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December 21, 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)
Application to Suspend Obligation to Supply Service to Cryptocurrency
Mining Projects (Application)**

BC Hydro writes pursuant to section 28(3) of the *Utilities Commission Act (UCA)* to apply for a final order which relieves it of its obligation to supply service to certain new cryptocurrency mining projects¹ for a period of 18 months from the date of the Commission's order.² On December 21, 2022, the British Columbia Government issued the Direction to the British Columbia Utilities Commission Respecting Cryptocurrency Mining Projects (Order in Council No. 692/2022) (**Direction**)³ which provides that the Commission must issue final orders approving BC Hydro's application for this relief as specified in the Direction.

In accordance with the Direction, BC Hydro is requesting the final order be issued within 10 days of the date of our Application.

Appendix A sets out the specific form of order sought by this Application.

Appendix B provides a copy of the Direction to the British Columbia Utilities Commission Respecting Cryptocurrency Mining Projects.

Appendix C contains copies of the System Impact Study Agreements of three of the four new high-voltage cryptocurrency projects that are referenced in the Direction, which are

¹ The terms "cryptocurrency mining project" and "cryptocurrency project" are used interchangeably.

² Pursuant to section 3(2) of the Direction the Commission must not add terms to its final order.

³ Available online at: https://www.bclaws.gov.bc.ca/civix/document/id/oic/oic_cur/0692_2022

filed with the Commission on a confidential basis. The fourth project has withdrawn its request for service.

Appendix D contains a copy of section 5 of BC Hydro's revised Business Practice for Interconnection Queue Management (**business practice**).

1 Background

There has been significant interest from cryptocurrency mining companies in locating in B.C. There are currently 13 cryptocurrency mining projects in operation or in advanced stages of connecting to BC Hydro's system totaling 273 MW and an additional 21 requests to connect totaling 1,403 MW. As noted in the B.C. Government's news release issued on December 21, 2022, if this trend continues, much of BC Hydro's available energy could be supplied to cryptocurrency mining projects, leaving little remaining to electrify projects that align with the B.C. Government's CleanBC climate action plan.⁴ As specified in section 28 of the UCA, BC Hydro has an obligation to serve customers that seek service on a non-discriminatory basis so long as such customers are willing to take service in accordance with BC Hydro's approved tariffs.

In the news release, the B.C. Government also announced a temporary suspension on the connection of new cryptocurrency mining operations to BC Hydro's electricity system for 18 months. To enable this, the B.C. Government issued the Direction to the Commission which provides that the Commission must approve BC Hydro's application for relief from its obligation to supply service to certain new cryptocurrency mining projects for a period of 18 months. Once a final order is issued by the Commission, BC Hydro will temporarily cease providing service to "new low-voltage cryptocurrency projects" and "new high-voltage cryptocurrency projects" (both as defined in the Direction). The temporary suspension will preserve B.C.'s electricity supply, while giving the B.C. Government and BC Hydro sufficient time to engage with industry and First Nations and develop a permanent framework for any future cryptocurrency mining operations.

This temporary suspension does not affect (i) existing operating cryptocurrency mining projects, (ii) cryptocurrency mining projects that want to connect at transmission voltage and are in the advanced phases of BC Hydro's interconnection process, (iii) cryptocurrency mining projects connecting at distribution voltage that are smaller than the size thresholds set out in the Direction, and (iv) cryptocurrency mining projects that will connect at distribution voltage, that are larger than the size thresholds set out in the Direction and that have paid their design deposits.

1.1 Definition of Cryptocurrency Mining Project

In section 5.2 of the revised business practice (excerpt provided in Appendix D), BC Hydro defines a cryptocurrency mining project as a project or operation that

⁴ BC Ministry of Energy, Mines and Low Carbon Innovation (December 21, 2022). Province hits pause on electrical connections for cryptocurrency mining.
<https://news.gov.bc.ca/releases/2022EMLI0067-001928>

consumes electricity for cryptographic use applied to blockchains used for digital currency mining, where:

- “Blockchain” is defined as a distributed and secure database, in its current and future versions, in which successive transactions (blocks) between users are recorded in chronological order. Each block is linked to the block before it and so forth going back to the first block in the chain; and
- “Cryptographic use applied to blockchain” is defined as the operation of computer equipment dedicated to cryptographic calculations which, in particular, serve to validate successive transactions made by users of a blockchain.

