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August 31, 2021

Mr. Patrick Wruck  
Commission Secretary and Manager  
Regulatory Support  
British Columbia Utilities Commission  
Suite 410, 900 Howe Street  
Vancouver, BC V6Z 2N3

Dear Mr. Wruck:

**RE: British Columbia Utilities Commission (BCUC or Commission)  
British Columbia Hydro and Power Authority (BC Hydro)  
Application for Mandatory Reliability Standards Costs Regulatory Account  
for Fiscal 2022 (the Application)**

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BC Hydro writes pursuant to sections 59-61 of the *Utilities Commission Act (UCA)* seeking approval for the establishment of a new regulatory account referred to as the “Mandatory Reliability Standards Costs Regulatory Account”.

As discussed further in section 4 of the Application, since filing the Fiscal 2022 Revenue Requirements Application, BC Hydro has determined that it needs to undertake certain additional activities that will result in BC Hydro incurring significant unplanned MRS costs in fiscal 2022 associated with achieving and maintaining compliance with Mandatory Reliability Standards (**MRS** or **Standards**) and the implementation of new Standards. The new Mandatory Reliability Standards Costs Regulatory Account is required in order to allow BC Hydro to recover these reasonable costs of service from ratepayers.

In the Application, we have split the discussion on Mandatory Reliability Standards between public content and confidential content in Appendix A. Appendix A is confidential and is being made available to the BCUC only for two related reasons:

- First, information related to the protection of cyber infrastructure is highly security-sensitive. The release of that information to the public could compromise the safety and reliability of the Bulk Electric System by exposing it to physical attacks by malicious actors or cyberattacks; and
- Second, the BCUC’s MRS Rules of Procedure, including the Compliance Monitoring Program Rules and Penalty Guidelines, make the framework and processes for reporting, auditing and oversight of MRS compliance confidential. While certain information about an entity’s violations, if confirmed, may become public after the fact, there remains a presumption of confidentiality. The presumption of

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confidentiality is especially important where the subject-matter relates to a cybersecurity incident or may otherwise jeopardize the security of the Bulk Electric System.

For further information, please contact Joe Maloney at 604-623-4348 or by email at [bchydroregulatorygroup@bchydro.com](mailto:bchydroregulatorygroup@bchydro.com).

Yours sincerely,



Chris Sandve  
Chief Regulatory Officer

fk/tl

Enclosure

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**BC Hydro Application for Approval of Mandatory  
Reliability Standards Costs Regulatory Account for  
Fiscal 2022**

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**August 2021**

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## 1 Introduction

2 In this application (**Application**), BC Hydro is requesting a British Columbia Utilities  
3 Commission (**Commission**) order pursuant to sections 59-61 of the *Utilities*  
4 *Commission Act (UCA)* approving the establishment of a new regulatory account  
5 referred to as the “Mandatory Reliability Standards Costs Regulatory Account”. The  
6 Mandatory Reliability Standards Costs Regulatory Account will capture actual  
7 unplanned costs in fiscal 2022 in specific categories described in this Application  
8 associated with achieving and maintaining compliance with Mandatory Reliability  
9 Standards (**MRS** or **Standards**) and the implementation of new Standards. We are  
10 seeking approval to recover the fiscal 2022 forecast ending balance in the account  
11 over the next test period (i.e., fiscal 2023 to fiscal 2025) and to refund or recover any  
12 differences between actual amounts deferred to the account in fiscal 2022 and  
13 forecast amounts recovered in rates over fiscal 2023 to fiscal 2025 over the  
14 subsequent test period.

15 BC Hydro’s Fiscal 2022 Revenue Requirements Application included \$21.7 million  
16 in incremental planned spending with respect to the implementation of, and  
17 compliance with, MRS. In its Decision on the Fiscal 2022 Revenue Requirements  
18 Application, the BCUC found the increase for MRS related expenditures, including  
19 those related to the implementation of new Standards, to be reasonable, stating that:  
20 “...the investments are not only warranted but required to safeguard the BES [Bulk  
21 Electric System].”<sup>1</sup>

22 As discussed in this Application, BC Hydro is incurring unplanned MRS costs in  
23 fiscal 2022 estimated at \$15.9 million. These costs are driven by: (1) the need to  
24 achieve and maintain compliance with MRS, and (2) the implementation of CIP  
25 Version 7. The unplanned MRS costs in fiscal 2022 outlined in this Application are

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<sup>1</sup> BCUC Decision and Order No. G-187-21, Fiscal 2022 Revenue Requirements Application (June 17, 2021), page 30.

