genivar Inc. (currently WSP Canada Inc.) to undertake a Custom Project Savings Verification ("CPSV") review of the Company's custom projects ("CPSV Contractors").

- a) Was the work of the CPSV contractors, in addition to being supervised by Enbridge, also supervised by the stakeholder members of the Audit Committee?
- b) Please describe the method used in calculating gas volume savings for custom projects.

RESPONSE

- a) CPSV firms are not supervised by Enbridge or the stakeholder members of the Audit Committee ("AC"). Rather, the CPSV firms are contracted to provide an independent assessment and analysis in their CPSV report. Further, the CPSV firms were guided by the CPSV Terms of Reference ("ToR") which was finalized by the Technical Evaluation Committee ("TEC").

As a reminder, The Technical Evaluation Committee consists of seven individuals; three intervenor members elected by the Consultative, two utility members one from EGD and one from Union Gas, and two independent members with technical and other relevant expertise.

During the 2013 audit process, stakeholder members of the AC had the opportunity to ask questions and seek clarification from the CPSV firms prior to the finalization of

Witnesses: S. Moffat
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R. Sigurdson

Enbridge's 2013 DSM Draft Evaluation Report – either directly or via the Auditor. As a further enhancement to the 2012 audit process, the Draft 2013 CPSV reports were provided to all AC members for review and comment, as noted on page 7 of Enbridge's 2013 DSM Audit Summary Report. Following receipt of the Final CPSV reports, the AC was also invited to join weekly conference calls with CPSV firms along with the Auditor and Enbridge. At least one AC stakeholder member was able to attend these meetings as detailed in Appendix C of the 2013 DSM Audit Summary Report.

- b) The specific method used by Enbridge in calculating the gas savings varies from project to project depending on information available and the particular parameters for each project. The methods may include; statistical analysis of actual gas consumption, engineering energy analysis, calibrated model simulation, or some combination of any of these. Further, as per the CPSV terms of reference, the CPSV firms determine and develop their own independent estimate of savings for projects.

Witnesses: S. Moffat
F. Oliver-Glasford
R. Sigurdson

BOARD STAFF INTERROGATORY #3

INTERROGATORY

Ref: Exhibit B, Tab 1, Schedule 1, Tables 13, 14, 15

Please update the tables to provide the following:

- a) the number of participants
- b) the number of units installed
- c) the annual average savings
- d) the average measure life used in the calculation of cumulative savings
- e) the average payback period for the participants before financial incentives
- f) adjustment for free riders
- g) adjustment for persistence of savings

RESPONSE

Please see below a modified table inclusive of participants, average annual net savings, average measure life, average payback period before financial incentives, and adjustment for free riders. As per EB-2012-0394, Exhibit B, Tab 1, Schedule, 2, page 9 adjustment factors for persistence are addressed through evaluation of individual DSM activities as appropriate. As such, Enbridge does not apply a persistence adjustment to the CER offer.

Further, due to the holistic nature of Enbridge's Community Energy Retrofit offer, the Company assesses its results based on the number of homes which participate as opposed to the number of units installed. While there are a minimum number of energy efficiency measures that must be installed in a given home to qualify for the incentive, that number varies from home to home. The objective of this offer is to examine a customer's home as an integrated system and enable that system to achieve overall energy savings of 25%.

Witnesses: S. Moffat
F. Oliver-Glasford
R. Sigurdson

Residential Sector	Actual CCM	Participants	Average Measure Life	Average Annual Net Savings	Average Payback Period*	Adjustment for Free Riders
<i>Community Energy Retrofit</i>	38,980,521	1,649	20	1,182	8.8	15%

*Average Payback Period has been provided for illustrative purposes and includes gas savings only. Payback calculation is based on an assumed cost of \$0.24/m³ which is the average of 2013 Rate 1 costs per m³ delivered to customers on system supply exclusive of fixed customer charges (non-fixed charges include delivery, gas commodity, transportation and load balancing).

Witnesses: S. Moffat
F. Oliver-Glasford
R. Sigurdson

BOARD STAFF INTERROGATORY #4

INTERROGATORY

Ref: Exhibit B, Tab 1, Schedule 1, Table 20, 21, 22

Please update the tables to provide the following:

- a) the number of participants
- b) the number of units installed
- c) the annual average savings
- d) the average measure life used in the calculation of cumulative savings
- e) the average payback period for the participants before financial incentives
- f) adjustment for free riders
- g) adjustment for persistence of savings

RESPONSE

Please see below a modified table inclusive of number of participants, number of units installed, average annual net savings, measure lives, average payback period before financial incentives, adjustment for free riders and adjustment for persistence for the Low Income offerings.

