STATE OF NEW YORK

6486--D

2021-2022 Regular Sessions

IN SENATE

May 3, 2021

Introduced by Sens. PARKER, MAY, BIAGGI, BRISPORT, GOUNARDES, JACKSON, KRUEGER, RAMOS, RYAN, SALAZAR -- read twice and ordered printed, and when printed to be committed to the Committee on Environmental Conservation -- committee discharged, bill amended, ordered reprinted as amended and recommitted to said committee -- committee discharged, bill amended, ordered reprinted as amended and recommitted to said committee -- recommitted to the Committee on Environmental Conservation in accordance with Senate Rule 6, sec. 8 -- committee discharged, bill amended, ordered reprinted as amended and recommitted to said committee -- committee discharged, bill amended, ordered reprinted as amended and recommitted to said committee

AN ACT to amend the environmental conservation law, in relation to establishing a moratorium on cryptocurrency mining operations that use proof-of-work authentication methods to validate blockchain transactions; and to require a comprehensive generic environmental impact statement review

The People of the State of New York, represented in Senate and Assembly, do enact as follows:

- 1 Section 1. Legislative findings. The legislature hereby finds and 2 declares that:
- (a) Climate change threatens the health, welfare, and economy of the state with increasingly severe and widespread impacts to our communities due to flooding, sea level rise, heat waves, coastal erosion, erratic and unpredictable weather patterns, shifting climatic zones, loss of wildlife, increased harmful algal blooms and invasive species, and increased risk of disease, in part, which leads directly to loss of life, property damage and reduction in value, ecological damage, and 10 increased infrastructure costs;

7

(b) It is the policy of the State of New York to conserve, improve and 11 12 protect its natural resources and environment and to prevent, abate and 13 control water, land and air pollution, in order to enhance the health,

EXPLANATION--Matter in italics (underscored) is new; matter in brackets [-] is old law to be omitted.

LBD11081-20-2

S. 6486--D

safety and welfare of the people of the state and their overall economic and social well-being;

- (c) To mitigate the current and future effects of climate change, the State of New York implemented the Climate Leadership and Community Protection Act, requiring that statewide greenhouse gas emissions be reduced eighty-five percent by 2050 and that the state has net zero emissions in all sectors of the economy by that time;
- (d) Cryptocurrency mining operations running proof-of-work authentication methods to validate blockchain transactions are an expanding industry in the State of New York; and
- (e) The continued and expanded operation of cryptocurrency mining operations running proof-of-work authentication methods to validate blockchain transactions will greatly increase the amount of energy usage in the state of New York, and impact compliance with the Climate Leadership and Community Protection Act.
- 16 § 2. The environmental conservation law is amended by adding a new 17 section 19-0331 to read as follows:
 - § 19-0331. Moratorium on air permit issuance and renewal.
 - 1. For the period commencing on the effective date of this section and ending two years after such date, the department, after consultation with the department of public service, shall not approve a new application for or issue a new permit pursuant to this article, or article seventy of this chapter, for an electric generating facility that utilizes a carbon-based fuel and that provides, in whole or in part, behind-the-meter electric energy consumed or utilized by cryptocurrency mining operations that use proof-of-work authentication methods to validate blockchain transactions.
 - 2. For the period commencing on the effective date of this section and ending two years after such date, the department shall not approve an application to renew an existing permit or issue a renewal permit pursuant to this article for an electric generating facility that utilizes a carbon-based fuel and that provides, in whole or in part, behind-the-meter electric energy consumed or utilized by a cryptocurrency mining operation that uses proof-of-work authentication methods to validate blockchain transactions if the renewal application seeks to increase or will allow or result in an increase in the amount of electric energy consumed or utilized by a cryptocurrency mining operation that uses proof-of-work authentication methods to validate blockchain transactions.
 - § 3. Generic environmental impact statement. (a) The department of environmental conservation, in consultation with the department of public service, shall prepare, pursuant to article eight of the environmental conservation law, a generic environmental impact statement on cryptocurrency mining operations that use proof-of-work authentication methods to validate blockchain transactions.
 - (b) The generic environmental impact statement shall address, at a minimum:
- 48 (i) the number and location of existing cryptocurrency mining oper-49 ations that use proof-of-work authentication methods to validate block-50 chain transactions in the state;
- 51 (ii) the amount of electric energy consumed by each cryptocurrency 52 mining operation that uses proof-of-work authentication methods to vali-53 date blockchain transactions;
- (iii) the sources of electric energy consumed by each cryptocurrency mining operation that uses proof-of-work authentication methods to vali-

S. 6486--D

1 date blockchain transactions and the type of fuel used by each energy 2 source;

- (iv) the amount of greenhouse gas emissions and co-pollutants released by each energy source attributable to providing electric energy to cryptocurrency mining operations that use proof-of-work authentication methods to validate blockchain transactions;
- (v) the anticipated increase, if any, of cryptocurrency mining operations that use proof-of-work authentication methods to validate block-chain transactions in the state and the anticipated expansion, if any, of existing operations;
- (vi) the potential impacts of electric energy consumption by cryptocurrency mining operations that use proof-of-work authentication methods to validate blockchain transactions on the state's ability to meet the greenhouse gas emission reduction goals set forth in article seventyfive of the environmental conservation law;
- (vii) the amount of water usage, water quality and other ecological impacts, if any, of cooling water use by cryptocurrency mining operations that use proof-of-work authentication methods to validate blockchain transactions;
- (viii) the potential public health impacts, if any, due to reduced air and water quality in communities near cryptocurrency mining operations that use proof-of-work authentication methods to validate blockchain transactions;
- (ix) the potential statewide public health impacts, if any, from increased greenhouse gas emissions released by cryptocurrency mining operations that use proof-of-work authentication methods to validate blockchain transactions; and
- (x) the social and economic costs and benefits, if any, of cryptocurrency mining operations that use proof-of-work authentication methods to validate blockchain transactions.
- § 4. Any generic environmental impact statement draft shall be posted on the department of environmental conservation's website and be subject to 120 days of public comment from the date of issuance. The department of environmental conservation shall conduct at least one public hearing in each of the following regions of the state: western New York, the finger lakes, the southern tier, central New York, the Mohawk valley, the north country, the capital region/Hudson valley, and the City of New York/Long Island, as defined by the Empire State Development Corporation, and provide meaningful opportunity for comment.
- § 5. The department shall issue a final generic environmental impact statement after close of the public comment and public hearing period and no later than one year after the effective date of this act.
 - § 6. For the purposes of this act:
- (a) "Cryptocurrency mining operations that use proof-of-work authentication methods" shall mean the use of a consensus algorithm in a block-chain network used to confirm and produce new blocks to the chain to validate a cryptocurrency transaction, where competitors complete new blocks and where the algorithm changes the complexity of the competition in a manner that is designed to and/or results in increased energy usage for each competitor when the complexity is increased; and
- 51 (b) "blockchain" shall mean a digital ledger in which transactions are 52 recorded chronologically and publicly.
- 53 § 7. This act shall take effect immediately and shall apply to all permits or renewal applications filed after such date.