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Supporting Statement for Coal Markets Reporting System

# Part B: Collections of Information Employing Statistical Methods

**OMB No. 1905-0167**

*Form EIA-3, “Quarterly Survey of Industrial, Commercial, & Institutional Coal Users”*

*Form EIA-7A, “Annual Survey of Coal Production and Preparation”*

*Form EIA-8A, “Annual Survey of Coal Stocks and Coal Exports”*

*Form EIA-6, “Emergency Coal Supply Survey (Standby)”*

*Form EIA-20, “Emergency Weekly Coal Monitoring Survey for Coal Burning Power Producers (Standby)”*



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## B.1. Respondent Universe

EIA coal surveys collect information at the site and company level. EIA uses Form EIA-3, Form EIA-7A, and standby Form EIA-20 to collect information at the site level. EIA utilizes Form EIA-8A and standby Form EIA-6 to collect data at the company level.

Form EIA-3

All companies operating coke plants within the United States during the reporting quarter must submit Form EIA-3. All other sites that use in excess of 1,000 short tons of anthracite, bituminous, subbituminous, lignite, or refined coal during the sum of the current reporting quarter and the previous three reporting quarters must submit Form EIA-3. Form EIA-3 does not require a report from sites that use less than 1,000 short tons of coal annually. The year includes the current reporting quarter and the previous three quarters.

Forms EIA-7A and EIA-8A

All coal mining companies that owned a mining operation which produced 25,000 or more short tons of coal during the reporting year must submit Form EIA-7A, except for anthracite mines. All anthracite mines that produced 10,000 or more short tons during the reporting year must submit Form EIA-7A. Standalone facilities (e.g., preparation plant/tipple/loading dock/train loadout) that worked 5,000 or more hours must submit Form EIA-7A. A separate Form EIA-7A is submitted for each mining operation and standalone facility that meets the reporting criteria. Form EIA-8A is submitted by all coal brokers, coal traders, and coal terminals in the 50 states and the District of Columbia that owned stocks of 10,000 or more short tons of coal originating in the United States on December 31st of the reporting year and/or exported coal originating in the United States during the reporting year. Companies that take custody (physical possession) of the coal and transport it but never own the coal do not need to report. Companies that report coal stocks on the EIA-923, Power Plant Operations Report, do not need to report. Form EIA-923 includes on-site and off-site (i.e., transfer terminal) electric utility coal stockpiles.

Standby Forms EIA-6 and EIA-20

Standby Forms EIA-6 and EIA-20 will be activated during coal supply disruptions. Companies in the 50 United States and the District of Columbia that produced 25,000 or more short tons of coal during the year, defined by the previous calendar year, must report Form EIA-6. Note that depending on the circumstances of the coal disruption, EIA may require only a subset of the U.S. coal mining companies that meet these criteria to submit the survey. All required respondents will be individually notified by EIA. Form EIA-20 is a survey for all coal-burning electric power plants and combined heat and power (CHP) plants that meet the following criteria: 1) have a total generator nameplate capacity (sum for generators at a single site) of 1 megawatt (MW) or greater; and 2) where the generator(s), or the facility in which the generator(s) resides, is connected to the local or regional electric power grid and has the ability to draw power from the grid or deliver power to the grid. All required respondents will be notified individually by EIA. Completed forms should be sent via email to an address that EIA shall specify at the time the respondent is notified of its obligation to file the form. Forms must be submitted no later than 5pm eastern time each Monday after the seven-day reporting period. The reporting period is Saturday midnight to Saturday midnight.

## B.2. Statistical Methods

### Sample Design

There are no sample surveys in the Coal Markets Reporting System ICR.

### Imputation and Estimation Procedures

Imputation for item non-response is done for Form EIA-7A and Form EIA-3 surveys. Table 1 below shows variables where there was imputation for item non-response. The imputation method uses a linear regression to estimate item nonresponse. The formula for Form EIA-3 uses data reported for two quarters, the current quarter and the same quarter in the previous year to impute a value. For Form EIA-7A, the regression estimates for item nonresponse use two consecutive years of reported data. EIA applies imputation for the following Form EIA-7A variables:

* recoverable coal reserves
* productive capacity
* type of surface/underground mining technique
* average thickness of coalbed(s) mined

EIA applies imputation for the following Form EIA-3 variables:

* coal receipts
* total cost of coal received
* coal consumption
* ending coal stocks
* Prior ending coal stocks

There is no imputation for item non-response for data reported on Form EIA-8A.