As approved by the Board in EB-2012-0394, Exhibit B, Tab 1, Schedule 2, paragraph 8, the free ridership values for Low Income prescriptive and custom measures are deemed zero. Further, as per EB-2012-0394, Exhibit B, Tab 1, Schedule, 2, page 9 Adjustment factors for persistence are addressed through evaluation of individual DSM activities as appropriate. As such, Enbridge does not apply a persistence adjustment to its Weatherization or Multi-Residential Custom Low Income offerings.

Witnesses: S. Moffat
F. Oliver-Glasford
R. Sigurdson

Low Income	Actual CCM	Participants*	Units Installed*	Average Measure Life	Total Annual Net Savings	Average Annual Net Savings	Average Payback Period**	Adjustment for Free Riders	Adjustment for Persistence of Savings ¹
<i>Single Family (Part 9)</i>									
Weatherization	31,909,475	1,839	n/a	25	1,276,379	694	n/a	0%	0%
Water Conservation	995,209	2,099	2,160	10	99,219	47	n/a	0%	12.3%
Total	32,904,684				1,375,598				
<i>Multi-Residential (Part 3)</i>									
Custom	26,575,868	47	n/a	20	1,474,225	31,366	2.9	0%	0%
Water Conservation	738,287	n/a	1,349	10	73,829	1,995	n/a	0%	12.3%
Total	27,314,154				1,548,054				

*For Enbridge's Part 9 offer, Participant count represents the total number of households. For Enbridge's Part 3 offer, Participant count represents the number of buildings which completed custom projects. For both Part 9 and Part 3, number of Units Installed represents the number of individual water conservation measures installed.

**Average Payback Period has been provided for illustrative purposes and includes gas savings only. The customer does not bear any cost to participate in Enbridge's Low Income Part 9 offering, making a payback period inapplicable. Part 3 offering average payback is based on an assumed cost of \$0.23/m³ which is the average of 2013 Rate 6 costs per m³ delivered to customers on system supply exclusive of fixed customer charges (non-fixed charges include delivery, gas commodity, transportation and load balancing).

¹ 2012 Multi-Residential Low Income Showerhead Verification Report, Ipsos Reid, Mar. 28th, 2013

Witnesses: S. Moffat
F. Oliver-Glasford
R. Sigurdson

BOARD STAFF INTERROGATORY #5

INTERROGATORY

Ref: Exhibit B, Tab 1, Schedule 1, page 64, Table 23

Please provide % savings corresponding to the average annual gas savings provided in the table.

RESPONSE

The contract between Enbridge and its delivery agents does not currently require aggregation of the HOT 2000 modeling software data collected by the delivery agents through Pre and Post Blower Door tests. While this data is contained within each individual project file, providing a detailed fulsome response to this question would require retrieving and inputting data from thousands of files which could not be completed in a timely basis for the purposes of this response.

Moving forward, Enbridge will amend the contracts with delivery agents to require the data in an aggregated form.

Witnesses: S. Moffat
F. Oliver-Glasford
R. Sigurdson

BOARD STAFF INTERROGATORY #6

INTERROGATORY

Ref: Exhibit B, Tab 1, Schedule 1, pages 126-128, Tables 53, 54, 55

Please update the tables to include the average measure life used in the calculation of the cumulative savings for each of the technologies included in the tables.

RESPONSE

Tables 53, 54 and 55 in Exhibit B, Tab 1, Schedule 1 have been updated below to include average measure lives. For formatting purposes, Table 54 has been split into two tables. As stated on page 126 of Exhibit B, Tab 1, Schedule 1 these tables have been provided for illustrative purposes only.

