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July 15, 2022

Sara Hardgrave
Acting Commission Secretary and Manager
Regulatory Services
British Columbia Utilities Commission
Suite 410, 900 Howe Street
Vancouver, BC V6Z 2N3

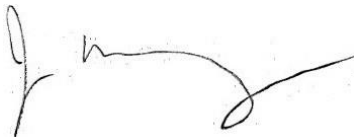
Dear Sara Hardgrave:

**RE: British Columbia Utilities Commission (BCUC or Commission)
British Columbia Hydro and Power Authority (BC Hydro)
Fiscal 2005 – Fiscal 2006 Revenue Requirements Application
BCUC Decision G-96-04 dated October 29, 2004: Directive 69
(AMENDED pursuant to 2006 Integrate Electricity Plan and
2006 Long-Term Acquisition Plan
BCUC Decision G-29-07 dated May 11, 2007: Directive 16)
2008 Long-Term Acquisition Plan
BCUC Decision G-91-09 dated July 27, 2009: Directives 36, 38 and 42
Fiscal 2017 – Fiscal 2019 Revenue Requirements Application
BCUC Decision G-47-18 dated March 1, 2018: Directive 23 Fiscal 2020 –
Fiscal 2021 Revenue Requirements Application
BCUC Decision G-246-20 dated October 2, 2020: Directives 47, 49, 50
and 51**

BC Hydro writes to provide its Report on Demand Side Management Activities for the 12 months ending March 31, 2022.

For further information, please contact Joe Maloney at 604-623-4348 or by email at bchydroregulatorygroup@bchydro.com.

Yours sincerely,



(for) Chris Sandve
Chief Regulatory Officer

bm/ma

Enclosure



Report on Demand-Side Management Activities for Fiscal 2022

July 8, 2022

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1 Introduction

This BC Hydro annual report to the British Columbia Utilities Commission (**BCUC** or **Commission**) on Demand-Side Management (**DSM**) activities provides information on DSM expenditures, electricity savings, plan performance and mitigation measures for the 2022 fiscal year, which is the twelve months ending March 31, 2022. This report also provides information on Low Carbon Electrification expenditures within the DSM Regulatory Account.

This annual report is filed in compliance with, or to reflect, the following BCUC Directives:

- Directive 69 from the BCUC Decision G-96-04 on BC Hydro's Fiscal 2005 to Fiscal 2006 Revenue Requirements Application (**F05-F06 RRA**);
- Directive 16 from the BCUC Decision G-29-07 on BC Hydro's 2006 Integrated Electricity Plan and Long-Term Acquisition Plan (**2006 IEP/LTAP**);
- Directives 36, 38, and 42 from the BCUC Decision G-91-09 on BC Hydro's 2008 Long-Term Acquisition Plan (**2008 LTAP**);
- Directive 23 from the BCUC Decision G-47-18 on BC Hydro's Fiscal 2017 to Fiscal 2019 Revenue Requirements Application (**F17-F19 RRA**); and
- Directive 47, 49, 50 and 51 from the BCUC Decision G-246-20 on BC Hydro's Fiscal 2020 to Fiscal 2021 Revenue Requirements Application (**F20-F21 RRA**).

Directive 69 of the F05-F06 RRA Decision directed BC Hydro "to provide information to the BCUC for on-going review of Power Smart performance through:

- Executive Summaries of milestone evaluation reports and full final evaluation reports for each program;
- Semi-annual- reports on DSM activities which, amongst others, will include:

-
- ▶ Detailed breakdown of OMA expenses related to support activities carried out within the Power Smart group and in other departments that support the Power Smart organization;
 - ▶ Detailed description of the functions of portfolio level costs and how these costs are allocated to programs;
 - ▶ Summaries of the overall performance of Power Smart with reference to program objectives; and
 - ▶ Variances of fiscal year budgeted and actual deferred capital expenditures and explanation of variances.”

Directive 16 of the 2006 IEP/LTAP Decision directed BC Hydro “to continue to file reports on DSM performance as described in Directive 69 of the F05/F06 RRA Decision included in Order No. G-9604 and to file its Semi Annual Demand-Side Management Reports in the same format as the June 2005 Report with the following enhancements:

- (i) Provide annual and cumulative totals since program inception;
- (ii) Express these values on a per unit basis; and
- (iii) Provide the benefit to cost ratios for the three DSM tests.”

