Part B

Collection of Information Employing Statistical Methods

B.1. Respondent Universe

The electric power surveys collectively cover the entire range of companies involved in the generation, transmission, distribution, and sales of electricity. Of the six surveys in this package, three surveys are of the entire universe (or nearly the entire universe) based on more exacting filing requirements given in those surveys. The remaining three surveys are sample surveys. The respondent universe for each survey is:

- **EIA-411** – The target population for this annual census comprises all electricity generators and electric utilities in the United States. The eight Regions of the North American Electric Reliability Corporation (NERC) collect the data from the target population units. Each Region assembles the required information using input from the member electricity generators and electric utilities in its geographic area. The Regions submit the compiled data to the NERC headquarters, where it is consolidated and forwarded to the EIA.

- **Form EIA-826** – The target population for this monthly survey comprises all U.S. electric utilities, electric service providers, and distribution companies. Cutoff sampling is used to select the sample for the Form EIA-826, which includes most of the investor-owned utilities (188), 4 Federal utilities, all electric service providers (92), all distribution companies, and a sample of approximately 164 municipal, cooperative, State and political subdivision utilities that have sales to end-use customers.

- **Form EIA-860** – The target population for this annual census comprises all existing and proposed (for operation within 5 years) electric power plants that have a total generator nameplate capacity of 1 megawatt or greater. Companies complete the form for all the plants they operate. There are approximately 2,700 entities that operate and/or propose to operate about 5,500 facilities, containing over 17,000 generators, who are required to file the Form EIA-860. The respondents to this survey form the basis of the EIA electric power entity frame, from which samples for other surveys are drawn.

- **EIA-860M –** The target population for this monthly census comprises power plants within the EIA-860 target population that have either (a) a new generator scheduled to begin commercial operations within the next 12 months, or (b) an existing generator scheduled for retirement within the next 12 months, or (c) an existing generator undergoing modifications resulting in changes in capacity or other major modifications that are scheduled to be completed within 1 month. Respondents are the operators of the power plants where these new generators and

existing generators are located. Based on the number of plants putting new generators into service in 2008 and 2009, the EIA estimates that in a typical month the Form EIA-860M will be used to collect data from approximately 124 respondent entities.

- **Form EIA-861** – The target population for this annual census comprises participants in the electric power industry involved in the generation, transmission, or distribution of electricity in the United States and its territories. Target population members include electric utilities, wholesale power marketers (registered with the Federal Energy Regulatory Commission), energy service providers (registered with the States), and electric power producers. There are approximately 3,300 entities in the United States involved in the generation, transmission, and distribution of electric energy. This survey serves as the universe from which the sample for the Form EIA-826 is drawn.

- **Form EIA-923 –** The target population for this annual census comprises all electric plants in the United States that are connected to the electric power grid and have a generating capacity of 1 megawatt or greater. While the target population is defined in terms of plants, the respondents for the EIA-923 are companies, which report data for the eligible plants they operate. There are approximately 5,300 operating power plants (being reported by 2,800 respondents) for which data will be collected through Form EIA-923. Data will be reported monthly for a sample of approximately 1,565 plants, although this may be adjusted as the data are evaluated. Monthly respondents will report on Schedules 1, 3, 4, and 5, plus Schedule 2 if their generating capacity is 50 megawatts or greater and they are fossil-fueled plants. At the end of the year, the monthly respondents will report on Schedules 6 and 7, plus Schedule 8, if they have a capacity of 10 megawatts or greater and they are steam-electric organic-fueled plants. Those respondents who are not in the monthly frame will file annually. They will file Schedules 1, 3, 4, 5, 6, and 7, plus Schedule 2 if their capacity is 50 megawatts or greater and they are fossil-fueled plants, and Schedule 8, if they have a capacity of 10 megawatts or greater and are steam-electric organic-fueled plants.

B.2. Statistical Methodology

To limit the burden on industry respondents, the two monthly surveys, the Form EIA-826 and the Form EIA-923, will be sent to only a sample of units in the target populations. The samples will be *cutoff* samples, i.e., they will comprise all units with measures of size larger than a predefined threshold. The cutoff sampling eliminates the monthly reporting burden for smaller industry participants. Because smaller units have, in the past, been responsible for a high percentage of reporting errors, the cutoff sampling may also reduce the levels non-sampling error affecting the published estimates. (See Knaub (2007) on cutoff sampling in general, Royall (1970) on model variance, and Knaub

(2001) on model bias and variance.) The remainder of this section provides detail on the sampling and estimation methods used for the two sample surveys.