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1 operating costs that are not eligible for capitalization under the International  
2 Financial Reporting Standards (**IFRS**). Capturing these costs in the Mandatory  
3 Reliability Standards Costs Regulatory Account and recovering the fiscal 2022  
4 forecast ending balance in rates over the next test period will allow BC Hydro to  
5 recover these reasonable costs of service from ratepayers.

6 This Application is organized as follows:

- 7 • Section [2](#) discusses how we have addressed MRS-related information that is  
8 security-sensitive and subject to confidentiality requirements under the BCUC's  
9 Rules of Procedure. Our approach is consistent with how we proceeded in the  
10 Fiscal 2022 Revenue Requirements Application and the BCUC's Decision;
- 11 • Section [3](#) provides some general background on MRS, with additional  
12 information (mostly repeated from the Fiscal 2022 Revenue Requirements  
13 Application) provided in Appendix B;
- 14 • Section [4](#) identifies the two drivers of the unplanned MRS costs in fiscal 2022,  
15 and explains why these costs were not included in the Fiscal 2022 Revenue  
16 Requirements Application;
- 17 • Section [5](#) explains the approach to cost recovery of the Mandatory Reliability  
18 Standards Costs Regulatory Account balance;
- 19 • Section [6](#) sets out, in full, the order sought in this Application (a draft form of  
20 order is attached as Appendix C); and
- 21 • Section [7](#) provides BC Hydro 's proposed Regulatory Review Process for this  
22 Application.

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## 2 Confidential Appendix Includes Information that Is Security-Sensitive and Subject to BCUC Confidentiality Requirements

The topic of MRS gives rise to confidentiality considerations. The main body of this Application has been written for public viewing, and includes the information that can be provided in a public forum without giving rise to confidentiality considerations. Certain confidential content has been included in a confidential appendix (Appendix A) that is being made available to the BCUC only.

As noted in Chapter 5, section 5.6.1 of the Fiscal 2022 Revenue Requirements Application, there are two related reasons for maintaining confidentiality over the information in Appendix A:

- First, information related to the protection of cyber infrastructure is highly security-sensitive. The release of that information to the public could compromise the safety and reliability of the Bulk Electric System<sup>2</sup> by exposing it to physical attacks by malicious actors or cyberattacks; and
- Second, the BCUC's MRS Rules of Procedure, including the Compliance Monitoring Program Rules and Penalty Guidelines, make the framework and processes for reporting, auditing and oversight of MRS compliance confidential.<sup>3</sup> While certain information about an entity's violations, if confirmed, may become public after the fact, there remains a presumption of

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<sup>2</sup> The Bulk Electric System is defined as the electrical generation resources, transmission lines, interconnections with neighbouring systems and associated equipment, generally operated at voltages of 100 kV or higher.

<sup>3</sup> Specifically, information produced for, or created in the course of, any compliance monitoring process is considered confidential information pursuant to the BCUC's MRS Rules of Procedure (see section 2.2, definition of "confidential information"). Further, and with respect to information that is submitted to the BCUC for the purposes of a Hearing, the Rules of Procedure provide that "[a]ll information...will be held in confidence pursuant to the BCUC's Rules of Practice and Procedure." (See section 6.2 of the BCUC MRS Rules of Procedure). Finally, where applicable, notices of alleged violations are also treated as confidential unless and until the BCUC confirms the alleged violation and the BCUC considers that disclosure would not identify a cybersecurity incident or otherwise jeopardize the security of the Bulk Electric System (see section 4.3.1 of the Compliance Monitoring Program for BC Mandatory Reliability Standards).