Directive 36 of the 2008 LTAP Decision directed BC Hydro to switch from semi-annual to annual DSM performance reports. Directive 38 from the same Decision directed BC Hydro to include in these reports:

“...metrics for each initiative, achievements in relation to milestones, and description of past or planned mitigation measures where warranted. These mitigation measures should include shifting program resources and alternative supply options for each program. Ongoing DSM performance reporting should demonstrate how BC Hydro is continuously pursuing DSM and that specific programs are cost-effective.”

Directive 42 of the 2008 LTAP Decision directed BC Hydro to continue to report on a Ratepayer Impact Measure (**RIM**) test values.

Directive 23 of the F17-F19 RRA Decision directs BC Hydro to “include a line item in BC Hydro’s Annual Report on DSM Activities to reflect the Non-Integrated Area (**NIA**) activities that are tracked separately.”

Directive 47 of the F20-F21 RRA Decision directed BC Hydro, among other things, to report on the progress of the NIA program in future annual DSM reports, and in the fiscal 2023 Revenue Requirements Application, “including an assessment of whether that program has been effective in reducing barriers for Non-Integrated Area customers in accessing DSM offerings and thereby meeting the objective of Directive 23 from the 2017 to 2019 Revenue Requirements Application.”

Directive 49 of the F20-F21 RRA Decision directed BC Hydro “to report on the Low Carbon Electrification expenditures within the DSM Regulatory Account annually in its annual DSM report to the BCUC, clearly allocated to the applicable classes defined in section 4(3) (a), (b), (c) or (d) of the GRR, including a consolidated table with a break down between the Initial LCE and BC Hydro LCE projects and programs.”

Directive 50 of the F20-F21 RRA Decision rescinded Directive 61 from Order No. G-96-04 on BC Hydro’s F05-F06 RRA.

Directive 51 of the F20-F21 RRA Decision determined that BC Hydro may make inter-year and inter-program area transfers, as follows:

- BC Hydro may transfer unspent accepted DSM expenditures in a program area to the same program area in the following year of the Test Period, on the condition that BC Hydro provides information regarding unspent amounts as part of its annual DSM reports so that all amounts transferred within a program area are transparently accounted for from one test year to the next; and

-
- The Panel accepted the DSM expenditure schedule including transfers of up to 25 per cent of DSM expenditures from any one existing program area to any other existing program area.

BC Hydro files its evaluation reports pursuant to Directive 69 of the F05-F06 RRA Decision separately.

This annual report addresses the balance of Directives 69 and 16, as well as Directives 36, 38, and 42 of the 2008 LTAP Decision, Directive 23 of the F17-F19 RRA Decision and Directives 47, 49, 50 and 51 of the F20-F21 RRA Decision.

2 Expenditures and Electricity Savings for Fiscal 2022 as a Result of DSM activities

BC Hydro's DSM expenditures¹ in fiscal 2022 totalled \$85 million, while new incremental DSM electricity savings totalled 647 GWh/year. Expenditures were \$3.1 million or 4 per cent above the Fiscal 2022 DSM Plan presented in BC Hydro's F22 RRA. Fiscal 2022 expenditures were in line with the revised fiscal 2022 DSM expenditures that BC Hydro is seeking acceptance of in the on-going F23-F25 RRA proceeding. Overall, new incremental electricity savings as shown in [Table 1](#) exceeded the DSM Plan by 59 GWh/year or 10 per cent.

BC Hydro considered whether the approved transfer rules could be utilized to cover the expenditures above plan. While the current transfer rules allow for a transfer between fiscal years of a test period to accommodate situations where a given fiscal year may be above the planned amount, BC Hydro's fiscal 2022 DSM expenditure schedule was only one year, so there was no opportunity to transfer unspent amounts from the previous year. The current transfer rules do not provide

¹ Comprising all DSM-related deferred operating expenditures. DSM operating expenditures are presented in [Table 8](#) of this report.

another mechanism for BC Hydro to accommodate the \$3.1 million variance in fiscal 2022.

[Table 1](#) presents planned and actual DSM expenditures and new incremental electricity savings in fiscal 2022.