Witnesses: S. Moffat
F. Oliver-Glasford
R. Sigurdson

Table 53. Overview by Prescriptive Technology

Summary Overview by Prescriptive Technology							
	Net Annual Gas Savings (m3)	Cumulative Cubic Metres (CCM)	Average Weighted Measure Life	Total Incentive Amount \$	Net Gas Saved per Incentive \$ spent (m3)	Total Net Incremental Costs	Net Gas Saved per Incremental \$ spent (m3)
Commercial							
Air Curtain	180,695	2,710,421	15	\$22,000	8.21	\$219,868	0.82
Boiler - Hydronic Condensing	129,849	3,246,221	25	\$23,600	5.50	\$217,711	0.60
Boiler - Hydronic High Efficiency	1,024,896	25,576,386	25	\$127,550	8.04	\$568,196	1.80
Commercial Multi-Residential Showerheads	827,890	8,278,902	10	\$167,874	4.93	\$177,491	4.66
Condensing Tank Water Heater	16,614	215,977	13	\$7,200	2.31	\$39,672	0.42
Demand Control Kitchen Ventilation (DCKV)	562,658	8,439,876	15	\$97,500	5.77	\$788,500	0.71
Energy Recovery Ventilators (ERV)	911,649	12,763,079	14	\$113,273	8.05	\$990,130	0.92
Energy Star Convection Ovens	1,355	20,328	15	\$200	6.78	\$1,400	0.97
Energy Star Dishwasher	194,328	2,994,770	15	\$31,600	6.15	-\$37,603	-5.17
Energy Star Fryer	129,094	1,549,123	12	\$14,600	8.84	\$122,538	1.05
Energy Star Steam Cooker	2,579	25,792	10	\$100	25.79	\$1,600	1.61
Energy Star Under Fired Broilers	2,683	32,198	12	\$200	13.42	\$2,032	1.32
Heat Recovery Ventilators (HRV)	71,057	994,800	14	\$11,224	6.33	\$136,599	0.52
Infrared Heaters	685,648	13,312,954	20	\$53,700	12.40	\$1,253,451	0.53
Ozone Laundry	1,306,903	19,603,549	15	\$274,418	4.76	\$544,990	2.40
Commercial Total	6,027,897	99,764,377	17	\$945,039	6.38	\$5,026,574	1.20
Industrial							
Infrared Heaters	39,570	791,404	20	\$2,700	14.66	\$29,631	1.34
Industrial Total	39,570	791,404	20	\$2,700	14.66	\$29,631	1.34
Low Income							
Boiler - Hydronic Condensing	16,396	409,900	25	\$2,400	6.83	\$12,749	1.29
Boiler - Hydronic High Efficiency	101,376	2,534,400	25	\$19,800	5.12	\$81,600	1.24
Low Income Showerheads	188,999	1,689,992	10	\$0	0.00	\$60,165	2.81
Low Income TAPS	4,048	43,504	11	\$0	0.00	\$1,643	2.46
Low Income Total	290,819	4,677,796	16	\$22,200	13.10	\$156,157	1.86

Witnesses: S. Moffat
F. Oliver-Glasford
R. Sigurdson

Table 54. Overview by Custom Technology

Summary Overview by Custom Technology							
	Net Annual Gas Savings (m3)	Cumulative Cubic Metres (CCM)	Average Weighted Measure Life	Total Incentive Amount \$	Net Gas Saved per Incentive \$ spent (m3)	Total Net Incremental Costs	Net Gas Saved per Incremental \$ spent (m3)
Commercial							
Air Curtain	106,686	1,600,294	15	\$13,714	7.78	\$164,002	0.85
Air Handling Unit	5,919	88,778	15	\$3,011	1.97	\$20,000	0.30
Boiler - Hydronic Condensing	3,646,100	90,676,746	25	\$849,348	4.29	\$3,731,242	0.98
Boiler - Hydronic High Efficiency	5,803,792	144,205,506	25	\$1,024,824	5.66	\$8,004,743	0.73
Boiler - Steam	191,452	4,786,308	25	\$25,446	7.52	\$123,068	1.56
Building Envelope	519,295	9,301,993	18	\$66,754	7.78	\$466,725	1.11
Controls	5,398,515	80,977,723	15	\$764,077	7.07	\$10,927,663	0.49
Demand Control Ventilation (DCV)	678,203	10,173,047	15	\$233,047	2.91	\$836,724	0.81
Destratification	634,106	9,511,589	15	\$127,135	4.99	\$533,652	1.19
Drain Water Heat Recovery	65,763	1,644,076	25	\$8,454	7.78	\$66,000	1.00
Energy Recovery Ventilators (ERV)	22,703	317,839	14	\$3,020	7.52	\$34,431	0.86
Heat Recovery Ventilators (HRV)	896	12,546	14	\$115	7.79	\$2,192	0.41
Heat Recovery/Economizer	194,395	2,915,928	15	\$19,454	9.99	\$363,989	0.53
High Extraction Washer	112,693	1,690,402	15	\$28,130	4.01	\$51,072	2.21
Insulation/Caulking/Sealing	54,113	811,693	15	\$6,956	7.78	\$44,206	1.22
Make Up Air Unit	118,360	1,775,407	15	\$17,369	6.81	\$199,882	0.59
Metal Halide	53,855	807,819	15	\$6,923	7.78	\$297,876	0.18
Operational Improvements	1,592,427	7,363,817	5	\$173,703	9.17	\$839,719	1.90
Pool Heating	43,473	652,088	15	\$5,589	7.78	\$55,544	0.78
Reflective Panel	304,566	4,568,494	15	\$52,541	5.80	\$352,499	0.86
Steam Boiler Blowdown	89,631	1,344,467	15	\$11,521	7.78	\$132,880	0.67
Steam Pipe Insulation	32,299	484,489	15	\$4,152	7.78	\$38,434	0.84
Steam Trap	894,636	4,473,180	5	\$72,647	12.31	\$143,045	6.25
Tank Less/Instantaneous	9,876	177,762	18	\$1,269	7.78	\$74,800	0.13
Variable Frequency Drive (VFD)	912,820	13,692,296	15	\$103,110	8.85	\$2,213,729	0.41
Ventilation	12,155	182,325	15	\$3,125	3.89	\$12,320	0.99
Commercial Total	21,498,730	394,236,615	18	\$3,625,433	5.93	\$29,730,435	0.72