Form EIA-826 Sampling

For the Form EIA-826, the sample is composed of those utilities that typically sell most of the electricity in each category (or end-use sector) in each State. The sample is made up of

- all investor-owned utilities (IOUs), except for a few small IOUs in Alaska
- all energy service providers
- all Federal utilities
- all entities selling in the public transportation sector
- a sample of the municipal and cooperative utilities.

The frames for Schedule B (energy service providers) and Schedule C (distribution companies) are not always complete, as information from the States on these entities is not always available in a timely manner. In these cases, the two types of respondents are reconciled at the State level and added to the State totals as residuals. (Classical ratio estimation can be used for variance estimation. See Knaub (1991), pages 776 and 777, "Incompletely Specified Auxiliary Data.") A zero-intercept, ratio model (see Royall and Cumberland, 1978) is used to estimate total sales and revenue by end-use sector and State. The sample eliminates the smaller respondents, thus reducing burden and reducing the source of non-sampling errors.

The Form EIA-826 sample design and estimation procedures employ a linear regression model to represent the relationship between the respondent's annual data value (e.g., sales) from the prior year and the corresponding monthly value for the current month. The prior year's annual data come from the Form EIA-861. Data values for units not in the sample are estimated from the prior year's annual data and the estimated parameters of the regression model. Data from sample units for which there is no historical Form EIA-861 data (e.g., units new to the target population) are not used to estimate the relationship between the prior year's annual value and the current monthly value. The reported current monthly data are, however, used in estimating totals for publication groups. (See Knaub (2002).) If a sample unit's annual data are deemed reliable, and its Form EIA-826 (monthly) data are considered unreliable, the annual data are used (as for the non-sampled units) to impute the monthly Form EIA-826 data. As mentioned above, a census is performed within the Form EIA-826 for the utilities and power marketers or energy service providers (ESP) data, and their totals are added to the estimated (imputed) entities to obtain the estimates for the entire universe.

Form EIA-826 Monthly Sample Selection from the Form EIA-861 Annual Frame:

The monthly cutoff sample thresholds for the Form EIA-826 were originally selected based on the criterion of having estimated relative standard error (RSE) values less than 1 percent for all publication groups. The RSE is a percentage measure of the precision of a survey statistic and is used in part as one way to measure sampling error induced by

sampling. RSEs are estimated using model-based predicted monthly values of the quantities of interest (revenues, sales, etc.) along with the corresponding annual (Form EIA-861) data for the units not in the monthly sample. Threshold values for the cutoff sampling have been adjusted over time to maintain low RSEs for the published estimates.

For 2008, the adjustments are based on a preliminary run of the regression imputation procedure using 2006 preliminary monthly data along with annual data from 2005. The cutoff threshold is revised downward (i.e., one or more additional sample units are added) for a sampling stratum (State crossed by industry sector) when both of the following criteria hold for either sales or revenue estimates:

1.) At least 1 month produced an RSE greater than 5 percent for a given State/sector.
2.) At least 2 other months had an RSE greater than 2 percent for the same State/sector as in item #1.

These criteria were chosen to maintain reasonably low RSEs for the published estimates without adding substantial burden to respondents or increasing the monthly processing burden for the EIA. The above criteria help ensure that the sample is not increased due to one or two questionable data points. Threshold values are only revised downward for strata that appear consistently prone to high variability.

The adjustments resulted in the addition of 20 respondents to the Form EIA-826 monthly sample. Of these, three additions are due to sales RSEs only, four are due to sales and revenue RSEs, and 13 additions are due to revenue RSEs only. In future years, similar procedures will be used to adjust the cutoff sample threshold values, as needed, in order to maintain the reliability of the estimates while minimizing costs and respondent burden.

Form EIA-923 Sampling

One of the goals of the new Form EIA-923 sample selection process is to reduce the sample size from the current Forms EIA-906/920 sample. Not only does this reduce respondent burden, but it also allows the EIA survey staff to focus its resources on a smaller sample to ensure a higher quality of data. A reduction in sample size is especially important in the commercial and industrial sectors due to sometimes questionable data quality and the difficulty in collecting data from many of the smaller facilities.