1 confidentiality. The presumption of confidentiality is especially important where  
2 the subject-matter relates to a cybersecurity incident or may otherwise  
3 jeopardize the security of the Bulk Electric System.

4 In its Decision on the Fiscal 2022 Revenue Requirements Application, the BCUC  
5 indicated that “in general ratepayers should be able to review and understand why  
6 proposed operating and capital investments are required to maintain compliance  
7 with MRS.”<sup>4</sup> However, the BCUC acknowledged that:

8 “...BC Hydro is particularly sensitive and vulnerable to external  
9 threats if security risks are exposed, such as if information about  
10 violations were to be published prior to the mitigation of these  
11 violations. Information from these incidents could potentially  
12 expose a path of entry for those who may wish to do harm to the  
13 system.”<sup>5</sup>

14 Further, the BCUC agreed “that it is appropriate that certain CIP and cybersecurity  
15 information be kept confidential to safeguard the BES” and “that certain sensitive  
16 cybersecurity information ought to remain confidential due to the risk of inadvertent  
17 disclosure and potential harm to BC Hydro, its ratepayers, and the public.”<sup>6</sup>

18 As a result, BC Hydro is limiting circulation of such information to the BCUC only.  
19 We understand that this presents a challenge for interveners. However, we believe  
20 very strongly that it is in the public interest to impose strict limitations on the  
21 circulation of security-sensitive information to reduce the potential for inadvertent  
22 disclosure, as well as to respect the compliance processes and rules that the BCUC  
23 has put in place for MRS.

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<sup>4</sup> See BCUC Decision and Order No. G-187-21, page 34.

<sup>5</sup> See BCUC Decision and Order No. G-187-21, page 35.

<sup>6</sup> See BCUC Decision and Order No. G-187-21, page 35.



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### 3 Mandatory Reliability Standards Background

BC Hydro is subject to MRS that are in place to ensure the reliable operation of the Bulk Electric System throughout North America. Ongoing compliance with these Standards is, as the name MRS suggests, mandatory. The scope and complexity of the requirements under these Standards is increasing. The work that we must undertake to achieve and maintain compliance is increasing commensurately.

In Chapter 5, section 5.6.2 of the Fiscal 2022 Revenue Requirements Application, BC Hydro provided background information on MRS. We explained the importance of MRS for the reliable operation of the Bulk Electric System and the framework in place to ensure compliance with the Standards. We have repeated this background information from the Fiscal 2022 Revenue Requirements Application in Appendix B to this Application for reference.

### 4 We Are Experiencing Unplanned MRS Costs in Fiscal 2022

In the Fiscal 2022 Revenue Requirements Application, which was filed on December 22, 2020, BC Hydro outlined increased funding to achieve and maintain compliance with MRS and to implement new Standards. We also noted that we anticipated further expansion of our MRS program and investments in future years as our efforts mature and new standards and iterations of existing standards are implemented.<sup>7</sup> Since filing the Fiscal 2022 Revenue Requirements Application, BC Hydro has determined that it needs to undertake certain additional activities that will result in BC Hydro incurring additional and significant unplanned MRS costs in fiscal 2022.

[Table 1](#) below presents the estimated unplanned MRS costs for fiscal 2022. There are two drivers to the request, which are explained below:

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<sup>7</sup> See Chapter 5, section 5.6 of the Fiscal 2022 Revenue Requirements Application, page 5-25.

- 1 • Unplanned costs incurred to achieve and maintain compliance with MRS, for  
 2 unplanned activities that were identified subsequent to the filing of the  
 3 Fiscal 2022 Revenue Requirements Application; and
- 4 • Unplanned costs associated with the implementation of CIP-003-8 (**CIP  
 5 Version 7**) arising as a result of an expanded implementation approach  
 6 determined to be appropriate subsequent to the filing of the Fiscal 2022  
 7 Revenue Requirements Application.