Witnesses: S. Moffat
F. Oliver-Glasford
R. Sigurdson

Summary Overview by Custom Technology							
	Net Annual Gas Savings (m3)	Cumulative Cubic Metres (CCM)	Average Weighted Measure Life	Total Incentive Amount \$	Net Gas Saved per Incentive \$ spent (m3)	Total Net Incremental Costs	Net Gas Saved per Incremental \$ spent (m3)
Industrial							
Air Cleaning/Filtration	13,396	200,943	15	\$3,759	3.56	\$7,860	1.70
Air Handling Unit	111,950	1,679,257	15	\$31,417	3.56	\$63,500	1.76
Boiler - Hydronic Condensing - Replacement	134,064	3,351,604	25	\$28,588	4.69	\$471,188	0.28
Boiler - Steam - Replacement	32,590	814,738	25	\$9,146	3.56	\$46,837	0.70
Building Envelope	161,650	4,041,248	25	\$35,042	4.61	\$132,286	1.22
Combustion Control	133,070	1,996,053	15	\$10,724	12.41	\$22,655	5.87
Condensing Economizer	13,167	197,511	15	\$3,695	3.56	\$17,726	0.74
Controls	1,725,521	25,882,815	15	\$272,502	6.33	\$804,950	2.14
Destratification	157,162	2,357,426	15	\$45,109	3.48	\$179,757	0.87
Direct Contact Water Heater	44,246	1,106,148	25	\$5,795	7.64	\$136,543	0.32
Dryer	284,147	4,262,207	15	\$78,994	3.60	\$83,197	3.42
Furnace	1,695,469	30,518,437	18	\$316,240	5.36	\$1,878,637	0.90
Greenhouse Curtains	43,842	438,416	10	\$6,249	7.02	\$17,119	2.56
Heat Recovery	148,528	2,227,927	15	\$47,571	3.12	\$57,185	2.60
Heat Recovery/Economizer	25,861	387,919	15	\$3,387	7.64	\$17,573	1.47
Industrial Equipment	5,928,718	118,574,357	20	\$604,588	9.81	\$2,882,794	2.06
Insulation	503,385	7,550,760	15	\$139,908	3.60	\$319,788	1.57
Linkageless Control	72,171	1,082,569	15	\$12,429	5.81	\$73,856	0.98
Pipe Insulation	164,776	2,471,637	15	\$22,902	7.19	\$142,533	1.16
Process Heating Improvements	875,845	8,258,733	9	\$125,805	6.96	\$81,295	10.77
Steam Trap	764,118	3,820,590	5	\$76,797	9.95	\$79,018	9.67
Variable Frequency Drive (VFD)	37,509	562,636	15	\$10,526	3.56	\$9,975	3.76
Industrial Total	13,071,186	221,783,951	17	\$1,891,172	6.91	\$7,526,269	1.74
Low Income							
Boiler - Hydronic Condensing	456,109	11,402,736	25	\$125,142	3.64	\$203,259	2.24
Boiler - Hydronic High Efficiency	132,121	3,303,022	25	\$29,892	4.42	\$133,480	0.99
Building Automation System (BAS)	33,617	504,251	15	\$7,606	4.42	\$16,052	2.09
Building Envelope	1,731	43,272	25	\$0	0.00	\$1,800	0.96
Controls	348,289	5,224,332	15	\$91,638	3.80	\$472,260	0.74
Make Up Air Unit	6,959	104,383	15	\$1,578	4.41	\$4,300	1.62
Reflective Panel	116,143	1,742,152	15	\$112,179	1.04	\$48,411	2.40
Low Income Total	1,094,969	22,324,148	20	\$368,034	2.98	\$879,562	1.24

