

Exhibit 1a. Year 2023: Total Annual Respondent Burden and Cost of Reporting and Recordkeeping Requirements for Industry, Emission Guidelines for GHG Emissions for EGUs
(40 CFR part 60, subpart UUUUa)

Burden Item	(A) Hours/ Occurrence	(B) Occurrences/ Respondent/Year	(C) Hours/ Respondent/Year (A x B)	(D) Respondents/ Year	(E) Total Hours/Year (C x D)	(F) Technical Hours/Year (E x 0.79)	(G) Managerial Hours/Year (E x 0.09)	(H) Clerical Hours/Year (E x 0.12)	(I) Cost/Year
1. REPORTING REQUIREMENTS									
A. Read and Understand Rule Requirements ^a	40	1	40	277	11,080	5,540	5,540		\$1,211,914
B. Required Activities									
Modify existing monitoring system for net energy output ^{b,c}	516	1	516	277	142,932	142,932			\$12,882,747
C. Create Information	Incl. in 1B								
D. Gather Information	Incl. in 1B								
E. Report Preparation	N/A								
TOTAL ANNUAL LABOR BURDEN AND COST					154,012	148,472	5,540	0	\$14,094,661
AVERAGE ANNUALIZED COSTS (O&M)									
Recordkeeping/reporting supplies									\$282,500

^a Assumes one-time burden of 50 hours (based on an average reading rate of 100 words/minute) to read and understand rule requirements, divided equally among technical and managerial staff; respondents include all 277 facilities covered under the emission guidelines.

^b Includes the one-time modification of an existing monitoring system (including metering hardware and software engineering) to monitor, calculate, and report hourly net energy output into the ECPMS. Respondents include all 277 facilities covered under the emission guidelines.

^c Burden hours based on 1 FTE per facility per month for 3 months to modify the monitoring system; with a wage rate of \$90.13 per hour, the cost is estimated to be about \$46,500 per affected facility. No managerial or clerical labor is involved in this task (assume 100 percent technical labor).

Nationwide Respondent Assumptions

Respondents	No.	Notes
No. EGUs covered under emission guidelines	565	Boilers
No. facilities covered under emission guidelines	277	

Respondent Labor Rates

Labor Category	Respondent Labor Rates (May 2017)		
	Unloaded	Overhead Multiplier (110%)	Loaded
Industry (EGUs) ^a			
Technical	\$42.92	2.1	\$90.13
Managerial	\$61.25	2.1	\$128.63
Clerical	\$24.03	2.1	\$50.46
Composite			\$120.90

^a Unloaded labor rates from U.S. Department of Labor, Bureau of Labor Statistics, Occupational Employment Statistics, May 2017 National Industry-Specific Occupational Employment and Wage Estimates, NAICS 221100 - Electric Power Generation, Transmission and Distribution <https://www.bls.gov/oes/current/naics4_221100.htm>

Recordkeeping/Reporting Supplies (Annual O&M Costs)

Supply Item	Price per Item	Number per Respondent	Number of Respondents	Total
Data acquisition system (upgrade) ^{a,b}	\$500	1	565	\$282,500

^a One-time cost, incurred in 2020.

^b Respondents include all 565 EGUs covered under emission guidelines.

Exhibit 1b. Year 2025: Total Annual Respondent Burden and Cost of Reporting and Recordkeeping Requirements for Industry, Emission Guidelines for GHG Emissions for EGUs
(40 CFR part 60, subpart UUUUa)

Burden Item	(A) Hours/ Occurrence	(B) Occurrences/ Respondent/Year	(C) Hours/ Respondent/Year (A x B)	(D) Respondents/ Year	(E) Total Hours/Year (C x D)	(F) Technical Hours/Year (E x 0.79)	(G) Managerial Hours/Year (E x 0.09)	(H) Clerical Hours/Year (E x 0.12)	(I) Cost/Year
1. REPORTING REQUIREMENTS									
A. Read and Understand Rule Requirements	N/A								
B. Required Activities	N/A								
C. Create Information	Incl. in 1B								
D. Gather Information	Incl. in 1B								
E. Report Preparation									
Report hourly net energy output into ECPMS ^a	N/A								
TOTAL ANNUAL LABOR BURDEN AND COST					0	0	0	0	\$0
AVERAGE ANNUALIZED COSTS (O&M)									
Recordkeeping/reporting supplies									\$0

^a There are no reporting costs because the industry is required to report an entire suite of data, of which this data point is a very small percentage, due to the requirements of other rules to which they are subject.