New customer requests may be required to identify the type of project they are looking to connect or add to BC Hydro’s system and, if BC Hydro deems appropriate in its sole discretion, BC Hydro may require a sworn declaration by a director or senior officer of the company that the project it requires service for is not a cryptocurrency mining project as defined above at the time of the new customer request and/or prior to the new project being commissioned for service.

2 Impact of the Direction on Cryptocurrency Projects

The following explains what the Direction means to new cryptocurrency mining projects that are currently seeking service from BC Hydro.

2.1 Treatment of Suspended Cryptocurrency Projects

The Direction enables BC Hydro to apply for relief during the suspension period of its obligation to supply service to two categories of cryptocurrency mining projects: “new low-voltage cryptocurrency projects” and “new high-voltage cryptocurrency projects”. The Direction provides the following definitions:

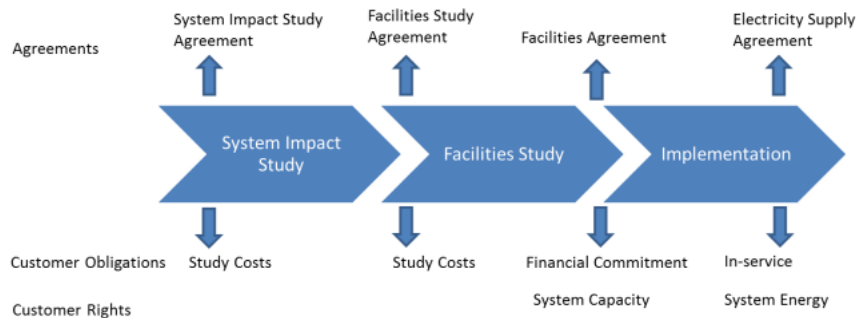
- A “new low-voltage cryptocurrency project” means “a project to mine cryptocurrency (a) for which (i) the project proponent requests at least 2.5 megawatts of power, and power would be supplied through a 12.5 kV connection to the authority’s electric distribution system, or (ii) the project proponent requests at least 5 megawatts of power, and power would be supplied through a 25 kV connection to the authority’s electric distribution system, and (b) in relation to which a design deposit has not been received by the authority before the date this direction comes into force”; and
- A “new high-voltage cryptocurrency project” means “a project to mine cryptocurrency (a) that would receive from the authority an electricity supply of 60 kV or higher, and (b) in relation to which the authority has not entered into a facilities study agreement before the date this direction comes into force”.

With respect to new high-voltage cryptocurrency projects, the Direction further specifies that BC Hydro is not obligated to enter into any new system impact study agreements (as defined in the Direction) in relation to a new high-voltage cryptocurrency project, or

to advance any of the defined “paused projects” (as defined in the Direction) which are in the system impact study agreement stage of BC Hydro’s interconnection process.

In practice, BC Hydro distinguishes service to transmission and distribution customers by voltage level, and therefore “high-voltage” in the Direction refers to BC Hydro’s transmission service and “low-voltage” refers to BC Hydro’s distribution service. For context, an overview of BC Hydro’s load interconnection process for transmission projects is provided in [Figure 1](#).⁵

Figure 1: Overview of Load Interconnection Process for Transmission Service Projects



BC Hydro’s requested relief means that the following types of new cryptocurrency mining projects would not be able to proceed through the interconnection process during the suspension period:

- Any new distribution cryptocurrency mining projects requesting at least 2.5 MW of power supplied at 12.5 kV or 5 MW supplied at 25 kV that have not paid a design deposit before the date of the order will not be served;
- Any new transmission service cryptocurrency mining projects that have not entered into a facilities study agreement before the date of the order will not enter BC Hydro’s transmission voltage load interconnection queue and will not receive service; for clarity, with the exception of the “paused projects” discussed below, this means that BC Hydro will no longer advance any cryptocurrency mining projects into its transmission voltage load interconnection queue or through any stage of its transmission interconnection process; and
- Those new transmission service cryptocurrency mining projects that are currently undergoing a system impact study, as specified in the Direction, will be “paused” during the suspension period. This treatment is explained in more detail below. BC Hydro notes that one of the “paused projects” as specified in the Direction has

⁵ BC Hydro’s current business practice (which excludes section 5) is available online at: <https://app.bchydro.com/content/dam/BCHydro/customer-portal/documents/corporate/regulatory-planning-documents/regulatory-matters/00-2014-11-18-queue-management-business-practice.pdf>

withdrawn its request for service and so is therefore no longer impacted by the Direction.

Those projects not included in section 3 of the Direction would be able to advance. As noted above, this temporary suspension does not affect (i) existing operating cryptocurrency mining projects, (ii) cryptocurrency mining projects that want to connect at transmission voltage and are in the advanced phases of BC Hydro's interconnection process (i.e., transmission projects that have signed a Facilities Study Agreement or Facilities Agreement), (iii) cryptocurrency mining projects connecting at distribution voltage that are smaller than the size thresholds set out in the Direction, and (iv) cryptocurrency mining projects that will connect at distribution voltage, that are larger than the size thresholds set out in the Direction and that have paid their design deposits.

2.2 Treatment of “Paused” Transmission Cryptocurrency Projects

Certain new high-voltage cryptocurrency projects are specified in the Direction as being a “paused project”. Each of the three paused projects have entered into a System Impact Study Agreement (**SIS Agreement**) before the date of the Direction. Each of the paused projects will be suspended during the 18-month suspension period referenced in the Direction.

Section 5 of BC Hydro's revised business practice has been provided in this Application for information to show how BC Hydro intends to implement this temporary suspension of service contemplated in this Application.⁶ In general, where BC Hydro is relieved from its obligation to serve new customers, those customers' requests for service will not be processed by BC Hydro. However, the “paused projects” will be treated differently to reflect the fact that their System Impact Studies are already underway.

Treatment of these “paused projects” is described in section 5.3 and section 5.4 of the revised business practice. Under section 5.3, the “paused projects” will be removed from BC Hydro's interconnection queue during the suspension period since BC Hydro no longer has an obligation to provide service to those projects. BC Hydro will consider their signed SIS Agreements as being suspended. At the end of the suspension period, any “paused projects” that continue to want service from BC Hydro will be placed back in BC Hydro's interconnection queue in the order in which they originally entered the interconnection queue but behind all other requests then in the interconnection queue.

Under section 5.4, for those customers whose project is included as a “paused project” under the Direction, the customer may elect to terminate their SIS Agreement during the suspension period and in such a case BC Hydro will return all deposits provided to BC Hydro by that customer in respect of the “paused project”⁷ and will not invoice for any costs incurred in relation to any work completed on their System Impact Study. If a customer whose project is included as a “paused project” under the Direction does not

⁶ Please see section 4 of the Direction which prohibits the Commission from using its rate-making powers to amend this business practice in relation to the paused projects.

⁷ For SIS Agreements, the customer pays BC Hydro a deposit based on the estimated costs of the study.

elect to terminate its SIS Agreement within the suspension period, then the terms of the SIS Agreement will continue to apply.

3 Customer Communication

BC Hydro is notifying affected customers that are actively engaged in BC Hydro's interconnection process of this Application and the Direction which will have the effect of temporarily suspending service to new cryptocurrency mining projects.

4 Conclusion

BC Hydro respectfully submits that issuing the form of order included in Appendix A will fulfill the requirements of section 3 of the Direction, as explained in this Application.