Witnesses: S. Moffat
F. Oliver-Glasford
R. Sigurdson

Table 55. Custom Project Overview by Sub-Sector

Summary Overview by Sub-Sector for Custom Projects							
	Net Annual Gas Savings (m3)	Cumulative Cubic Metres (CCM)	Average Weighted Measure Life	Total Incentive Amount \$	Net Gas Saved per Incentive, \$ spent (m3)	Total Net Incremental Costs	Net Gas Saved per Incremental \$ spent (m3)
Commercial							
Accommodation	468,809	9,186,029	20	\$146,366	3.20	\$645,137	0.73
Food Services	12,155	182,325	15	\$3,125	3.89	\$12,320	0.99
Government	3,276,234	51,239,256	16	\$426,297	7.69	\$7,892,606	0.42
Health Care	3,583,075	48,993,113	14	\$424,924	8.43	\$4,439,097	0.81
Large New Construction	821,058	20,526,461	25	\$121,493	6.76	\$3,944,195	0.21
Logistics	935,415	15,803,686	17	\$159,110	5.88	\$1,160,768	0.81
Multi - Residential Private	7,437,691	161,746,064	22	\$1,485,304	5.01	\$4,027,737	1.85
Other Commercial	325,657	6,745,956	21	\$54,371	5.99	\$568,679	0.57
Professional	2,430,405	48,330,742	20	\$437,509	5.56	\$3,129,308	0.78
Recreational Non-Government	170,222	3,399,141	20	\$28,851	5.90	\$156,352	1.09
Retail	1,110,310	13,397,160	12	\$163,906	6.77	\$1,527,571	0.73
Schools	251,330	4,344,158	17	\$37,383	6.72	\$495,813	0.51
Universities	676,369	10,342,523	15	\$136,794	4.94	\$1,730,853	0.39
Commercial Total	21,498,730	394,236,615	18	\$3,625,433	5.93	\$29,730,435	0.72
Industrial							
Agriculture	434,663	7,351,845	17	\$53,414	8.14	\$596,186	0.73
Industrial Custom	12,636,523	214,432,105	17	\$1,837,758	6.88	\$6,930,083	1.82
Industrial Total	13,071,186	221,783,951	17	\$1,891,172	6.91	\$7,526,269	1.74
Low Income							
Multi Residential - Part 3	1,094,969	22,324,148	20	\$368,034	2.98	\$879,562	1.24
Low Income Total	1,094,969	22,324,148	20	\$368,034	2.98	\$879,562	1.24

Witnesses: S. Moffat
F. Oliver-Glasford
R. Sigurdson

BOARD STAFF INTERROGATORY #7

INTERROGATORY

Ref: Exhibit B, Tab 5, Schedule 1, pages 9

For each of the custom projects listed please provide in a table the following:

- a) the simple payback period before any incentive was provided
- b) the amount of incentive provide
- c) adjustment for free riders used
- d) adjustment for persistence of savings
- e) the average measure life used in the calculation of the cumulative savings

RESPONSE

Please see below a modified version of the table referenced above inclusive of payback period before incentives, incentive amount, free rider adjustment, and measure life used for each project. As per EB-2012-0394, Exhibit B, Tab 1, Schedule, 2, page 9 adjustment factors for persistence are addressed through evaluation of individual DSM activities as appropriate. As such, Enbridge does not apply a persistence factor to its Commercial Custom offering.

Witnesses: S. Moffat
F. Oliver-Glasford
R. Sigurdson

Report Section	DSM Code	Measure Life (years)	Natural Gas Savings (m3)	Payback Period	Incentive	Free Ridership
3.1	RA.MR.EX.004.13	25	42,783	0.57	\$6,600	20%
3.2	RA.MR.EX.017.13	15	24,971	0.81	\$2,497	20%
3.3	RA.MR.EX.018.13	15	70,110	1.04	\$7,011	20%
3.4	RA.MR.EX.020.13	25	14,977	4.69	\$3,731	20%
3.5	RA.MR.EX.023.13	25	207,221	0.64	\$33,112	20%
3.6	RA.MR.EX.041.13	15	159,967	1.25	\$15,997	20%
3.7	RA.MR.EX.046.13	25	117,028	0.30	\$20,653	20%
3.8	RA.MR.EX.053.13	25	75,374	4.26	\$16,386	20%
3.9	RA.MR.EX.108.13	15	52,779	5.11	\$5,278	20%
3.1	RA.REC.EX.003.13	15	53,700	1.52	\$5,370	12%
3.11	RA.GOV.EX.007.13	15	27,082	3.00	\$2,708	12%
3.12	RA.HC.EX.016.13	20*	527,704	15.33	\$30,000	12%
3.13	LW.MR.PART3.044.14	25	144,416	0.36	\$15,000	0%
3.14	RA.ACC.EX.017.13	15	18,131	27.29	\$1,813	12%
3.15	RA.GOV.EX.021.13	15	590,285	14.87	\$59,029	12%
3.16	RA.GOV.EX.024.13	25	1,050,208	2.78	\$100,000	12%
3.17	RA.HC.EX.021.13	25	93,114	16.47	\$13,967	12%
3.18	RA.HC.EX.049.13	25	45,325	5.88	\$6,571	12%
3.19	RA.MR.EX.054.13	25	41,760	8.12	\$9,089	20%
3.2	RA.MR.EX.105.13	20	69,570	4.16	\$6,957	20%
3.21	RA.MR.EX.140.13	22**	215,509	0.90	\$22,245	20%
3.22	RA.MR.EX.169.13	25	83,054	1.27	\$13,203	20%
3.23	RA.MR.EX.211.13	25	22,680	0.50	\$4,556	20%
3.24	RA.PRO.EX.016.13	25	72,778	0.73	\$11,181	12%
3.25	RA.PRO.EX.027.13	15	16,644	4.54	\$1,664	12%
3.26	RA.RET.EX.070.13	25	24,939	14.75	\$5,273	12%
3.27	RA.UNIV.EX.006.13	15	531,963	10.68	\$100,000	12%