8 **Table 1 Fiscal 2022 Unplanned MRS Costs**

<b>Business Group</b>	<b>Achieve and Maintain Compliance (\$ million)</b>	<b>Implement CIP Version 7 (\$ million)</b>	<b>MRS Total (\$ million)</b>
Integrated Planning	5.9	5.0	<b>10.9</b>
Finance, Technology, Supply Chain	3.0	0.9	<b>3.9</b>
Safety and Compliance	1.1	-	<b>1.1</b>
<b>Total</b>	<b>10.0</b>	<b>5.9</b>	<b>15.9</b>

9 **4.1 Post-Fiscal 2022 Revenue Requirements Application**  
 10 **Unplanned Costs to Achieve and Maintain Compliance**

11 An additional \$10.0 million is required to perform unplanned activities to achieve and  
 12 maintain compliance with MRS. The need to incur these expenditures emerged  
 13 subsequent to the filing of the Fiscal 2022 Revenue Requirements Application. The  
 14 details of these activities are confidential and are thus addressed in confidential  
 15 Appendix A for the BCUC only.

16 **4.2 Additional Work to Implement New CIP Standards in**  
 17 **Fiscal 2022**

18 BC Hydro must be compliant with CIP Version 7 prior to October 2023 in accordance  
 19 with the effective date approved by the BCUC. As discussed in the Fiscal 2022  
 20 Revenue Requirements Application, we have initiated a project to implement the

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1 compliance requirements associated with CIP Version 7 at each of BC Hydro's 131<sup>8</sup>  
2 low impact facilities. The CIP Version 7 project must inventory all cyber assets at  
3 these facilities, reconcile the inventory with existing asset data, and design and  
4 implement organizational change management to support the Standard.

5 Subsequent to the filing of the Fiscal 2022 Revenue Requirements Application,  
6 BC Hydro expanded its implementation approach for CIP Version 7. The change in  
7 approach resulted in additional activities to be performed beyond what was originally  
8 contemplated in the fiscal 2022 forecast. As a result, \$5.9 million is required to  
9 complete CIP Version 7 project activities to enable BC Hydro to be compliant with  
10 the Standard.

11 While the implementation of CIP Version 7 itself is not confidential, the drivers  
12 behind the incremental costs are linked to confidential information, and thus are  
13 addressed in confidential Appendix A for the BCUC only.

## 14 **5 Recovery of Account Balance in the Next Test Period**

15 We are proposing to recover the fiscal forecast 2022 ending balance in the account  
16 over the next test period (i.e., fiscal 2023 to fiscal 2025). The forecast revenue  
17 requirements in the Fiscal 2023 to Fiscal 2025 Revenue Requirements Application  
18 include forecast amortization of the fiscal 2022 forecast ending account balance.<sup>9</sup>  
19 BC Hydro expects there will be a difference between the actual amounts deferred to  
20 the Mandatory Reliability Standards Costs Regulatory Account in fiscal 2022 and the  
21 forecast amounts proposed to be recovered over fiscal 2023 to fiscal 2025. This  
22 difference would be refunded to or recovered from ratepayers over the subsequent  
23 test period.

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<sup>8</sup> There are a further two low impact facilities that are not yet in service and thus not included in the project but will be addressed as they are put into service.

<sup>9</sup> In the event that the BCUC was to disallow some or all of the requests in this Application, BC Hydro's compliance filing in the Fiscal 2023 to Fiscal 2025 Revenue Requirements Application would adjust for the change accordingly.

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## 6 Orders Sought

The specific approvals sought in this Application are as follows:

- To establish a new Mandatory Reliability Standards Costs Regulatory Account and to defer actual unplanned costs in fiscal 2022 to deliver the scope of work described in this Application;
- To apply interest to the balance of the account based on BC Hydro's current weighted average cost of debt;
- Effective starting in fiscal 2023, to recover forecast interest charged to the account, attributable to fiscal 2022 costs deferred, each year from the account each year; and
- Effective starting in fiscal 2023, to recover the forecast balance at the end of a test period over the next test period, until such time that the actual amounts deferred to the account for fiscal 2022 are recovered in rates.

A draft order is included in Appendix C.

We are not, as part of this Application, seeking approval to use the account on an ongoing basis beyond fiscal 2022. The Fiscal 2023 to Fiscal 2025 Revenue Requirements Application includes a request to continue using the account in future years for certain MRS-related costs. We explain the rationale for our ongoing use of the account in that application.

