



**ORDER NUMBER  
G-39-23**

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

and

British Columbia Hydro and Power Authority  
Application for the Energy Management System Upgrade Project

**BEFORE:**

E. B. Lockhart, Panel Chair  
W. M. Everett, KC, Commissioner  
A. Pape-Salmon, Commissioner

on February 28, 2023

**ORDER**

**WHEREAS:**

- A. On March 11, 2022, British Columbia Hydro and Power Authority (BC Hydro) filed an application with the British Columbia Utilities Commission (BCUC) seeking acceptance of an expenditure schedule in the cost range of \$24.8 million to \$32.8 million for the Energy Management System Upgrade Project (Project), pursuant to section 44.2 of the *Utilities Commission Act* (Application);
- B. BC Hydro's Bulk Electric System comprises a network of generation resources, transmission lines, interconnections with neighbouring systems and associated equipment, generally operated at voltages of 100 kV or higher. The Bulk Electric System is monitored, controlled and operated using a technology system called the Energy Management System (EMS). The current EMS software and hardware on which it runs are at end-of-life. The Project consists of upgrading the EMS software and hardware. The Project also includes the replacement of the Intrusion Detection System;
- C. In the Application, BC Hydro also seeks approval of a software upgrade asset class with an expected useful life of seven years;
- D. On July 20, 2022, BC Hydro filed an errata to the Application, amending the expected Project cost range to a range of \$24.5 million to \$32.8 million;
- E. By Orders G-102-22, G-168-22, G-235-22 and G-260-22, the BCUC established and amended regulatory timetable for the review of the Application, which provided for public notice, intervenor registration, two rounds of BCUC and intervenor information requests (IRs), BC Hydro's responses to IRs and written final and reply arguments;
- F. BC Sustainable Energy Association, Commercial Energy Consumers Association of British Columbia, and Residential Consumer Intervenor Association registered as intervenors in the proceeding; and

- G. The BCUC has considered the Application, evidence and submissions of the parties and makes the following determinations.

**NOW THEREFORE** pursuant to section 44.2 and 56 of the *Utilities Commission Act* and for the reasons provided in the Decision issued concurrently with this order, the BCUC orders as follows:

1. BC Hydro's capital expenditure schedule for the Project, with an estimated cost range of \$24.5 million to \$32.8 million, is accepted as being in the public interest.
2. BC Hydro is approved to use a software upgrade asset class for software assets with an expected useful life of seven-years.
3. BC Hydro is directed to file Project reports as outlined in Appendix A to the Decision.
4. BC Hydro is directed to comply with all directives outlined in the Decision issued concurrently with this order.

**DATED** at the City of Vancouver, in the Province of British Columbia, this 28<sup>th</sup> February 2023.

BY ORDER

*Original signed by:*

E. B. Lockhart  
Commissioner