*Multiple measures with different measure lives were included in this custom project. Measure life presented is an un-weighted average of those measure lives.

** EB-2014-0277, Exhibit B, Tab 5, Schedule 1, p.112

Witnesses: S. Moffat
F. Oliver-Glasford
R. Sigurdson

ENERGY PROBE INTERROGATORY #1

INTERROGATORY

Ref: Exhibit B, Tab 1, Tables 3 & 4, Scorecard Results

- a) Please provide the full cost of the 2013 RA programs for Residential and Low Income (separately). Breakout incentives, program administration, overheads.
- b) Please provide the Unit cost-effectiveness CCM/\$ for the two programs.
- c) Please compare to the historic CCM/\$.
- d) Please explain the material differences in achievement for each program and the impact on DSMIDA and Rate 1/6 customers from the over-achievement and under achievement for the respective programs.
- e) What in EGDs view are the limits and implications if any, on significant over-achievement?

RESPONSE

- a) Please find below a chart illustrating the costs of Enbridge's Residential Resource Acquisition offer and Low Income program broken out to show incentives and program administration respectively. While overhead spending for Low Income has been provided, Enbridge's overhead spending specific to the Residential portion of Resource Acquisition has not been provided as overhead spending is tracked at the Program level (i.e., Resource Acquisition, Low Income and Market Transformation). Total overhead spending in 2013 was \$5,091,220 for Resource Acquisition and \$586,981 for Low Income.

Witnesses: S. Moffat
F. Oliver-Glasford
R. Sigurdson

Program Sector	Incentives	Program Admin	Total Costs (less overheads)
<u>Resource Acquisition</u>			
Residential	\$1,922,320	\$454,577	\$2,376,897
<u>Low Income</u>			
<i>Single Family (Part 9)</i>	\$4,470,507	\$168,530	\$4,639,037
<i>Multi-Residential (Part 3)</i>	\$695,352	\$28,376	\$723,728
Total Low Income	\$5,165,859	\$196,906	\$5,362,765

b) Please find below the unit cost-effectiveness, expressed as CCM per dollar, for Enbridge's Residential Resource Acquisition offer and Low Income offers.

Program Sector	Total Costs (less overheads)	Total CCM	CCM per \$
<u>Resource Acquisition</u>			
Residential	\$2,376,897	38,980,521	16.40
<u>Low Income</u>			
<i>Single Family (Part 9)</i>	\$4,639,037	32,904,684	7.09
<i>Multi-Residential (Part 3)</i>	\$723,728	27,314,154	37.74
Total Low Income	\$5,362,765	60,218,838	11.23

Witnesses: S. Moffat
F. Oliver-Glasford
R. Sigurdson

- c) Please find below a comparison of CCM per dollar spent for Enbridge's Residential Resource Acquisition offer and Low Income offers compared to 2012 CCM per dollar spent¹.

Program Sector	2013 CCM per \$	2012 CCM per \$
<u>Resource Acquisition</u>		
Residential	16.40	12.44
<u>Low Income</u>		
<i>Single Family (Part 9)</i>	7.09	4.29
<i>Multi-Residential (Part 3)</i>	37.74	31.73
Total Low Income	11.23	9.56

- d) Please see Enbridge's response to Energy Probe Interrogatory #2 at Exhibit I, Tab 2, Schedule 2 in which the Company provides a comparison of material differences in achievement, and its impacts on DSMIDA for Rates 1 and 6 respectively, between results as filed, at 100% of target and at the upper target for its weighted scorecards.
- e) The scorecards were designed to be flexible and in such a way as to allow for over or under achievement within individual metrics that comprised a scorecard. This

¹ The historical comparison provided is limited to 2012, as this year represents the beginning of a new set of DSM Guidelines, significant changes to Enbridge's DSM portfolio, and the first year in which Enbridge's results were measured using CCM on a weighted scorecard basis, as opposed to using Net TRC Benefits.