The cutoff sampling process for the Form EIA-923 sample is similar to the one described above for the monthly Form EIA-826 sample. A preliminary run of the regression imputation procedure was performed using 2006 finalized annual data. Monthly reported values plus annual values prorated across months then form the census for the year chosen. Gross generation is the main focus of the sample selection process and its high correlation with other data elements on the Form EIA-923 should ensure good results for other reported values.

Further experiments to adjust the cutoff sampling thresholds based on other data requirements will be performed as the opportunity permits. Future study should especially focus on such

variables as volumes and costs of fuels received by respondents, in order to evaluate the effects of the new sampling procedures on the ability of the EIA to impute data for respondents who formerly reported monthly on the EIA/FERC-423 forms.

Sampling parameters are assigned to each sampling stratum. The strata are defined by facility type, energy source, and geographic region. (See "publication groups" in Knaub (1999).) For instance, one stratum is identified as electric utilities burning coal in the South Atlantic Census Division. The types of stratification groups are briefly described below.

Facility Type Classification for Form EIA-923

The four facility type categories comprise seven sectors for which data are collected. These four categories, which correspond to the facility type classifications published in the Electric Power Monthly (EPM), are (1) electric utilities, (2) independent power producers, (3) commercial facilities, and (4) industrial facilities. Table 8 below shows the seven sectors. (Combined Heat and Power Plant is abbreviated CHP.)

Table 8. Facility Types

Sector Classification Number	Sector Classification Description	Facility Type Stratification Group
1	Regulated Electric Utility	Electric Utilities
2	IPP (Non-CHP)	Independent Power Producers
3	IPP (CHP)	Independent Power Producers
4	Commercial (Non-CHP)	Commercial Facilities
5	Commercial (CHP)	Commercial Facilities
6	Industrial (Non-CHP)	Industrial Facilities
7	Industrial (CHP)	Industrial Facilities

Energy Source Classification for Form EIA-923

The 14 energy source categories, which correspond to the energy source classifications published in the EPM, are aggregations of the 36 different fuel types for which data are collected on the survey. Table 9 gives the 14 energy source categories and the corresponding stratification categories. The energy source codes are defined in the instructions for completing Form EIA-923. (See Appendix C.)

Table 9. Energy Source Aggregations

Reported Energy Source Code	Energy Source Stratification Group
NG	Natural Gas
NUC	Nuclear

HPS[1]	Pumped Storage
WAT	Conventional Hydroelectric
PC	Petroleum Coke
GEO	Geothermal
SUN	Solar
WND	Wind
BFG, OG, PG	Other Gas
WDL, WDS, BLQ	Wood
OTH, MSN, TDF, PUR	Other Sources
BIT, LIG, SC, SUB, WC	Coal
RFO, DFO, JF, KER, OO, WO	Petroleum
AB, LFG, MSB, OBG, OBL, OBS, SLW	Waste

Geographic Regions Classification for Form EIA-923

The 10 geographic sampling groups correspond to 10 modified Census division regions published in the EPM. The States assigned to each division are shown in Table 10.

Table 10. State/Census Division Aggregations

States	Modified Census Divisions
AK, HI	Pacific Non-Contiguous
NJ, NY, PA	Mid-Atlantic
CA, OR, WA	Pacific Contiguous
AL, KY, MS, TN	East Central
AR, LA, OK, TX	West Central
IL, IN, MI, OH, WI	East North Central
CT, ME, MA, NH, RI, VT	New England
IA, KS, MN, MO, NE, SD, ND	West North Central
AZ, CO, ID, NT, NV, NM, UT, WY	Mountain Region
DE, DC, FL, GA, MD, NC, SC, VA, WV	South Atlantic

Sample Selection Criteria for Form EIA-923

The Form EIA-923 sample is chosen to provide reasonably accurate results for multiple attributes (published aggregate numbers) while minimizing the burden on the industry and the Federal government. The following five steps are used in selecting plants for the monthly sample:

1) Select preliminary cutoff samples based on nameplate capacity values.
2) Add sample units, where necessary, based on generation, consumption and stocks.
3) Add sample units, where necessary, to provide adequate sample counts for estimation groups.

[1] Pumped Storage facilities do not actually report energy source code HPS, rather they report energy source code WAT combined with a prime mover code of PS to differentiate them from conventional hydroelectric facilities. The energy source is renamed to HPS for simplicity sake only.

4) Add sample units, where necessary, to reduce relative standard errors (RSEs) of key estimates to acceptable levels.
5) Add other facilities, based on special-case criteria.