Nationwide Respondent Assumptions

Respondents	No.	Notes
No. EGUs covered under emission guidelines	565	Boilers
No. facilities covered under emission guidelines	277	

Respondent Labor Rates

Labor Category	Respondent Labor Rates (May 2017)		
	Unloaded	Overhead Multiplier (110%)	Loaded
Industry (EGUs) ^a			
Technical	\$42.92	2.1	\$90.13
Managerial	\$61.25	2.1	\$128.63
Clerical	\$24.03	2.1	\$50.46
Composite			\$120.90

^a Unloaded labor rates from U.S. Department of Labor, Bureau of Labor Statistics, Occupational Employment Statistics, May 2017 National Industry-Specific Occupational Employment and Wage Estimates, NAICS 221100 - Electric Power Generation, Transmission and Distribution <https://www.bls.gov/oes/current/naics4_221100.htm>

Recordkeeping/Reporting Supplies (Annual O&M Costs)

Supply Item	Price per Item	Number per Respondent	Number of Respondents	Total
Data acquisition system (upgrade) ^{a,b}	\$500	1	0	\$0

^a One-time cost, incurred in 2020.

^b Respondents include all 565 EGUs covered under emission guidelines.

Exhibit 1c. Year 2030: Total Annual Respondent Burden and Cost of Reporting and Recordkeeping Requirements for Industry, Emission Guidelines for GHG Emissions for EGUs
(40 CFR part 60, subpart UUUUa)

Burden Item	(A) Hours/ Occurrence	(B) Occurrences/ Respondent/Year	(C) Hours/ Respondent/Year (A x B)	(D) Respondents/ Year	(E) Total Hours/Year (C x D)	(F) Technical Hours/Year (E x 0.79)	(G) Managerial Hours/Year (E x 0.09)	(H) Clerical Hours/Year (E x 0.12)	(I) Cost/Year
1. REPORTING REQUIREMENTS									
A. Read and Understand Rule Requirements	N/A								
B. Required Activities	N/A								
C. Create Information	Incl. in 1B								
D. Gather Information	Incl. in 1B								
E. Report Preparation									
Report hourly net energy output into ECPMS ^a	N/A								
TOTAL ANNUAL LABOR BURDEN AND COST					0	0	0	0	\$0
AVERAGE ANNUALIZED COSTS (O&M)									
Recordkeeping/reporting supplies									\$0

^a There are no reporting costs because the industry is required to report an entire suite of data, of which this data point is a very small percentage, due to the requirements of other rules to which they are subject.

Nationwide Respondent Assumptions

Respondents	No.	Notes
No. EGUs covered under emission guidelines	565	Boilers
No. facilities covered under emission guidelines	277	

Respondent Labor Rates

Labor Category	Respondent Labor Rates (May 2017)		
	Unloaded	Overhead Multiplier (110%)	Loaded
Industry (EGUs) ^a			
Technical	\$42.92	2.1	\$90.13
Managerial	\$61.25	2.1	\$128.63
Clerical	\$24.03	2.1	\$50.46
Composite			\$120.90

^a Unloaded labor rates from U.S. Department of Labor, Bureau of Labor Statistics, Occupational Employment Statistics, May 2017 National Industry-Specific Occupational Employment and Wage Estimates, NAICS 221100 - Electric Power Generation, Transmission and Distribution <https://www.bls.gov/oes/current/naics4_221100.htm>

Recordkeeping/Reporting Supplies (Annual O&M Costs)

Supply Item	Price per Item	Number per Respondent	Number of Respondents	Total
Data acquisition system (upgrade) ^{a,b}	\$500	1	0	\$0

^a One-time cost, incurred in 2020.

^b Respondents include all 565 EGUs covered under emission guidelines.

Exhibit 1d. Year 2035: Total Annual Respondent Burden and Cost of Reporting and Recordkeeping (40 CFR part 60, subpart UUUUa)

Burden Item	(A) Hours/ Occurrence
1. REPORTING REQUIREMENTS	
A. Read and Understand Rule Requirements	N/A
B. Required Activities	N/A
C. Create Information	Incl. in 1B
D. Gather Information	Incl. in 1B
E. Report Preparation	
Report hourly net energy output into ECPMS ^a	N/A
TOTAL ANNUAL LABOR BURDEN AND COST	
AVERAGE ANNUALIZED COSTS (O&M)	
Recordkeeping/reporting supplies	

^a There are no reporting costs because the industry is required to report an entire suite

Nationwide Respondent Assumptions

Respondents	No.
No. EGUs covered under emission guidelines	565
No. facilities covered under emission guidelines	277

Respondent Labor Rates

Labor Category	Re
	Unloaded
Industry (EGUs) ^a	
Technical	\$42.92
Managerial	\$61.25
Clerical	\$24.03
Composite	

^a Unloaded labor rates from U.S. Department of Labor, Bureau of Labor Statistics May 2017 National Industry-Specific Occupational Employment and Wage Estimation, Transmission and Distribution <<https://www.bls.gov/oes/current/n>>

Recordkeeping/Reporting Supplies (Annual O&M Costs)

Supply Item	Price per Item
Data acquisition system (upgrade) ^{a,b}	\$500

^a One-time cost, incurred in 2020.