Witnesses: S. Moffat
F. Oliver-Glasford
R. Sigurdson

framework structure helps to encourage focus on programs that are received positively by Enbridge's customers, and ensure they are not prematurely stifled. The limit of over achievement is the Maximum Incentive Available as filed and approved by the Board on page two of Exhibit B, Tab 1, Schedule 2 in EB-2012-0394. The approved maximum potential incentive for 2013 is \$10,659,000.

Witnesses: S. Moffat
F. Oliver-Glasford
R. Sigurdson

ENERGY PROBE INTERROGATORY #2

INTERROGATORY

Ref: Exhibit B, Tab 4, Schedule 1, DSMIDA Allocations

Please provide the calculation of the DSMIDA amounts for Rate1 \$2,094,687 gross and Rate 6 \$2,007,512 gross:

- i) As filed (339% of Target);
- ii) With 100% target achievement; and,
- iii) With 125%.

RESPONSE

Enbridge provides below an analysis of the DSMIDA amounts to be recovered from Rates 1 and 6 respectively under 3 scenarios; as filed, at 100% target achievement on all weighted scorecards and at upper target achievement on all weighted scorecards. As noted in Enbridge's DSM Plan¹, all upper targets, with the exception of Home Labelling and Commercial Savings by Design, are set at 125% of their 100% target.

The Company believes it is important to put Energy Probe's reference to 339% at Energy Probe Interrogatory #2(i) above into context. This reference relates to the calculation set out at Exhibit B, Tab 1, Schedule 1, Table 11 of the prefiled evidence which shows that the actual CCM achieved in 2013 in respect of the residential sector only was 339% of the 2013 target CCM for the residential sector at 100%. For the purposes of the resource acquisition scorecard which is presented at Exhibit B, Tab 1, Schedule 1, Table 10 of the prefiled evidence, it should be noted that the actual CCM

¹ EB-2012-0394, Exhibit B, Tab 2, Schedule 9, page 9, paragraph 2

Witnesses: S. Moffat
F. Oliver-Glasford
R. Sigurdson

results for 2013 are the aggregate of each of the residential, commercial and industrial sectors. This aggregate relates to the Cumulative Savings (million m³) metric included on the Company's Resource Acquisition scorecard. While the favourable results from the residential sector contributed to the actual CCM achieved for the purposes of the aggregate figure used, it is the weighted aggregate figure relative to the targets which was used for the purposes of determining the DSMIDA. It is therefore inaccurate to suggest that the as filed actual result was 339% as the IR appears to indicate.

Table 11 provides a comparison of the target at 100% and the actual CCM achieved for each of the residential, commercial and industrial sectors. This information was intended to provide context and indicate where directionally the CCM was achieved. The DSMIDA was not calculated on the basis of Table 11 but rather the weighted scorecard results as set out in Table 10 as required by the approved DSM Plan for 2013.

i) DSMIDA Amounts for Rate 1 and Rate 6 as Filed

Rate 1: \$2,094,687

Rate 6: \$2,007,512

Total DSMIDA amount for all rate classes: \$4,538,188

ii) DSMIDA amounts for Rate 1 and Rate 6 based on 100% Target Achievement on all Weighted Scorecards²

Rate 1 = \$1,967,945

Rate 6 = \$1,886,045

Total DSMIDA amount for all rate classes = \$4,263,600

² Note this is a hypothetical program result showing a subsequent impact on DSMIDA only.

Witnesses: S. Moffat
F. Oliver-Glasford
R. Sigurdson

iii) DSMIDA amounts for Rate 1 and Rate 6 based on Upper Target Achievement on all Weighted Scorecards³

Rate 1 = \$4,919,863

Rate 6 = \$4,715,113

Total DSMIDA amount for all rate classes = \$10,659,000

³ Same as above

Witnesses: S. Moffat
F. Oliver-Glasford
R. Sigurdson

ENERGY PROBE INTERROGATORY #3

INTERROGATORY

Ref: Exhibit B2, Tab 1, Schedule1 and Exhibit B4, Schedule 1

Preamble: Overall in terms of CCM Savings (table 4) the 2013 DSM portfolio fell short of the Combined CCM savings target.

- a) Please provide a breakout/comparison of the Target and Actual CCM savings for the Commercial and Industrial programs.
- b) Please provide explanations for under-achievement.
- c) Please provide for each sector the CCM/m3 (all costs included).
- d) Breakout the Unit cost-effectiveness CCM/\$ for the two programs Compare to Target/and or historic values. Please comment on result.