Table 1 Expenditures and New Incremental Electricity Savings for Fiscal 2022*

	Expenditures ¹				New Incremental Electricity Savings			
	Plan ² \$ 000	Actual \$ 000	Variance \$ 000	%	Plan ² GWh/yr	Actual ³ GWh/yr	Variance GWh/yr	%
Rate Structures								
<i>Transmission Service Rate</i>	456	556	100	22%	119	119	0	0%
Total Rate Structures	456	556	100	22%	119	119	0	0%
DSM Programs								
<i>Residential Sector</i>								
Low Income	7,393	5,264	(2,129)	(29%)	8	5	(3)	(41%)
Non Integrated Areas	1,411	1,082	(328)	(23%)	0.6	0.4	(0.2)	(33%)
Retail	2,212	2,266	54	2%	7	6	(1)	(15%)
Home Renovation Rebate	4,991	9,914	4,922	99%	9	9	(0)	(2%)
<i>Residential Energy Management Activities</i>	4,995	3,778	(1,217)	(24%)	16	25	9	55%
<i>Residential Sector Total</i>	21,002	22,304	1,303	6%	41	45	4	10%
<i>Commercial Sector</i>								
LEM-C	8,578	10,527	1,950	23%	37	57	20	54%
New Construction	1,898	1,931	33	2%	6	6	0	2%
<i>Commercial Energy Management Activities</i>	6,150	5,892	(258)	(4%)	n/a	n/a	n/a	n/a
<i>Commercial Sector Total</i>	16,626	18,351	1,725	10%	43	63	20	47%
<i>Industrial Sector</i>								
LEM-I	13,745	14,530	785	6%	127	143	17	13%
<i>Industrial Energy Management Activities</i>	7,025	7,004	(21)	(0%)	n/a	n/a	n/a	n/a
<i>Industrial Sector Total</i>	20,771	21,534	763	4%	127	143	17	13%
Total Programs	58,398	62,189	3,791	6%	210	251	41	19%
Supporting Initiatives								
Public Awareness	7,578	7,424	(154)	(2%)	-	-	-	-
<i>Indirect and Portfolio Enabling</i>	7,444	6,584	(859)	(12%)	-	-	-	-
Supporting Initiatives Total	15,022	14,008	(1,014)	(7%)	-	-	-	-
Total Programs, Rates & Supporting Initiatives	73,876	76,753	2,877	4%	329	370	41	12%
Codes and Standards	5,439	5,304	(134)	(2%)	259	277	18	7%
Capacity Focused DSM	2,900	3,257	357	12%	-	-	-	-
PORTFOLIO TOTAL	82,215	85,315	3,100	4%	588	647	59	10%

* Numbers may not add due to rounding.

Notes:

- ¹ Including all DSM-related deferred operating expenditures.
- ² Plan figures are from BC Hydro's F22 RRA, Appendix M.
- ³ Reported savings from codes and standards and transmission service rate structures are based on planned estimates as well as evaluated results.

[Table 2](#) provides explanations of the variances between planned and actual expenditures and savings shown in [Table 1](#) above:

Table 2 Variance Explanations between Planned and Actual Expenditures and Savings for Fiscal 2022

Rate Structures	
Transmission Service Rate	Expenditures were above plan due to higher than planned costs associated with the evaluation of the Transmission Service Rate. Electricity savings were on plan.
DSM Programs	
Residential Sector	
Low Income	Expenditures and electricity savings were below plan due to lower requests for Energy Saving Kits than forecast as well as the COVID-19 pandemic limiting customer demand for in-home visits.
Non-Integrated Areas	Expenditures and electricity savings were below plan due to lower than forecast projects completed within the rebate offers resulting largely from the COVID-19 pandemic, which continued to prevent site visits from external contractors in some remote communities.
Retail	Expenditures were approximately on plan. Electricity savings were below plan due to lighting and thermostat sales being lower than historic volumes.
Home Renovation Rebate	Expenditures were above plan due to higher participation and the time-limited 'double the rebate' offer (offered in fiscal 2021, but customers had until the end of Q1 fiscal 2022 to complete the installation). This offer was put in place to support contractors and customers impacted by the COVID-19 pandemic. Electricity savings were approximately on plan after the impact of increased participation was offset by evaluation adjustments.
Residential Energy Management Activities	Expenditures were below plan primarily due to reduced advertising activities and an Energy Insights enabling trial not proceeding. Electricity savings were above plan as both Team Power Smart challenge and Energy Visualization Portlet participants were higher than forecast.
Commercial Sector	
Leaders in Energy Management – Commercial (LEM-C)	Expenditures and electricity savings were above plan due to higher volume of project completions in fiscal 2022 than expected.
New Construction	Expenditures and electricity savings were approximately on plan.