## 7 Proposed Regulatory Review Process

BC Hydro is filing this Application separately from the Fiscal 2023 to Fiscal 2025 Revenue Requirements Application as these unplanned costs relate to fiscal 2022. BC Hydro respectfully requests a decision on this Application prior to the completion of our fiscal 2022 year-end (i.e., March 31, 2022).

1 BC Hydro proposes a written process with one round of BCUC and Intervener  
2 Information Requests (**IRs**) followed by written arguments. BC Hydro proposes that  
3 the first round of IRs run concurrently with the Fiscal 2023 to Fiscal 2025 Revenue  
4 Requirements Application. A proposed timetable for the BCUC's consideration is  
5 presented in [Table 2](#) below:

6 **Table 2 Proposed Regulatory Review Process for**  
7 **the Application**

<b>Process</b>	<b>Date</b>
Application Filed	August 31, 2021
BCUC Information Request No. 1 to BC Hydro	October 5, 2021
Intervener Information Request No. 1 to BC Hydro	October 12, 2021
BC Hydro responds to BCUC and Intervener Information Request No. 1	November 18, 2021
BC Hydro Final Argument	December 2, 2021
Intervener Final Argument	December 16, 2021
BC Hydro Reply Argument	January 11, 2022 <sup>10</sup>

<sup>10</sup> The longer period between intervener arguments and BC Hydro's reply submissions is to account for the holiday period. We respectfully request that the BCUC account for the holiday period in approving a schedule.

**BC Hydro Application for Approval of Mandatory  
Reliability Standards Costs Regulatory Account  
for Fiscal 2022**

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**Appendix A**

**Fiscal 2022 Unplanned Mandatory Reliability  
Standards Costs**

**PUBLIC**

# **CONFIDENTIAL ATTACHMENT**

# **FILED WITH BCUC ONLY**

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**BC Hydro Application for Approval of Mandatory  
Reliability Standards Costs Regulatory Account for  
Fiscal 2022**

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**Appendix B**

**Mandatory Reliability Standards Background**



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## 1 5.6.2 MRS Background

2 The following subsections explain the importance of MRS for the reliable operation  
3 of the Bulk Electric System and the framework in place to ensure compliance with  
4 the Standards. The growing complexity and number of MRS obligations provide  
5 context for why BC Hydro is increasing investment in MRS in the Test Period.

### 6 **5.6.2.1 Standards Specify Requirements for Reliable Operation and** 7 **Protection of Bulk Electric System**

8 MRS define the reliability requirements for planning and operating the Bulk Electric  
9 System. This includes requirements for the operation of existing Bulk Electric  
10 System facilities, including physical and cyber security protection, and the design of  
11 planned additions or modifications to such facilities to the extent necessary to  
12 provide for the reliable operation of the Bulk Electric System. There are 13 MRS  
13 standard areas approved for adoption in British Columbia which apply to BC Hydro's  
14 operations.

15 Each standard area will typically include multiple Standards, and each Standard will  
16 include a number of specific requirements. For example, the CIP standard area  
17 includes 11 currently effective standards with 39 requirements. Each requirement  
18 includes a number of elements for which BC Hydro must develop operating  
19 processes in order to achieve the requirement. Developing, implementing and  
20 sustaining these processes represent the majority of the work we must undertake to  
21 achieve and maintain compliance.

22 [Table 5-9](#) below provides a list of the Standards grouped by the areas that they  
23 cover as well as the number of Standards that are effective in B.C.<sup>86</sup> within those  
24 areas of coverage.

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<sup>86</sup> As of December 9, 2020.