The first three steps are designed to ensure adequate coverage of the target population by including all of the largest contributors to key data elements. The fourth step helps ensure that the published estimates will meet reasonable reliability standards, which is the key goal, given acceptable resource expenditure. The final criterion covers special cases, as described below.

Facilities in the target population that meet any one of the sample selection criteria applied at any of the five steps are included in the final sample. Further, any additional prime movers and energy sources used by a sample facility are also included in the sample even if individually they did not meet any of the sample selection criteria. Each sample facility reports data for all combinations of prime mover and fuel source each month. All nuclear and pumped storage facilities are included in the monthly sample. The remainder of this section provides further detail on the sampling steps.

Step 1: Select Cutoff Samples Based on Nameplate Capacity. Initially, pre-determined capacity coverage percentages are tested to ensure a certain proportion of operational Form EIA-860 capacity is covered within each sampling group. Stand-by and back-up generators are not included in the operational capacity totals when data are aggregated to the level of prime mover, and only the largest consumed fuel source for each generator is used in identifying the sample groupings. Different coverage percentages are selected for each facility classification, and are applied to all regions and energy sources within each classification. When the capacity cutoff percentage yields a capacity cutoff of less than 25 megawatts, then a default value of 25 megawatts is used instead. Otherwise, the percentages of capacity included in the sample are listed below.

1) Electric utilities – 70 percent
2) Independent power producers – 70 percent
3) Commercial facilities – 50 percent
4) Industrial facilities – 50 percent.

Step 2: Add Units Based on Generation, Consumption, and Stocks. Facilities accounting for large percentages of actual past reported gross generation, fuel consumption, or fuel stocks, are added to the sample, even if their nameplate capacities fall below the capacity coverage percentage cutoff.

Step 3: Add Units to Ensure Adequate Sample in Estimation Groups. Estimation strata identical to those currently employed in the Form EIA-906/920 regression imputation system are examined. Units below the threshold value are added to any group with fewer than 10 usable observations, until the usable count is brought up to 10.

Step 4: Add Sample to Meet Reliability Standards. Weighted multiple regressions, identical to those currently employed in the Form EIA-906/920 imputation system, are run, and relative standard error (RSE or CV) estimates are calculated for each publication group by month. An

additional diagnostic measure, the RSESP, is calculated to indicate the adequacy of the regression model fit. Limits for both measures (RSE and RSESP) are set individually for each facility classification and applied to all energy sources for the U.S. total for each classification. If one or both of the error measures falls outside of the limits, the next largest facilities, ranked by gross generation, are included until the RSE/RSESP's are brought into a reasonable range. It is important to note that if only the RSESP estimate is out of range, then it is difficult to lower the estimate of RSESP based on sampling alone. In these cases, a change in modeling may be necessary. The RSE/RSESP data quality limits are outlined below.

1) Electric utilities – RSE less than 5 percent and RSESP less than 20 percent
2) Independent power producers – RSE less than 5 percent and RSESP less than 20 percent
3) Commercial facilities – RSE less than 10 percent and RSESP less than 30 percent
4) Industrial facilities – RSE less than 10 percent and RSESP less than 30 percent.

Step 5: Add Special Cases. Finally, additional facilities are added to the sample as necessary. These include storage-only facilities (used in estimating stocks); new facilities for which the EIA has no prior-year's annual data for use in regression imputation; and any large, easy to survey facilities which the survey staff identifies as being desirable in the sample.

EIA-923 Sampling Results

The new sampling methodology implemented with Form EIA-923 results in a 24-percent decrease in the number of sampled facilities, as shown in Tables 11 and 12. This reduces the amount of reported gross generation by approximately 7 percent. The lower sample coverage may increase the number of table cells in EIA publications for which estimates cannot be published due to high sampling variability. It is expected, however, that the new procedures will decrease the levels of non-sampling error affecting the published estimates.