Table 1 shows non-response rates and imputations for the abovementioned variables. The “Percent Blank” column represents the percentage of respondents that submitted blank responses for that variable. Respondent that reported a zero value are excluded from Percent Imputed column in table 1. Respondents may submit blank responses because either a variable does not apply to their operations or the respondent does not have that information. For example, a respondent who does not export coal may leave the “Export Sales” variable blank. The “Percent Imputed” represents the percentage of data values that were changed because either the reported value failed the edit check or the respondent reported a blank value and EIA imputed a modified positive value.

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| Table 1. Non-Response and Imputation | | | |
| SSB Variables | **Survey** | **Percent Blank** | **Percent Imputed** |
| Recoverable coal reserves | 7A | 3.5% | 30.7% |
| Productive capacity | 7A | 3.9% | 1.8% |
| Type of surface/underground mining technique | 7A | 0.2% | 15.9% |
| Average thickness of coalbed(s) mined | 7A | 0.0% | 25.3% |
| Coal receipts | 3 | 0.0% | 0.5% |
| Total cost of coal received | 3 | 0.0% | 0.5% |
| Coal consumption | 3 | 0.0% | 0.5% |
| Ending Coal Stocks | 3 | 0.0% | 0.5% |
| Prior Ending Coal Stocks | 3 | 0.0% | 0.0% |

## B.3. Maximizing Response Rates

To help ensure maximum response, EIA uses a two-pronged approach:

* Approximately 7 to 10 business days before the end of the reporting period, respondents on the latest respondent list are sent an email inquiring whether they will continue to submit, or if not, to reply with the name, telephone number, and e-mail address of the new preparer. This advance query helps EIA keep its list of e-mail addresses and names current. It is important to keep email addresses up to date because most communication is sent by email.

Then, once the due date has passed, EIA sends email messages indicating the respondent is late in submitting the survey report. For those surveys that are still outstanding after the email late notice is sent, the survey manager makes telephone calls to the survey preparers, then their superiors, to increase awareness about the delinquent survey. Finally, noncompliance letters are sent requiring respondents to submit by a specified date. More follow-up is given to large coal mines that report on the EIA-7A to increase production coverage.

* Respondents are required to submit Form EIA-3 no later than **30 days** after the end of a calendar quarter. If respondents are delayed in submitting their survey(s), emails are used to notify non-respondents on a weekly basis for the first three weeks following the survey due date. For those surveys that are still outstanding after this three-week-period, the survey manager will begin making calls to the survey preparers, then their superiors, to increase awareness about the delinquent survey. Finally, noncompliance letters are sent requiring respondents to submit by a specified date.
* Mines with non-anthracite annual production of less than 25,000 short tons and preparation plants who record fewer than 5,000 person-hours during the reporting year are not required to file Form EIA-7A. In addition, anthracite coal mines that produce less than 10,000 short tons during the reporting year are not required to file Form EIA-7A.
* Form EIA-8A does not require companies (coal brokers, coal traders, and coal terminals) that own less than 10,000 tons of coal stocks originating in the United States on December 31 of the reporting year and companies that did not export any coal originating in the United States during the reporting year to file. Companies that take custody (physical possession) of the coal and transport it but do not own the coal are not required to file a report.

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| **EIA Form Number/Title** | **Average 2018 Response Rate** |
| EIA-3, Quarterly Survey of Industrial, Commercial, & Institutional Coal Users | 100% |
| EIA-7A, Annual Survey of Coal Production and Preparation | 95% |
| EIA-8A, Annual Survey of Coal Stocks and Coal Exports | 100% |

## B.4. Test Procedures and Form Consultations

Internet-based collection of data has been successfully used by EIA since 2002. EIA draws upon respondent feedback and experiences on other EIA internet collection surveys to improve edits, methodology, operations, and procedures.

## B.5. Statistical Consultations

For additional information concerning this proposed information collection, please contact or Jacob.bournazian@eia.gov.