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**Table 5-9 Mandatory Reliability Standards by Area**

Abbreviation	Summary of Coverage	Standard Area	Number of Standards
BAL	Covers areas from Real power Balancing Control Performance to Automatic Time Error Correction and Automatic Generation Control.	Resource and Demand Balancing	6
CIP	Covers areas from Sabotage Reporting to Cyber Security standards in the areas of Critical Asset Identification, Security Management Controls and Electronic and Physical Security of Cyber Assets.	Critical Infrastructure Protection	11
COM	Covers Telecommunications, Communications and Coordination	Communications	2
EOP	Covers areas from Emergency Operations Planning and Load Shedding Plans, to System Restoration Coordination and Restoration from Blackstart Resources.	Emergency Preparedness and Operations	7
FAC	Covers areas from Facility Connection Requirements and Transmission Vegetation Management, to System Operating Limits Methodologies and Transmission Maintenance.	Facilities Design, Connections and Maintenance	9
INT	Covers areas from Interchange Transaction Implementation to Interchange Coordination Exemptions.	Interchange Scheduling and Coordination	5
IRO	Covers areas from Reliability Coordination – Responsibilities and Authorities, to Operations Planning and Transfer Path Unscheduled Flow Relief.	Interconnection Reliability Operations and Coordination	11
MOD	Covers areas from the Development of Steady-State and Dynamics System Models of the interconnected transmission system and Transmission Reliability Margin Calculation Methodologies, to the development and documentation of transfer capability calculations in the support of system operations.	Modeling, Data and Analysis	13
PER	Covers Operating Personnel Training and Certification procedures and requirements.	Personnel Performance, Training and Qualifications	3

Abbreviation	Summary of Coverage	Standard Area	Number of Standards
PRC	Covers areas from System Protection Coordination among operating entities and Disturbance Monitoring, to the Development and Documentation of Under Frequency/Voltage Load Shedding Programs and associated Maintenance and Testing programs.	Protection and Control	20
TOP	Covers areas from Normal Operations Planning to Planned Outage Coordination and System Operating Limits along Major WECC Transfer Paths.	Transmission Operations	8
TPL	Covers areas from Transmission System Planning Performance Requirements under normal conditions to System Performance Planning Following Loss of Single/Multiple Bulk Electric System Element(s).	Transmission Planning	1
VAR	Covers areas from Voltage and Reactive Control in real time to protect equipment, to Power System Stabilization (PSS) on synchronous generators.	Voltage and Reactive	3
<b>Total Standards Adopted in B.C.</b>			<b>99</b>

1 Currently, there are 99 Standards effective in British Columbia comprised of a total  
 2 of 457 requirements that apply across 3,250 BC Hydro assets.

3 Across North America, the electrical grid is becoming more complex and therefore  
 4 more challenging to manage. There is more intermittent generation, increased  
 5 frequency and severity of weather events impacting the grid, digital technologies are  
 6 replacing mechanical equipment, and attempts to access and disrupt systems are  
 7 becoming more sophisticated. As a result of this changing environment, the  
 8 Standards have increased over time in both number and complexity. For example,  
 9 the next iteration of the CIP-003 Standard (CIP-003-8, which comes in to effect in  
 10 October 2023) will greatly expand the scope of compliance requirements.

1 A number of different entities are involved in the development, approval, adoption,  
2 administration, and monitoring of MRS in British Columbia. The process, at a high  
3 level, unfolds as follows:

- 4 • The North American Electric Reliability Corporation<sup>87</sup> and the six Regional  
5 Reliability Organizations are responsible for developing Standards;
- 6 • The Federal Energy Regulatory Commission (**FERC**) is responsible for  
7 adopting Standards in the United States;
- 8 • BC Hydro assesses FERC-adopted MRS for adoption, administration and  
9 operation in British Columbia in accordance with section 125.2 of the *Utilities*  
10 *Commission Act* and the Mandatory Reliability Standards Regulation  
11 (B.C. Reg. 32/2009);
- 12 • The BCUC is responsible for the adoption and administration of the Standards  
13 in British Columbia which includes monitoring compliance;
- 14 • The Western Electricity Coordinating Council (**WECC**) is one of the six Regional  
15 Reliability Organizations in North America tasked with MRS oversight  
16 responsibility of certain aspects of the North American Bulk Electric System.  
17 WECC is the regional entity for the geographic area known as the Western  
18 Interconnection which extends from Canada to Mexico and includes the  
19 provinces of British Columbia and Alberta, the northern portion of Baja  
20 California, Mexico and all or portions of the 14 Western U.S. states between.  
21 WECC is also the administrator for and appointed by the BCUC in the  
22 administration of the approved MRS program in British Columbia and, in that  
23 capacity, assists the BCUC in carrying out the registration of parties and  
24 compliance monitoring.