Table 11. Form EIA-923 Sample Coverage by Facility Type

Facility Type	Total Count	Current Sample			Proposed Sample			Sample Count Change in Percent
		Count	Percent by Count	Percent by Volume	Count	Percent by Count	Percent by Volume	
Regulated Utilities	2,600	1,018	39	97	732	28	90	-28
Independent Power Producers	1,868	733	39	95	624	33	89	-15
Industrial Facilities	592	190	32	80	130	22	64	-32

Commercial Facilities	206	52	25	62	34	17	63	-35
Total	5,266	1,993	38	96	1,520	29	89	-24

Table 12. Form EIA-923 Sample Coverage by Energy Source

Energy Source	Total Count	Current Sample			Proposed Sample			Sample Count Change in Percent
		Count	Percent by Count	Percent by Volume	Count	Percent by Count	Percent by Volume	
Coal	280	200	71	98	156	56	89	-22
Geothermal	49	26	53	92	16	33	70	-38
Hydroelectric	1,332	349	26	84	198	15	67	-43
Natural Gas	1,540	583	38	91	435	28	81	-25
Nuclear	65	65	100	100	65	100	100	0
Other Gas	59	41	69	96	27	46	78	-34
Other Sources	115	61	53	92	53	46	86	-13
Petroleum	1,025	333	32	98	290	28	94	-13
Petroleum Coke	28	17	61	97	16	57	88	-6
Pumped Storage	39	39	100	100	39	100	100	0
Solar	11	10	91	99	11	100	100	+10
Waste	232	8	3	44	30	13	54	+275
Wind	271	131	48	92	81	30	76	-38
Wood	220	130	59	89	103	47	73	-21
Total	5,266	1,993	38	96	1,520	29	89	-24

Table 13 provides a comparison of the relative standard errors (RSEs) for State level-publication groups under the current sample and the proposed sampling procedures. The within-State groupings include breakouts by plant type and energy source. The counts shown in the table cover the entire year, so groups that had RSEs over the labeled amount in any 1 month are included in the final number. Note that the current criterion for not publishing an official statistic is that the corresponding RSE is larger than 50 percent.

Table 13. Form EIA-923 RSE Comparisons for Current vs. Proposed Sample

Type	Total	RSE > 50 percent	RSE > 20 percent	RSE > 10 percent
Current Sample	1,825	417	611	766
Proposed Sample	1,825	545	754	952

Graphic Representations of RSE/RSESP

For analysis purposes, when deciding on the sampling criteria to be used in order to provide customers with reasonably accurate data in a reasonable time frame with acceptable cost to the EIA and burden on the industry, graphs were used to display RSE and RSESP values and gross generation totals for the entire United States by facility type. As part of the process of determining the sample, reliability estimates computed from a sample of data collected in previous years were examined. The U.S. level was studied, but State level data and Census Division data were also considered. (Table 13 above shows data collected at the State level.) Following is an example of a U.S. level graph showing the range of estimated RSE and estimated RSESP values that pertained to each monthly gross generation estimate in 2006. This shows acceptable indications of accuracy for such a sample, for industrial facilities. It is anticipated that with such a reduced sample size, future data collections will have also have a reduced non-sampling error.