Commercial Energy Management Activities	Expenditures were below plan due to an IT project related to trade ally administration not being fully completed as expected.
Industrial Sector	
Leaders in Energy Management – Industrial (LEM-I)	Expenditures were above plan due to a greater number of incented projects being completed in F2022 than expected. Electricity savings were above plan due to higher savings from strategic energy management activity and the greater number of incented projects.
Industrial Energy Management Activities	Expenditures were on plan.
Total Programs	Expenditures were above plan primarily due to higher-than-expected participation in the Residential Home Renovation Rebate program. Electricity savings were above plan primarily due to higher-than-expected participation in the Commercial LEM-C program and higher savings from strategic energy management activity and the higher-than-expected number of incented projects in the Industrial LEM-I program.
Supporting Initiatives	
Public Awareness	Expenditures were approximately on plan.
Indirect and Portfolio Enabling	Expenditures were below plan due to reduced costs for maintenance and sustainment of systems and lower than planned labour.
Codes and Standards	Expenditures and electricity savings were approximately on plan.
Capacity Focused DSM	Expenditures were above plan due to higher pilot project activity than planned in the residential sector.
Portfolio Total	Expenditures were above plan primarily due to higher-than-expected participation in the Residential Home Renovation Rebate program. Electricity savings were above plan primarily due to higher-than-expected participation in the Commercial LEM-C program and higher savings from strategic energy management activity and the higher-than-expected number of incented projects in the Industrial LEM-I program.

3 Non-Integrated Areas Activity

BC Hydro's fiscal 2022 DSM expenditures, electricity savings and cost effectiveness results for the NIA program are shown as a line item within [Table 1](#) and [Table 3](#) through [Table 6](#), along with all other programs.

The main components of the NIA program include:

- Indigenous Communities Conservation Program (**ICCP**), which contains two streams:
 - ▶ Stream 1 provides free energy saving products, salary support and installation training for Indigenous Nations to hire local installers to conduct home energy upgrades such as energy efficient lighting, high performance faucets and showerheads, and basic draft proofing and to assess homes for additional energy-saving opportunities.
 - ▶ Stream 2 provides training to Indigenous Nations and their contractors to complete advanced home energy upgrades and provides rebates to support the cost of those upgrades (e.g., insulation, windows, doors, ventilation, heat pumps, etc.).

For communities that choose not to participate in the Indigenous Communities Conservation Program and for all other customers within the NIA, the following offers are available:

- Energy Savings Kits: free energy saving products are offered to NIA residential customers that they can install in their own homes;
- Home Renovation Rebates: NIA residential customers are offered bonus rebates on eligible home energy upgrades; and
- Business Energy Savings Incentives: NIA commercial customers, including Indigenous Nations, are eligible for bonus incentives through this program.

The NIA program continued to see strong participation (above plan) in ICCP Stream 1 in fiscal 2022.

For ICCP Stream 2, there was strong engagement from communities; however, the number of energy savings projects completed was below plan, due, in part, to project delays attributed to the ongoing impacts of the COVID-19 pandemic in some remote Indigenous communities, which prevented site visits from external contractors. It also reflects the longer than estimated timelines associated with planning, coordinating and delivering these more in-depth energy upgrade projects. While communities are engaged and have agreements in place, it is taking longer than originally estimated for projects to complete. As BC Hydro continues to gain experience, we aim to refine our timing estimates for completion of these types of projects.

Within the residential rebate offers, heat pump participants were above plan, offset by weatherization participants which were below plan. Overall, the number of projects completed in fiscal 2022 was lower than planned and in response, the program re-allocated budget from incentives to provide additional enabling support to remote Indigenous Nations for analysis and planning of DSM projects, which will support the implementation of projects in future fiscal years.

The NIA program seeks to address the following barriers faced by remote communities, particularly Indigenous Nations: awareness, acceptability, affordability, availability, accessibility. To better understand the barriers and the extent to which the program is addressing these barriers, BC Hydro initiated a process evaluation of the ICCP in fiscal 2022. Results of this process evaluation are expected in 2022.

Input received from Indigenous Nations through the ICCP process evaluation is also informing the ongoing development of a performance measurement framework for the NIA program. BC Hydro expects to use the performance measurement framework to report on how the program is addressing community goals and barriers in future DSM Annual Reports.