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<sup>87</sup> NERC is a not-for-profit international regulatory authority whose mission is to assure the effective and efficient reduction of risks to the reliability and security of the grid. NERC develops and enforces reliability standards; annually assesses seasonal and long-term reliability; monitors the Bulk Electric System through system awareness; and educates, trains, and certifies industry personnel. NERC's area of responsibility spans the continental US, Canada and the northern portion of Baja California, Mexico.

1 Standards adopted by the BCUC apply to every owner, operator and user of various  
2 components of the Bulk Electric System.<sup>88</sup> Entities that perform these functions are  
3 required to register and comply with Standards adopted by the BCUC. BC Hydro is  
4 the largest and most complex of these entities to which the MRS standards apply.

5 The following section provides a brief history of how the Standards were developed  
6 and became mandatory in British Columbia.

### 7 **5.6.2.2 Blackouts Led to the Development of MRS and their Adoption in** 8 **British Columbia**

9 In 1965, a Northeast blackout impacting over 30 million people in parts of Ontario  
10 and the Northeastern United States led to the creation of NERC as well as Regional  
11 Reliability Organizations including the Western Systems Coordinating Council, the  
12 predecessor organization to the WECC.<sup>89</sup>

13 This arrangement remained relatively stable throughout the 1970s and 1980s.  
14 However, during the 1990s, deregulation increased the number of utilities operating  
15 in the electricity industry. With the number of utilities increasing, there was a greater  
16 need for consistent and coordinated reliability standards across jurisdictions. In  
17 response, WECC implemented the voluntary Reliability Management System  
18 compliance program in 1999.

19 In 2003, there was another Northeast blackout, this time impacting about 50 million  
20 people. A joint Canada-United States task force was created to investigate the  
21 cause of the blackout and found that a lack of compliance with the existing voluntary  
22 reliability standards was a contributing factor. The task force recommended that  
23 reliability standards be made mandatory and enforceable.

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<sup>88</sup> Defined by NERC as “All Transmission Elements operated at 100 kV or higher and Real Power and Reactive Power resources connected at 100 kV or higher. This does not include facilities used in the local distribution of electric energy.”

<sup>89</sup> In 2002, the Western Systems Coordinating Council merged with the Southwest Regional Transmission Association and the Western Regional Transmission Association to create the Western Electricity Coordinating Council.

1 In 2005, the *Energy Policy Act* in the U.S. called for the creation of Mandatory  
2 Reliability Standards for the electricity grid to replace the voluntary standards. It also  
3 established that an Electricity Reliability Organization (**ERO**), appointed by FERC,  
4 would be responsible for developing the standards and submitting them to FERC for  
5 adoption, at which point the standards would become mandatory and enforceable. In  
6 2006, NERC was certified as the ERO in the United States and was directed to take  
7 the steps necessary to become certified as the ERO in Canada and Mexico.

8 In 2007, NERC approved WECC and other Regional Reliability Organizations to act  
9 as delegates to monitor compliance and enforce the Standards within their regional  
10 footprints in the U.S.

11 In 2008, the *Utilities Commission Act* was amended to create the framework for the  
12 adoption of the Standards in British Columbia. Specifically, section 125.2 was added  
13 to provide the BCUC with exclusive jurisdiction to determine whether a reliability  
14 standard is in the public interest and should be adopted in British Columbia and with  
15 responsibility for monitoring and enforcing compliance with the Standards.

16 While the first set of Standards was adopted in British Columbia in 2009, the  
17 Standards became auditable and enforceable in British Columbia in 2010.

### 18 **5.6.2.3 The BCUC's Compliance Monitoring Program**

19 The BCUC is responsible for auditing, monitoring and enforcing compliance with  
20 MRS in British Columbia. Its compliance framework, referred to as the Compliance  
21 Monitoring Program, is summarized below.

