

Supporting Statement – Part B
Emergency Survey – Cryptocurrency Mining Facilities
OMB No. 1905 - XXXX

SECTION B.

B.1. Respondent Universe

Form EIA-862 is an emergency market study survey of identified cryptocurrency mining companies reporting at the facility level intended to meet the needs identified in Supporting Statement – Part A. Cryptocurrency mining companies are commercial businesses who operate or lease facilities that engage in proof-of-work (PoW) consensus mechanisms to add and verify transactions on cryptocurrency blockchain networks. Cryptocurrency mining companies are exclusive of individuals who may engage in cryptocurrency mining outside of cryptocurrency mining facilities, such as with personal computers in households. The target population is the universe of cryptocurrency companies that operate or lease facilities conducting PoW cryptocurrency mining in all 50 U.S. states and the District of Columbia. Based on reviews of online resources and articles, state business registration data, and existing EIA survey data, EIA has constructed a survey frame with 82 cryptocurrency mining companies operating approximately 150 facilities. Based on EIA's research and the scale of identified cryptocurrency mining facilities in terms of megawatt capacity, cryptocurrency mining companies consist of most of the electricity consumption associated with cryptocurrency mining activities in the U.S. At this time, EIA does not have an estimate for the coverage of the survey frame for total U.S. cryptocurrency mining electricity consumption. For this reason, EIA will not use the survey data to do population-based inference either by using weighting adjustments or model-based methods. The collected data will only be representative of the identified respondents in this market study survey. EIA will review the respondent data to understand the possible scope of total U.S. cryptocurrency mining electricity consumption to determine coverage levels for future survey clearance requests.

Form EIA-862 is a new emergency survey, and EIA has not collected data from this target population before. Because of this condition, EIA does not have a historical reference survey response rate. On the survey frame, EIA has been able to identify the cryptocurrency mining megawatt capacities of most companies, particularly what EIA estimates are the top 25 largest cryptocurrency mining companies by capacity. These largest companies represent approximately 95% of the identified U.S. existing cryptocurrency mining capacity. EIA believes these largest companies are likely to participate in this survey based on public information they present on their websites, in public presentations, and in news articles. Based on EIA's experience receiving high response rates of over 95% on comparable establishment surveys, EIA is expecting a greater than 90% response rate based on a weighted existing cryptocurrency mining capacity basis.

B.2. Statistical Methods

Form EIA-862 is an emergency market study survey of all identified cryptocurrency mining companies and uses no sampling methods. Cryptocurrency mining is a relatively new and rapidly

changing industry. Limited, readily available information exists about this industry's effects on U.S. electricity consumption. The emergency market study survey methodology provides EIA with the ability to gain insight into this industry to accomplish the purposes of the survey data outlined in Supporting Statement – Part A. Since Form EIA-862 is a market study survey of all identified companies, EIA will use simple aggregation and descriptive statistics of respondent data to better understand industry characteristics and electricity consumption based on the reported size of facility operations and geographic locations.

EIA uses data validation/editing processes and software (programmed edits checks) to detect probable reporting errors and flag them for resolution by analysts, either through confirmation of the data by the respondent or submission of amendments to the previously filed data.

If the unit level non-responses cannot be resolved within a survey cycle, EIA uses nonresponse weight adjustment and/or donor-based imputation methods. If the item level non-responses cannot be resolved within a survey cycle, EIA uses model-based imputation methods. These imputation methods use previously reported data for the non-respondents and the current period's reported data for the respondents.

The data this survey aims to collect are all factual information, though some of it may be approximated or estimated by the respondent at the time of reporting. The precisions of the responses are implicit in the survey question items, such as the unit of electricity consumption and the number of decimal places in percentages. An individual respondent is expected to provide the respondent's best responses without falsifications, but EIA will verify data with reasonable review efforts. Individual data points will be aggregated to create summary statistics such as the means and totals, and some of the remaining uncorrected individual response errors may cancel out in the aggregates.

There are no "unusual problems requiring specialized sampling procedures" in the proposed survey.

The proposed survey is scheduled to run monthly. The survey frame may be updated each month, removing ineligible entities and adding new potential respondents. All entities in the survey frame at the time of the survey will be potential respondents for that survey cycle. After the first few months, depending on the quality of the responses, EIA will use pre-population of known survey responses from prior cycles (dependent interviewing) to reduce respondent burden.

B.3. Maximizing Response Rates

To maximize response rates, Form EIA-862 is designed and written for clarity and conciseness. Data that are not expected to change from month to month will use dependent interviewing (pre-population) to reduce respondent burden. Notifications will be emailed early during the reporting period to maximize the time that respondents have to complete the survey.

After an initial round of data collection using a paper questionnaire, EIA expects respondents will primarily respond to the survey using Computer-Assisted Self-Interviews (CASI). As noted in Supporting Statement – Part A, EIA's internet data collection system makes forms available online as soon as respondents obtain a unique link directly emailed to them. Form due dates are the same each period so that respondents can schedule their completion activities.

EIA will contact any non-respondents by email, telephone, and letter to request data submission until an insignificant or zero non-response rate is obtained. Follow-up email messages citing

sanctions for failing to file the required form(s) are sent to all non-respondents. If the follow-up email messages do not result in a response, EIA sends additional correspondence requesting immediate submission to the supervisor of the primary contact and, if necessary, to higher-level management officials at the nonresponding entity.

Respondents who submit their data using CASI will have the opportunity to either correct or explain unusual data during their submission. EIA will review these explanations. EIA will contact respondents if further clarification is needed. For those respondents who do not file via CASI, but rather on a hard copy of the form, email messages are sent, and/or telephone calls are made to confirm corrections or clarifications of any data suspected to be in error.

Changes in company ownership and/or contacts have contributed in the past to non-response. To address this issue, EIA has a dedicated frame management team that uses centralized processes and tools to manage frames so that all survey staff have almost immediate knowledge of changes in entity ownership and/or contacts.

Form EIA-862 does not use a sample and all collected data will be representative of the identified companies only.

B.4. Test Procedures and Form Consultations

The Form EIA-862 survey design is reviewed by EIA survey methodologists and modified as necessary to improve clarity and reduce burden.

B.5. Statistical Consultations

For additional information concerning this proposed information collection, please contact Glenn McGrath at 202-586-4325, or at electricity2023@eia.gov.