Accordingly, BC Hydro requests that the Commission issue a final order that is substantially consistent with the form of order in Appendix A within 10 days of the date of this Application.

For further information, please contact Shiau-Ching Chou at 604-623-3699 or by email at bchydroregulatorygroup@bchydro.com.

Yours sincerely,



Chris Sandve
Chief Regulatory Officer

ac/kl

Enclosure

**BC Hydro Application to Suspend Obligation to
Supply Service to Cryptocurrency Mining Projects**

Appendix A

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 to Suspend Obligation to Supply Service to Cryptocurrency
Mining Projects

BEFORE:

Commissioner
Commissioner
Commissioner

on Date

ORDER

WHEREAS:

- A. On December 21, 2022, BC Hydro filed with the British Columbia Utilities Commission (**BCUC** or **Commission**) an Application to Suspend Obligation to Supply Service to Cryptocurrency Mining Projects (**Application**) pursuant to section 28(3) of the *Utilities Commission Act* and as contemplated in the British Columbia Government's Direction to the British Columbia Utilities Commission Respecting Cryptocurrency Mining Projects (Order in Council No. 692 issued December 21, 2022) (**Direction**);
- B. The Direction was issued by the Lieutenant Governor in Council on December 21, 2022, and it requires the BCUC to issue final orders, within 10 days of an application by the authority, to BC Hydro to relieve BC Hydro of its obligation to supply service to certain new cryptocurrency mining projects during a suspension period of 18 months from the date of this order, as more specifically described in the Direction;
- C. The terms used in this Order, unless otherwise defined within this Order, have the same meaning given to them in the Direction where applicable;
- D. In the Application, BC Hydro requests that Appendix C of the Application, which contains copies of the System Impact Study Agreements of three new high voltage cryptocurrency projects that are referenced in the Direction, be held in confidence as they contain commercially sensitive customer information; and
- E. Accordingly, the BCUC makes the following directives as required by the Direction.

NOW THEREFORE, pursuant to the Direction to the British Columbia Utilities Commission Respecting Cryptocurrency Mining Projects and section 28(3) of the *Utilities Commission Act*, the British Columbia Utilities Commission orders as follows:

1. BC Hydro is relieved of the following obligations during the suspension period:
 - i) The obligation to supply service respecting a new low-voltage cryptocurrency project, including, without limitation, the obligation to accept a design deposit in relation to a new low voltage cryptocurrency project; and
 - ii) The obligation to supply service respecting a new high-voltage cryptocurrency project, including, without limitation:
 - (a) The obligation to enter into a system impact study agreement in relation to a new high-voltage cryptocurrency project; and
 - (b) The obligation to enter into a facilities study agreement in relation to a paused project.
2. The Commission will hold confidential the information in Appendix C of the Application and the associated customer information as they contain commercially sensitive information.

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

**BC Hydro Application to Suspend Obligation to
Supply Service to Cryptocurrency Mining Projects**

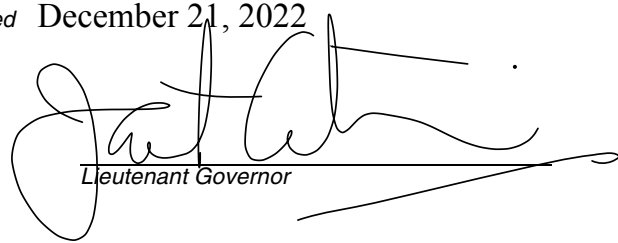
Appendix B

**Direction to the British Columbia Utilities
Commission Respecting Cryptocurrency Mining
Projects**

PROVINCE OF BRITISH COLUMBIA
ORDER OF THE LIEUTENANT GOVERNOR IN COUNCIL


Order in Council No. 692

, Approved and Ordered December 21, 2022


Lieutenant Governor

Executive Council Chambers, Victoria

On the recommendation of the undersigned, the Lieutenant Governor, by and with the advice and consent of the Executive Council, orders that attached Direction to the British Columbia Utilities Commission Respecting Cryptocurrency Mining Projects is made.



