

RESOLUTION NO. _____

A RESOLUTION RATIFYING AND CONFIRMING THE ADOPTION OF A MORATORIUM AND ESTABLISHING POLICIES FOR ENFORCING THE MORATORIUM ON ELECTRIC SERVICE APPLICATIONS FOR COMPUTING AND DATA PROCESSING LOADS RELATED TO VIRTUAL OR CRYPTOCURRENCY MINING, BITCOIN OR SIMILAR PURPOSES

FACTUAL BACKGROUND, REASONS FOR ACTION, AND PROPOSED POLICIES

After hearing presentations from staff on ongoing issues with high-density loads, particularly virtual and cryptocurrency loads, on March 19, 2018, and issues with loads over 5 MW on February 20 and March 5, 2018, the Commission passed the following motion during its March 19, 2018 meeting implementing a moratorium on electric service applications for computing and data processing loads related to virtual or cryptocurrency mining, bitcoin or similar purposes:

to adopt a moratorium on accepting any new electric service applications or further processing any existing electric service applications for proposed computing or data processing loads related to virtual or crypto-currency mining, bitcoin or any similar purpose, whether above 5 MW pursuant to Schedule 4 or, at or below 5 MW pursuant to Schedule 35 or any other schedule. The moratorium would not apply to approved applications that have fully paid all line extension estimates and upfront capital charges. Further, direct staff to prepare an appropriate confirming Resolution for consideration at the next Board meeting. Finally, setting a public hearing on the moratorium at 1:00 pm, May 14, 2018, in Wenatchee as part of the regular commission meeting for further consideration of the moratorium.

Definitive confirmation of the nature of loads related to virtual or crypto-currency mining, bitcoin or any similar purpose (e.g., what machines are drawing load and what the machines are doing) is unnecessary and impractical. The machines drawing the load are small and easily portable, and the computational work is unobservable by staff. Thus, the scope of the moratorium creates potential challenges for staff when applying it to specific loads or requests.

However, such loads have distinguishing characteristics from the perspective of the serving electric utility. Through enforcing Rate Schedule 35 and a past moratorium against unauthorized high-density loads, staff has gained extensive experience in identifying such loads based on various characteristics despite attempts by some at concealment. Because of the challenges inherent in enforcement against unauthorized loads, staff recommends that the Commission adopt the following policies to affirm staff's actions when applying the moratorium and enforcing District policies and regulations against unauthorized loads.

Proposed Enforcement Policies

Staff recommends the following guidelines for the implementation of the moratorium.

- Staff is directed to use its judgment and experience to make determinations regarding whether an ongoing operation or a request for service is subject to Schedule 35 and/or the moratorium. Definitive confirmation of the nature of the load (e.g., identifying the machines drawing load and confirming the computations conducted by the machines) is unnecessary and impractical.
- Staff should consider the following working understanding of mining of virtual or crypto-currency. Virtual currency or crypto-currency mining is the process of executing large numbers of computer operations in order to generate a new block of a currency's blockchain. The purpose of requiring execution of the large numbers of computer operations is primarily to make it nontrivial for a miner to generate a new block on the blockchain (i.e., to show "proof of work"). Associated loads tend to be highly responsive to digital currency market fluctuations. Staff is directed to update its scope of implementation as related technologies evolve and as its understanding of the loads changes.
- The following illustrative characteristics are useful, for identifying computing or data processing loads related to virtual or crypto-currency mining. This list is not exhaustive and staff is directed to expand the list as appropriate.
 - The customer's use of computer hardware designed or intended specifically for mining related uses.
 - Changes in electrical equipment, site conditions, or usage consistent with mining computing.
 - Any other evidence (for example, advertising, offering, or contracting for use of a facility or computing capacity by a customer or its affiliate) acquired through any proper means suggesting that the customer or facility is engaged in mining.

ACTION

IT IS RESOLVED BY THE COMMISSION OF PUBLIC UTILITY DISTRICT NO. 1 OF CHELAN COUNTY, WASHINGTON as follows:

Section 1. Based on the factors set forth herein and in staff's presentations of February 20, 2018, March 5, 2018, and March 19, 2018, the moratorium as adopted on March 19, 2018 is hereby ratified and confirmed.

Section 2. Staff is directed to enforce the moratorium, Schedule 35 and District rules related to unauthorized loads consistently with enforcement policies set out above. all of which are hereby adopted. When imposing fees and charges on an unauthorized load and/or disconnecting an unauthorized load, staff is directed to protect against safety risks, to attempt to impose all reasonable costs associated with unauthorized loads on those customer rather than on

the District's other customers, and to minimize impairment of the quality of service to other customers.

DATED this 2nd day of April 2018.

President

ATTEST:

Vice President

Secretary

Commissioner

Commissioner

Seal

Contact: Erik Wahlquist, Ext. 4237