- 22 • Regardless of the form of discovery, where a possible violation has occurred,  
23 an entity must take reasonable steps to mitigate the impact that the breach may  
24 have caused on reliability and remediate the possible violation;
- 25 • Where a possible violation has been identified, an entity is also strongly  
26 encouraged (and in some cases required) to prepare and submit to WECC (in  
27 its role as administrator) a Mitigation Plan which outlines an entity's action plan

1 to correct and prevent recurrence of the possible violation. If the Mitigation Plan  
2 is accepted by WECC, it is provided to the BCUC for approval; and

- 3 • Once accepted, an entity must provide updates to WECC on both the progress  
4 of the Mitigation Plan and completion evidence by each milestone due date.  
5 Upon completion of the plan, an entity is required to provide an attestation to  
6 WECC that all required actions described in the plan have been completed. If  
7 WECC agrees that the plan has been completed, it recommends approval by  
8 the BCUC. If WECC disagrees, it provides detailed reasons and requests a  
9 revised Mitigation Plan.

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**BC Hydro Application for Approval of Mandatory  
Reliability Standards Costs Regulatory Account for  
Fiscal 2022**

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**Appendix C**

**Draft Order**





**ORDER NUMBER**  
**G-xx-xx**

IN THE MATTER OF  
the *Utilities Commission Act*, RSBC 1996, Chapter 473

and

British Columbia Hydro and Power Authority (BC Hydro)  
Application for Approval of Mandatory Reliability Standards Costs Regulatory Account for Fiscal 2022

**BEFORE:**

Commissioner  
Commissioner  
Commissioner

on Date

**ORDER**

**WHEREAS:**

- A. On August 31, 2021, the British Columbia Hydro and Power Authority (**BC Hydro**) filed an application with the British Columbia Utilities Commission (**BCUC**) seeking approval, pursuant to sections 59 to 61 of the *Utilities Commission Act*, for the establishment of a Mandatory Reliability Standards Costs Regulatory Account to capture certain actual unplanned costs in fiscal 2022 required to achieve and maintain compliance with MRS and to implement new MRS (Application). BC Hydro forecasts these costs to be \$15.9 million;
- B. In the Application, BC Hydro also proposes to recover the fiscal 2022 forecast ending balance in the MRS Costs Regulatory Account over the next test period to commence in fiscal 2023;
- C. BC Hydro requests that Appendix A to the Application be held confidential and made available to the BCUC only in accordance with Part IV of the BCUC's Rules of Practice and Procedure on the basis that (i) aspects relate to matters deemed to be confidential by the BCUC's Rules of Procedure, and (ii) the remainder is security-sensitive information relating to the protection of critical infrastructure, the release of which could compromise the safety and reliability of the Bulk Electric System by exposing it to malicious attacks;
- D. By Order G-XX-21 dated XXX, 2021, the BCUC established the regulatory timetable for a written process to review the Application, which consisted of BCUC and interveners information requests (**IR**) No. 1 and written submissions by the parties; and
- E. The BCUC has reviewed the Application, responses to IR No. 1, and other written submissions, and finds that granting the relief sought in the Application is warranted.

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**NOW THEREFORE** pursuant to sections 59 to 61 of the Utilities Commission Act, the BCUC orders as follows:

1. BC Hydro's request to establish a Mandatory Reliability Standards Costs Regulatory Account and to defer the actual unplanned costs in fiscal 2022 required to achieve and maintain compliance with MRS and implement new MRS is approved as sought;
2. BC Hydro will apply interest to the balance of the account based on BC Hydro's current weighted average cost of debt;
3. Effective starting in fiscal 2023, BC Hydro will recover forecast interest charged to the account, attributable to fiscal 2022 costs deferred, each year from the account each year; and
4. Effective starting in fiscal 2023, BC Hydro will recover the forecast balance at the end of a test period over the next test period, until such time that the actual amounts deferred to the account for fiscal 2022 are recovered in rates.
5. BC Hydro's request to hold Appendix A of the Application confidential is approved.

**DATED** at the City of Vancouver, in the Province of British Columbia, this (XX) day of (Month Year).

BY ORDER

(X. X. last name)  
Commissioner

Attachment Options