Minister of Energy, Mines and Low Carbon Innovation



Presiding Member of the Executive Council

(This part is for administrative purposes only and is not part of the Order.)

Authority under which Order is made:

Act and section: *Utilities Commission Act, R.S.B.C. 1996, c. 473, s. 3*

Other:

R10647716

DIRECTION TO THE BRITISH COLUMBIA UTILITIES COMMISSION RESPECTING CRYPTOCURRENCY MINING PROJECTS

Contents

- 1 Definitions
- 2 Application
- 3 Suspension of obligation to serve
- 4 Load interconnection practice

Definitions

- 1 In this direction:

“**Act**” means the *Utilities Commission Act*;

“**design deposit**”, in relation to a project, means a payment to the authority to cover all or a portion of the estimated costs of designing upgrades to the authority’s electric distribution system that would be necessary to connect the project to the authority’s electric distribution system;

“**facilities study agreement**”, in relation to a project, means an agreement between the authority and the project proponent that

- (a) is in the form of agreement commonly referred to by the authority as a “facilities study agreement”, and
- (b) provides for an evaluation by the authority of the work that would be necessary to connect the project to the authority’s transmission system, including engagement with First Nations, engineering, procurement and construction;

“**new high-voltage cryptocurrency project**” means a project to mine cryptocurrency

- (a) that would receive from the authority an electricity supply of 60 kV or higher, and
- (b) in relation to which the authority has not entered into a facilities study agreement before the date this direction comes into force;

“**new low-voltage cryptocurrency project**” means a project to mine cryptocurrency

- (a) for which
 - (i) the project proponent requests at least 2.5 megawatts of power, and power would be supplied through a 12.5 kV connection to the authority’s electric distribution system, or
 - (ii) the project proponent requests at least 5 megawatts of power, and power would be supplied through a 25 kV connection to the authority’s electric distribution system, and
- (b) in relation to which a design deposit has not been received by the authority before the date this direction comes into force;

“paused project” means a new high-voltage cryptocurrency project that is the subject of one of the following agreements:

- (a) the system impact study agreement dated December 1, 2021;
- (b) the system impact study agreement dated January 28, 2022;
- (c) the system impact study agreement dated June 15, 2022;
- (d) the system impact study agreement dated June 20, 2022;

“suspension period” means the period beginning on the date the commission issues final orders under section 3 and ending 18 months after that date;

“system impact study agreement”, in relation to a project, means an agreement between the authority and the project proponent that

- (a) is in the form of agreement commonly referred to by the authority as a “system impact study agreement”, and
- (b) provides for an evaluation by the authority of
 - (i) the effects on the authority’s transmission system of connecting the project to the authority’s transmission system, and
 - (ii) the modifications to the authority’s transmission system that would be necessary to connect the project to the authority’s transmission system, including modifications to maintain the reliability of the authority’s transmission system.

Application

- 2 This direction is issued to the commission under section 3 of the Act.

Suspension of obligation to serve

- 3 (1) Within 10 days of the date of an application by the authority for the purposes of this section, the commission must issue final orders so that, during the suspension period, the authority is relieved of the following obligations:
 - (a) the obligation to supply service respecting a new low-voltage cryptocurrency project, including, without limitation, the obligation to accept a design deposit in relation to a new low-voltage cryptocurrency project;
 - (b) the obligation to supply service respecting a new high-voltage cryptocurrency project, including, without limitation,
 - (i) the obligation to enter into a system impact study agreement in relation to a new high-voltage cryptocurrency project, and
 - (ii) the obligation to enter into a facilities study agreement in relation to a paused project.
- (2) Except on application by the authority, the commission must not
 - (a) add terms to the orders referred to in subsection (1), or
 - (b) amend, cancel or suspend those orders.

Load interconnection practice

- 4 During the suspension period, the commission must not exercise its powers under sections 58 to 61 of the Act to require the authority to amend, cancel or suspend a rule or practice by which the authority processes requests for electricity service made in relation to the paused projects.