4 Expenditures to Date

BC Hydro's DSM expenditures for fiscal 2022 totalled \$85 million. [Table 3](#) presents DSM expenditures from April 1, 2021 to March 31, 2022.

Table 3 Expenditures for Fiscal 2022*

	F2022 (\$ 000)
Rate Structures	
<i>Transmission Service Rate</i>	556
Total Rate Structures	556
DSM Programs	
<i>Residential Sector</i>	
Low Income	5,264
Non Integrated Areas	1,082
Retail	2,266
Home Renovation Rebate	9,914
<i>Residential Energy Management Activities</i>	3,778
<i>Residential Sector Total</i>	22,304
<i>Commercial Sector</i>	
LEM-C	10,527
New Construction	1,931
<i>Commercial Energy Management Activities</i>	5,892
<i>Commercial Sector Total</i>	18,351
<i>Industrial Sector</i>	
LEM-I	14,530
<i>Industrial Energy Management Activities</i>	7,004
<i>Industrial Sector Total</i>	21,534
Total Programs	62,189
Supporting Initiatives	
Public Awareness	7,424
<i>Indirect and Portfolio Enabling</i>	6,584
Supporting Initiatives Total	14,008
Total Programs, Rates & Supporting Initiatives	76,753
Codes and Standards	5,304
Capacity Focused DSM	3,257
PORTFOLIO TOTAL	85,315

* Numbers may not add due to rounding.

BC Hydro's DSM electricity savings since the beginning of fiscal 2022 totalled 647 GWh/year at March 31, 2022, which equates to 110 per cent of the planned savings of 588 GWh/year in the F22 RRA. [Table 4](#) presents actual cumulative savings as a percentage of plan as of the end of fiscal 2022.

**Table 4 Cumulative Electricity Savings:
Fiscal 2022**

Actual as a Percentage of Plan¹	
Rate Structures	
<u>Transmission Service Rate</u>	<u>100%</u>
Total Rate Structures	100%
DSM Programs	
<u>Residential Sector</u>	
Low Income	59%
Non Integrated Areas	67%
Retail	85%
Home Renovation Rebate	98%
<u>Residential Energy Management Activities</u>	<u>153%</u>
<i>Residential Sector Total</i>	109%
<u>Commercial Sector</u>	
LEM-C	154%
New Construction	102%
<u>Commercial Energy Management Activities</u>	<u>n/a</u>
<i>Commercial Sector Total</i>	147%
<u>Industrial Sector</u>	
LEM-I	113%
<u>Industrial Energy Management Activities</u>	<u>n/a</u>
<i>Industrial Sector Total</i>	113%
Total Programs	119%
Codes and Standards	107%
Capacity Focused DSM	n/a
PORTFOLIO TOTAL	110%

Notes:

¹ Reported savings for codes and standards and rates structures are based on planned estimates as well as evaluated results.

The cumulative portfolio DSM electricity savings from April 1, 2021 through March 31, 2022 have been achieved at an average net levelized utility cost of \$16 per MWh. [Table 5](#) presents the net levelized utility cost that is calculated by subtracting capacity benefits from gross utility costs and then dividing the resulting net utility costs by electricity savings. A negative net levelized utility cost means that the subtracted capacity benefits exceed gross utility costs.

**Table 5 Utility Cost of Electricity Savings:
Fiscal 2022**

	Net Levelized Utility Cost (\$/MWh)
Rate Structures	
<u>Transmission Service Rate</u>	-10
Total Rate Structures	-10
DSM Programs	
<u>Residential Sector</u>	
Low Income	37
Non Integrated Areas	206
Retail	-20
Home Renovation Rebate	3
<i>Residential Sector Total</i>	8
<u>Commercial Sector</u>	
LEM-C	-4
New Construction	1
<i>Commercial Sector Total</i>	-4
<u>Industrial Sector</u>	
LEM-I	7
<i>Industrial Sector Total</i>	7
Total Programs	2
Energy Management Activities	n/a
Supporting Initiatives ¹	n/a
Codes & Standards	n/a
Portfolio Total²	16

Notes:

- Supporting initiatives costs have not been allocated to programs per Directive 50 of the F20-F21 RRA Decision, which rescinds Directive 61 from Order No. G-96-04 on BC Hydro's F05-F06 RRA.
- Energy management activities, supporting initiatives costs and codes and standards costs are included at the portfolio level. Capacity focused DSM is not included in cost effectiveness calculations because this initiative was still in the trial and pilot stage during fiscal 2022 and therefore the associated benefits have not yet been quantified.