RESPONSE

- a) Please see below Table 11 on page 25 of Exhibit B, Tab 1, Schedule 1, which shows Target and Actual CCM savings from Enbridge's Commercial and Industrial DSM offers:

Resource Aquisition Program Sector	CCM Target (100%)	Actual CCM	% Target Achieved	\$/CCM	Participants/ Units Installed*
<i>Residential</i>	11,500,013	38,980,521	339%	\$0.0680	1,649
<i>Commercial</i>	621,254,179	505,133,591	81%	\$0.0128	17,796
<i>Industrial</i>	339,889,500	222,575,355	65%	\$0.0117	142
Total/Average	972,643,692	766,689,466	79%	\$0.0153	19,587

*Participants/Units installed includes the # of unique addresses for custom offerings, and the # of units for prescriptive offerings.

Witnesses: S. Moffat
F. Oliver-Glasford
R. Sigurdson

- b) A full overview of 2013 results for Enbridge's Commercial and Industrial offers can be found on pages 32 through 58 of Exhibit B, Tab 1, Schedule 1. For convenience, the Company suggests the following excerpts as relevant to Energy Probe IR 3 b):

Commercial

"One of the largest impacts to 2013 Commercial sector performance was as a result of the removal of New Construction from the Resource Acquisition program.

As planned, the focus for the New Construction offering was redesigned in 2012 with the launch of the Commercial Savings by Design (SBD) Market Transformation initiative...

... Despite efforts to ramp up the focus on the retrofit market across other commercial sectors, building a funnel to make up these results could not be achieved in twelve months." p. 38

"An additional factor which impacted performance was due to Commercial group staffing changes which delayed planning timelines." p.38

"Feedback from customers has suggested that continuing low historical natural gas prices in 2013 impacted the decision for implementation of natural gas efficiency projects in comparison to electric efficiency improvement projects for some commercial customers." p.39

"Analysis of the first year of [Run it Right] participant results has shown that average savings levels are significantly lower than the targets initially set which were based on anticipated savings of greater than 10%. Analysis of results from 2013 show that average savings were only 2.5% for participants..." p.45

"[Run it Right] savings results are exclusively generated through operational improvements. Many other utility re-commissioning/retro-commissioning programs, as well as local initiatives such as Greening Healthcare and Race to Reduce do not distinguish between capital and operational improvements... These capital measures increase the potential savings that can be achieved." p.46

Witnesses: S. Moffat
F. Oliver-Glasford
R. Sigurdson

Industrial

"The increased effort in 2013 on appealing to small industrial customers resulted in a substantial increase in the number of projects involving these customers. The actual average size of the projects however, was smaller than anticipated resulting in lower total incentive payouts than initially forecast. Also, the average size of the large industrial projects decreased in 2013, further reducing the incentive paid in support of these efforts than predicted." p.54

"The Industrial sector continues to face a variety of challenges and the sector is not back to pre-recession levels. With gas prices remaining near ten-year lows throughout 2013, a decreased customer focus on gas efficiency projects is evident given lengthened project paybacks which are often less attractive relative to other investments, and more specifically, to other energy efficiency alternatives focusing on electricity usage for example." p.55

- c) For purposes of responding to this question, Enbridge assumed that Energy Probe meant "CCM/\$" versus "CCM/m³". As such, please see below costs, actual CCM and CCM per dollar for each sector within the Resource Acquisition Program. As noted in response to Energy Probe Interrogatory # 1 a), Enbridge's DSM overhead spending is tracked at the Program level (i.e., Resource Acquisition, Low Income and Market Transformation).

Program/Sector	Total Cost	CCM Actual Results	CCM per \$
<i>Residential</i>	\$2,376,897	38,980,521	16.40
<i>Commercial</i>	\$6,453,504	505,133,591	78.27
<i>Industrial</i>	\$2,607,644	222,575,355	85.35
<i>Overheads</i>	\$5,091,220	0	
Resource Acquisition	\$16,529,266	766,689,466	46.38

Witnesses: S. Moffat
F. Oliver-Glasford
R. Sigurdson

- d) Please see below a chart comparing 2012 and 2013 CCM per dollar spent for the Commercial and Industrial sectors within Resource Acquisition. The Company's 2013 DSM Plan, filed in EB-2012-0394 and developed in consultation with stakeholders, does not specify a CCM per dollar spent target to which to compare these values.

Program/Sector	CCM per \$ (2012)	CCM per \$ (2013)
<i>Commercial</i>	82.76	78.27
<i>Industrial</i>	116.81	85.35

As noted in the chart above, Enbridge's CCM per dollar spent remains relatively consistent between 2012 and 2013 within the Commercial sector. Changes in the Industrial CCM per dollar spent, as indicated in Enbridge's response to Energy Probe Interrogatory #3 b), are partly due to a decrease in the average size of industrial projects in terms of average gas savings.

Witnesses: S. Moffat
F. Oliver-Glasford
R. Sigurdson