

Comments of the U.S. Energy Information Administration on OMB's review and approval of the 2024
Annual Integrated Economic Survey
OMB Control No. 0607-1024
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The U.S. Energy Information Administration (EIA) is providing comments on the Census Bureau's (Census) submission of the Annual Integrated Economic Survey (AIES) to the Office of Management and Budget (OMB).¹ EIA requests that Census maintain the quantity of purchased electricity instead of eliminating it as proposed.

EIA relies on several external data sources, among them the Census's legacy Annual Survey of Manufactures, now integrated into the AIES. Census proposes to remove three electricity quantity variables² from AIES collection from 2024 forward. Of these three quantity variables, EIA requests that the quantity of purchased electricity be retained in the 2024 and future AIES.

Census's proposed elimination of collecting the quantity of purchased electricity in the AIES will have a detrimental impact on two statutorily required EIA activities: maintaining the National Energy Modeling System (NEMS), which is used to produce the *Annual Energy Outlook* (AEO), and conducting the quadrennial Manufacturing Energy Consumption Survey (MECS). The quantity of purchased electricity provides a benchmark for the AEO between MECS updates. It also provides an important check on MECS electricity estimates. Without Census's quantity of purchased electricity, these two products will not be as accurate as they have been in the past.

EIA Background

EIA is the statistical and analytical agency within the U.S. Department of Energy. EIA collects, analyzes, and disseminates independent and impartial energy information to promote sound policymaking, efficient markets, and public understanding of energy and its interaction with the economy and the environment. EIA is the nation's premier source of energy information, and, by law, its data, analyses, and forecasts are independent of approval by any other officer or employee of the U.S. government.

Annual Energy Outlook (AEO)

The AEO contains projections of future U.S. energy markets. The AEO is produced using the National Energy Modeling System (NEMS), which is statutorily required to be maintained by EIA.³ The AEO projects several major energy series: energy supply, energy consumption, energy prices, and CO₂ and other greenhouse gas emissions for the United States with Census division disaggregation through the year 2050.

The AEO includes a Reference case and several side cases that reflect differing economic or energy assumptions that result in a range of projections. The Reference case is a baseline projection that

¹ 89 Fed. Reg. p. 89597 (November 13, 2024)

² See Line 28 of Attachment Q, available at this address:

https://www.reginfo.gov/public/do/PRAViewDocument?ref_nbr=202411-0607-003. To be clear, EIA only proposes keeping quantity of purchased electricity.

³ USC 42. § 790a. In this statute, NEMS is described as the National Energy Information System.

assumes that current laws and regulations are maintained either until their sunset date or for the entire projection period if there is no sunset date. In particular, anticipated future laws and regulations are not included in the Reference case. Side cases have different assumptions from the Reference case. Side cases typically assume more or less economic activity; higher or lower oil prices; higher or lower levels of oil and gas supply; or higher or lower costs for zero-carbon technologies. Taken together, the Reference case and the side cases produce a range of projections.

Manufacturing Energy Consumption Survey (MECS)

Collecting data for the MECS is statutorily required.⁴ Among other items, the quantity of energy consumed is required to be collected at least once every four years. Purchased electricity is one of the energy sources. The quantity of purchased electricity in Census's legacy Annual Survey of Manufactures (ASM) is crucial to validating the MECS purchased electricity number.

Comments

Use of quantity of purchased electricity for benchmarking the Annual Energy Outlook (AEO)

The industrial energy consumption projections in the AEO (<https://www.eia.gov/outlooks/aeo/>) require a detailed historical baseline of energy consumption by industry. Most industrial energy is consumed in the manufacturing sector, and the MECS provides the historical data needed to benchmark the long-term industrial energy consumption projections for the AEO.

Although the MECS often provides detailed data down to a 6-digit NAICS code disaggregation, it is published only every four years, with the latest publication issued for the year 2018 (<https://www.eia.gov/consumption/manufacturing/data/2018/>). Thus, EIA modelers of industrial energy consumption must rely on projections to fill in the missing disaggregated industrial energy consumption historical data. For example, for the upcoming AEO2025, historical data from 2019 – 2023 must be estimated using industrial shipments data and energy intensities derived from 2018 data, not using actual historical industrial energy consumption data.

One workaround to these inevitable data gaps due to the quadrennial frequency of MECS is to employ, at least for manufacturers' purchased electricity, more recent data from the Annual Survey of Manufactures (ASM). In particular, the AEO uses the "Quantity of Purchased Electricity" data field provided in the ASM to benchmark industrial historical purchased electricity data by industry in the AEO projections. Of the three data fields whose removal are listed in Attachment Q of the [PRA ICR Documents](#) ("Quantity of Purchased Electricity", "Quantity of Electricity Sold or Transferred to Other Establishments", "Quantity of Generated Electricity"), EIA proposes to keep only the "Quantity of Purchased Electricity" field to maintain more up-to-date historical industrial electricity use. For the upcoming AEO2025, EIA modelers are employing purchased electricity data for years 2019, 2020, and 2021 from the ASM which better represents actual consumption by industry compared to the

⁴ USC 42 §7135(i). In this statute, MECS is described as the Manufacturers Energy Consumption Survey.

aforementioned methodology of estimating consumption based on shipments and 2018-derived intensities.

With a more accurate and more recent historical baseline, the integrity of the projections increases, and in dynamic industrial subsectors where electrification is increasing for policy and environmental reasons, the AEO projections will be able to better capture these trends.

Use of quantity of purchased electricity to validate the Manufacturing Energy Consumption Survey

The MECS collects energy consumption and related data, including purchased electricity, from U.S. manufacturing establishments. Critical to the MECS is our most basic definition of a manufacturer: an establishment that has at a minimum, electricity consumption. Some manufacturers produce a portion of the electricity they consume; however, most manufacturers purchase most of the electricity they consume.

In the past, we have always used both the Economic Census – Manufacturing (ECM) and the Annual Survey of Manufactures (ASM) to validate the reported MECS electricity data (consumed, purchased and produced) because of how crucial electricity data, particularly consumed and purchased, are to the essence of the MECS. Therefore, we request that the Annual Integrated Economic Survey (AIES) continue to collect, at least, the quantity of purchased electricity from U.S. manufacturers going forward.

Conclusion

For the reasons given above, EIA requests that the quantity of purchased electricity variable be retained in the 2024 and subsequent AIES.

Respectfully submitted,

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