[Table 6](#) presents benefit cost-ratios of actual DSM electricity savings achieved from April 1, 2021 through March 31, 2022.

Table 6 Benefit Cost Ratios of Electricity Savings: Fiscal 2022

	Benefit Cost Ratios ¹			
	LRMC \$54/MWh			Market Price (\$33 per MWh)
	Modified Total Resource Cost Test ²	Total Resource Cost Test excluding Non-Energy Benefits	Ratepayer Impact Measure Test ³	Utility Cost Test
Rate Structures				
Transmission Service Rate	<u>1.8</u>	<u>1.8</u>	<u>0.6</u>	<u>28.5</u>
Total Rate Structures	1.8	1.8	0.6	28.5
DSM Programs				
<i>Residential Sector</i>				
Low Income ⁴	2.4	2.5	0.6	1.0
Non Integrated Areas ^{4&5}	1.5	1.5	0.9	1.4
Retail	2.7	2.7	0.8	2.8
Home Renovation Rebate	<u>1.3</u>	<u>0.8</u> ⁸	<u>0.6</u>	<u>1.5</u>
<i>Residential Sector Total</i>	1.6	1.2	0.7	1.5
<i>Commercial Sector</i>				
LEM-C ⁴	2.8	1.7	0.8	3.0
New Construction	<u>1.5</u>	<u>1.1</u>	<u>0.8</u>	<u>2.6</u>
<i>Commercial Sector Total</i>	2.5	1.6	0.8	3.0
<i>Industrial Sector</i>				
LEM-I	<u>3.5</u>	<u>2.5</u>	<u>0.7</u>	<u>2.0</u>
<i>Industrial Sector Total</i>	3.5	2.5	0.7	2.0
Total Programs	2.3	1.6	0.7	2.1
Energy Management Activities	n/a	n/a	n/a	n/a
Supporting Initiatives ⁶	n/a	n/a	n/a	n/a
Codes & Standards	n/a	n/a	n/a	n/a
Portfolio Total⁷	1.6	1.2	0.6	1.5

Notes:

¹ To align with BC Hydro's F22 RRA, this report uses a long-run marginal cost (LRMC) of \$54 per MWh based on the low end of the preliminary range of the cost of new wind resources presented in the F20-F21 RRA, Chapter 10. BC Hydro's F20-F21 RRA, Chapter 10, describes that the \$105 per MWh value is based on an outdated assessment of greenfield wind projects, including BC Hydro's cost to integrate and deliver energy to the load centre (Lower Mainland). BC Hydro has updated the LRMC in the 2021 IRP and has used this in the F23-F25 RRA.

² In accordance with the DSM Regulation, the avoided cost of natural gas is valued at BC Hydro's LRMC of acquiring electricity generated from clean or renewable resources in B.C. converted to \$/gigajoule (GJ) in all

- time periods. Non-energy benefits in the DSM Regulation are valued at 15 per cent of the energy and capacity benefits of electricity and natural gas, or as quantified by the Utility.
3. While subsection 4(6) of the DSM Regulation precludes the use of the Ratepayer Impact Measure Test in determining cost effectiveness of a demand-side measure, this benefit cost ratio is included in the table to comply with Directive 42 from the BCUC decision on BC Hydro's 2008 LTAP.
 4. The Total Resource Cost Test benefit cost-ratios for the Low Income, Non-Integrated Areas and Social Housing Retrofit component of the LEM-C Program include a 40 per cent adder to program benefits, in accordance with the DSM Regulation.
 5. Avoided costs in all NIA cost tests are based on NIA generation costs of \$300 per MWh (F2021\$).
 6. Supporting initiatives costs have not been allocated to programs per Directive 50 of the F20-F21 RRA Decision.
 7. Energy management activities, supporting initiatives costs and codes and standards costs are included in cost effectiveness calculations at the portfolio level. Capacity focused DSM is not included in cost effectiveness calculations because this initiative was still in the trial and pilot stage during fiscal 2022 and therefore the associated benefits have not yet been quantified.
 8. The Home Renovation Rebate program consists of a bundle of building envelope offers, which passes the Total Resource Cost Test excluding Non-Energy Benefits (NEBs) in fiscal 2022, and a bundle of HVAC/Water Heating offers that fails the TRC excluding NEBs in fiscal 2022. The expenditures associated with the HVAC/Water Heating offers were \$7.3 million in fiscal 2022, which represent 8.5 per cent of portfolio expenditures, which is below the modified TRC cap in the DSM Regulation.