**BC Hydro Application to Suspend Obligation to
Supply Service to Cryptocurrency Mining Projects**

Appendix C

**System Impact Study Agreements in relation to
Paused Projects**

PUBLIC

**CONFIDENTIAL
ATTACHMENT**

**FILED WITH BCUC
ONLY**

**BC Hydro Application to Suspend Obligation to
Supply Service to Cryptocurrency Mining Projects**

Appendix D

**Section 5 of BC Hydro's revised Business Practice
for Interconnection Queue Management**

5 Cryptocurrency Suspension

5.1 Overview of the Suspension

On December 21, 2022, the Province of B.C. passed the Direction to the British Columbia Utilities Commission Respecting Cryptocurrency Mining Projects (Direction) which requires the British Columbia Utilities Commission (BCUC) to issue orders approving BC Hydro's application to be relieved from serving certain cryptocurrency mining projects. BC Hydro has filed the application for the specified relief contemplated in the Direction with the BCUC on December 21, 2022. Once the final order is issued, BC Hydro will be relieved from serving the following cryptocurrency mining projects during the specified suspension period (as defined in the Direction):

- New low-voltage cryptocurrency projects (as defined in the Direction); and
- New high-voltage cryptocurrency projects, including those that constitute "paused projects" (both as defined in the Direction).

BC Hydro clarifies that it considers new cryptocurrency mining projects at sites that may already be interconnected to BC Hydro's system as falling within the above definitions.

For clarity, a customer with a cryptocurrency mining project that does not meet the above definitions will continue to be served by BC Hydro in accordance with the above business practices; this Section 5 replaces the business practices identified above for all cryptocurrency mining customers whose service request is impacted by the Direction.

5.2 Definition of Cryptocurrency Mining Project

BC Hydro defines a cryptocurrency mining project as a project or operation that consumes electricity for cryptographic use applied to blockchains used for digital currency mining, where:

- "blockchain" is defined as a distributed and secure database, in its current and future versions, in which successive transactions (blocks) between users are recorded in chronological order. Each block is linked to the block before it and so forth going back to the first block in the chain; and
- "cryptographic use applied to blockchain" is defined as the operation of computer equipment dedicated to cryptographic calculations which, in particular, serve to validate successive transactions made by users of a blockchain.

New customer requests may be required to identify the type of project they are looking to connect or add to BC Hydro's system and, if BC Hydro deems appropriate in its sole discretion, BC Hydro may require a sworn declaration by a director or senior officer of the company that the project it requires service for is not a cryptocurrency mining project as defined above at the time of the new customer request and/or prior to the new project being commissioned for service.

5.3 Queue Management for Suspended Projects

For those customers whose project is included as a “paused project” under the Direction, the “paused projects” will be removed from BC Hydro’s interconnection queue during the suspension period since BC Hydro no longer has an obligation to provide service to those projects. BC Hydro will consider their signed SIS Agreements as being suspended. At the end of the suspension period, any “paused projects” that continue to want service from BC Hydro will be placed back in BC Hydro’s interconnection queue in the order in which they originally entered the interconnection queue but behind all other requests then in the interconnection queue.

5.4 Termination for New High-Voltage Cryptocurrency Mining Projects that are “paused”

For those customers whose project is included as a “paused project” under the Direction, the customer may elect to terminate their SIS Agreement during the suspension period and in such a case BC Hydro will return all deposits provided to BC Hydro by that customer in respect of the “paused project” and will not invoice for any costs incurred in relation to any work completed on their System Impact Study. If a customer whose project is included as a “paused project” under the Direction does not elect to terminate its SIS Agreement within the suspension period, then the terms of the SIS Agreement will continue to apply. For clarity, all cryptocurrency mining projects in BC Hydro’s interconnection process that are not a “paused project” are not eligible to receive a refund for any costs incurred as contemplated in this section 5.4.