Figure 2 – U.S. Level - Industrial Facilities – All Energy Sources

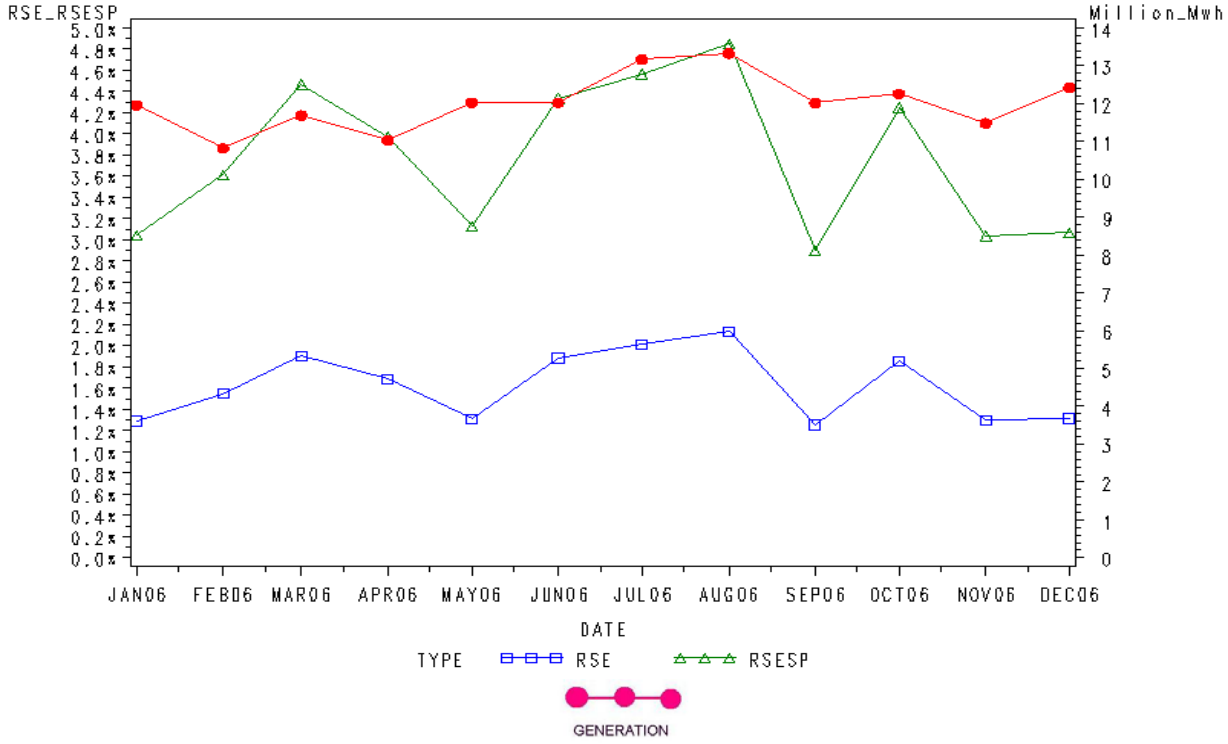

Table 14 displays a summary of the threshold values for nameplate capacity that were used for selecting cutoff samples of facilities in the 2006 frame. Facilities new to the frame in 2007 will be collected monthly regardless of their capacities due to a lack of annual regressor data for imputation. These cutoff values, given by facility type and energy source, were calculated using the same capacity coverage percentages described above, except that the coverage percentages pertain to strata representing higher levels of aggregation. Overall, the share of capacity that the monthly sample covers by fuel type and facility type are shown in Table 15. Facility types were aggregated into three strata: regulated utilities, independent power producers, and commercial/industrial facilities. Energy sources were aggregated into only coal, natural gas, conventional hydroelectric, petroleum, nuclear, pumped storage, and all other types. These cutoff levels may vary as the data are evaluated in the future.

Table 14. Form EIA-923 Capacity Cutoffs (megawatts)

Facility Type	Coal	Natural Gas	Hydroelectric	Petroleum	Other	Nuclear	Pumped Storage
Regulated Utilities	860	380	150	130	90	Census	Census
Ind. Power Producer	620	590	25	470	30	Census	Census
Commercial/Industrial	50	90	40	25	50	Census	Census

Table 15. Form EIA-923 Capacity Coverage (percent)

Facility Type	Coal	Natural Gas	Hydroelectric	Petroleum	Other	Nuclear	Pumped Storage
Regulated Utilities	90	83	72	77	92	100	100
Independent. Power Producer	88	83	66	84	74	100	100
Commercial/Industrial	68	65	75	57	67	100	100

REFERENCES:

The regression estimation/imputation procedures used for the Form EIA-826 and Form EIA-923 are documented and discussed in the on-line statistics journal, ***InterStat***, in the following articles:

- "Using Prediction-Oriented Software for Survey Estimation," at the following URL: http://interstat.stat.vt.edu/interstat/articles/1999/abstracts/g99001.html-ssi
- "Using Prediction-Oriented Software for Survey Estimation - Part II: Ratios of Totals," at the following URL: http://interstat.stat.vt.edu/interstat/articles/2000/abstracts/u00002.html-ssi
- "Using Prediction-Oriented Software for Survey Estimation - Part III: Full-Scale Study of Variance and Bias," at the following URL: http://interstat.stat.vt.edu/interstat/articles/2001/abstracts/u01001.html-ssi.

The method described in these articles is generally useful for both small area estimation and imputation, with adjustments as described in those documents. Additional documentation and references include:

(1) "Model-Based Sampling, Inference and Imputation," available on the EIA Web site at: http://www.eia.doe.gov/cneaf/electricity/forms/eiawebme.pdf

(2) "Weighting in Regression for Use in Survey Methodology," *InterStat*, available at: http://interstat.stat.vt.edu/InterStat/ARTICLES/1997/abstracts/A97001.html--ssi.