Based on the experience gathered over the past few years through initiative tracking, [Table 7](#) sets out the mitigation measures that have been undertaken or are planned for to address areas where cumulative energy savings are below plan. For some initiatives where cumulative energy savings are on or above plan, the table includes planned actions to ensure performance is maintained.

Table 7 Mitigating Measures to Address Cumulative Energy Savings Below Plan

Rate Structures	
Industrial Transmission	Cumulative electricity savings in fiscal 2022 were on plan.
DSM Programs	
Residential Sector	
Low Income	Cumulative electricity savings in fiscal 2022 were below plan. Communications plans from fiscal 2022 are being reviewed and adjustments will be made to fiscal 2023 Energy Conservation Assistance Program and Energy Saving Kits promotional campaigns.
Non-Integrated Areas	Cumulative electricity savings in fiscal 2022 were below plan. As public health measures have largely subsided, DSM projects are expected to increase with support from enabling activities.
Retail	Cumulative electricity savings in fiscal 2022 were below plan. Program staff will work with partners to determine the best campaign timing and duration to encourage the targeted levels of participation.

Rate Structures	
Home Renovation Rebate	Cumulative electricity savings in fiscal 2022 were approximately on plan. Program staff will continue to make program adjustments to address findings from the evaluation so that savings are realized.
Residential Energy Management Activities	Cumulative electricity savings in fiscal 2022 were above plan.
Commercial Sector	
LEM-C	Cumulative electricity savings in fiscal 2022 were above plan. We will continue to monitor the program results and work with customers and industry to address any barriers to participation.
New Construction	Cumulative electricity savings in fiscal 2022 were approximately on plan. The program is ramping down.
Industrial Sector	
LEM-I	Cumulative electricity savings in fiscal 2022 were above plan.
Capacity Focused DSM	There are no capacity savings in fiscal 2022 as these were pilot initiatives.

5 Conservation and Energy Management KBU Operating Expenditures for Fiscal 2022

BC Hydro's Conservation and Energy Management KBU operating expenditures in fiscal 2022 totalled \$652,198.² [Table 8](#) presents Conservation and Energy Management KBU operating expenditures in fiscal 2022.

Table 8 Conservation and Energy Management KBU Operating Expenditures for Fiscal 2022

	(\$000)
Labour	593
Consultants/Contractors/Temp Labour	14
Other	45
Total	652

² DSM operating expenditures are not included in earlier tables.

6 Low Carbon Electrification Expenditures

In accordance with Directive 49 of the F20-F21 RRA Decision, BC Hydro reports on the Low Carbon Electrification expenditures within the DSM Regulatory Account. BC Hydro's Low Carbon Electrification expenditures within the DSM Regulatory Account for fiscal 2022 totalled \$8.4 million. [Table 9](#) presents Low Carbon Electrification expenditures allocated to the applicable classes defined in section 4(3) (a), (b), (c) or (d) of the GRR, including a consolidated table with a break down between the Initial Low Carbon Electrification projects and BC Hydro Low Carbon Electrification programs.

Table 9 Low Carbon Electrification Expenditures for Fiscal 2022*

Initial LCE Projects		
GGRR Regulation Subsection	Projects	F2022 (\$ 000)
4(3)(a)	Project 3	(\$985)
	Project 4	\$1,153
	Thompson Rivers University	
4(3)(c)	Translink	
Project Total		\$168

BC Hydro LCE Programs		
GGRR Regulation Subsection	Programs	F2022 (\$ 000)
4(3)(a)(b)	BC Hydro LCE Program	\$7,161
4(3)(c)	BC Hydro LCE Program	\$147
4(3)(d)	BC Hydro LCE Program	\$968
Program Total		\$8,276

Summary of LCE Projects/Programs		F2022
Initial LCE Projects		\$168
BC Hydro LCE Programs		\$8,276
Total BC Hydro LCE Projects/Programs		\$8,443

* Numbers may not add due to rounding.