(3) "Some Applications of Model Sampling to Electric Power Data," ASA Proceedings of the Survey Research Methods Section, available at: www.amstat.org/sections/SRMS/proceedings/papers/1991_133.pdf

(4) Royall, R.M., and W.G. Cumberland (1978), "Variance Estimation in Finite Population Sampling," *Journal of the American Statistical Association,* 73, 351-358

(5) "The Classical Ratio Estimator," *InterStat,* available at: http://interstat.statjournals.net/YEAR/2005/abstracts/0510004.php

(6) "Cutoff Sampling and Inference," *InterStat,* available at: http://interstat.statjournals.net/YEAR/2007/abstracts/0704006.php.

B.3. Methods to Maximize Response Rates

For all of the EIA electric power respondents, the response rates are close to or equal to 100 percent. For 2006 annual data, all 7,914 annual respondents (aggregated across all surveys) submitted their data and typically only about 3-7 out of 2,291 monthly 2007 data respondents did not submit their data in any given month. To maximize response rates, the EIA forms have been designed and the instructions have been written to be clear and concise to help the respondent complete the forms. Data that are not expected to change from year-to-year or month-to-month are pre-populated on the forms. Forms and/or notifications are mailed or e-mailed early to maximize the time that respondents have to complete the surveys. As noted, the EIA Internet Data Collection (IDC) System makes forms available on-line as soon as respondents obtain a secure ID and password. Given the high IDC use rate in 2007 (80 percent of the annual reports and approximately 91 percent of the monthly reports are reported by IDC); most of those respondents will merely log on in the next data collection period and access their required forms. Form(s) due dates are the same each period so that respondents can schedule their completion activities. The notification and due dates for each survey are provided in Table 6.

The non-respondents are contacted by e-mail, telephone, and letter to request data submission until an insignificant non-response rate is obtained. Follow-up letters and e-mails citing failure to file the required form are mailed to all non-respondents. If no response occurs as a result of the letters, additional correspondence is sent from the Office Director and Administrator, if necessary, to higher level management officials requesting submission of the appropriate data. Statistical imputation fills any gaps created by the small amount of non-response.

Respondents who file via the IDC System are given the opportunity to either correct or explain unusual data during their submission. The explanations are reviewed by the EIA staff. Respondents are called if further clarification is needed. For those respondents that do not file via the IDC, but rather on a hardcopy of the form, telephone calls are made to confirm corrections or clarifications of any unusual data.

In addition, the EIA has recently developed an improved centralized frame system which affords all survey staff almost immediate knowledge of changes in plant ownership and/or contacts; such changes contributed to non-response in the past. The new system is

integrated with the IDC System so that access can be given to new owners and/or contacts quickly.

B.4. Tests of Procedures

The electric power surveys are established continuing surveys. Although the Form EIA-923 is new, the data being collected are the same as were collected through several other forms that have been discontinued. The Form EIA-860 was revised to include some data from a discontinued form as well. Modifications to the existing forms were made by the EIA staff. The testing of these new and revised forms has several parts. First, the forms were reviewed by internal EIA subject matter and survey methodology experts. The second phase of the testing involved sending draft forms to representatives of the major segments of the electric power industry. Finally the survey forms were tested with actual volunteer survey respondents. They were asked to review the forms and debriefed by EIA to make sure they understood the concepts being measured, could successfully navigate the forms, and had the data in their business records. Changes were made at all stages of testing to incorporate feedback.

B.5. Forms Consultation

During 2006, the Electric Power Division met with a variety of stakeholders to make them aware of the general proposals for form changes and to elicit their suggestions, concerns and needs. The following is a list of the organizations with whom the EIA met.

- American Council for an Energy Efficient Economy
- American Public Power Association
- American Statistic Association
- DOE, Office of Electricity Delivery and Energy Reliability
- DOE, Office of Fossil Energy
- Edison Electric Institute
- Electricity Consumers Resource Council
- Electric Power Supply Association
- Federal Energy Regulatory Commission
- National Association of Regulatory Utility Commissioners
- National Mining Association
- National Rural Electric Cooperative Association
- North American Electric Reliability Corporation
- 2007 EIA Energy Outlook, Modeling, and Data Conference.

For additional information concerning these surveys, please contact Jorge Luna-Camara at 202-586-3945 or at Jorge.Luna@eia.doe.gov. For information concerning this request

for OMB approval, please contact the agency Clearance Officer, Jay Casselberry, at 202-586-8616 or at jay.casselberry@eia.doe.gov.