^b Respondents include all 565 EGUs covered under emission guidelines.

Recordkeeping Requirements for Industry, Emission Guidelines for GHG Emissions for EGUs

(B) Occurrences/ Respondent/Year	(C) Hours/ Respondent/Year (A x B)	(D) Respondents/ Year	(E) Total Hours/Year (C x D)	(F) Technical Hours/Year (E x 0.79)
			0	0

of data, of which this data point is a very small percentage, due to the requirements of other rule

Notes
Boilers

Respondent Labor Rates (May 2017)	
Overhead Multiplier (110%)	Loaded
2.1	\$90.13
2.1	\$128.63
2.1	\$50.46
	\$120.90

, Occupational Employment Statistics,
 rates, NAICS 221100 - Electric Power
[naics4_221100.htm](#)>

Number per Respondent	Number of Respondents	Total
1	0	\$0

(G) Managerial Hours/Year (E x 0.09)	(H) Clerical Hours/Year (E x 0.12)	(I) Cost/Year
0	0	\$0
		\$0

s to which they are subject.

Exhibit 1d. Years 2023, 2025, and 2030: Summary of Respondent Burden and Cost of Reporting and Recordkeeping Requirements for Industry, Emission Guidelines for GHG Emissions for EGU's (40 CFR part 60, subpart UUUUa)

Summary of Annual Respondent Burden and Cost

Totals	Total Annual Labor Burden (Hours)	Total Annual Labor Costs	Total Annualized Capital Costs	Total Annual O&M Costs
Nationwide Total				
Year 2023	154,012	\$14,094,661	\$0	\$282,500
Year 2025	0	\$0	\$0	\$0
Year 2030	0	\$0	\$0	\$0
Year 2035	0	\$0	\$0	\$0
Average per Respondent				
Year 2023 ^a	556	\$50,883	\$0	\$500
Year 2025 ^b	0	\$0	\$0	\$0
Year 2030 ^c	0	\$0	\$0	\$0
Year 2035 ^c	0	\$0	\$0	\$0

^a Equal to estimate for each burden item in Exhibit 1a divided by the number of respondents in Exhibit 1a for that burden item, summed for all burden items.

^b Equal to estimate for each burden item in Exhibit 1b divided by the number of respondents in Exhibit 1b for that burden item, summed for all burden items.

^c Equal to estimate for each burden item in Exhibit 1c divided by the number of respondents in Exhibit 1c for that burden item, summed for all burden items.

^d Equal to estimate for each burden item in Exhibit 1c divided by the number of respondents in Exhibit 1d for that burden item, summed for all burden items.

Summary of Total Annual Responses

Information Collection Activity	Occurrence per Respondent per Year	Respondents per Year	Total Responses	Average
REPORT REQUIREMENTS				
Annual report preparation	0	277	0	
Total Annual Responses			0	
Total Number of Responses =				0
Average Responses per Respondent =				0
Average Hours per Response =				
Year 2020				0
Year 2025				0
Year 2030				0

Exhibit 2a. Year 2020: Total Annual Burden and Cost to the Agency, Emission Guidelines for GHG Emissions for EGUs (40 CFR part 60, subpart UUUUa)

Activity	(A) Hours/ Occurrence	(B) Occurrences/ Facility/Year	(C) Hours/ Facility/Year (A x B)	(D) Facilities/ Year	(E) EPA Total Hours/Year (C x D)	(F) EPA Technical Hours/Year (E x 0.79)	(G) EPA Managerial Hours/Year (E x 0.09)	(H) EPA Clerical Hours/Year (E x 0.12)	(I) Cost, \$
1. REPORTING SYSTEMS									
Program ECPMS system ^a	200	1	200	1	200	158	18	24	\$12,941
2. MODELING, ENERGY EFFIC., ADMIN.	N/A								
TOTAL ANNUAL LABOR BURDEN AND COST					200	158	18	24	\$12,941

^a Includes 200 hours of EPA Headquarters one-time burden for programming ECPMS system to receive quarterly data from affected facilities.

EPA Staff Labor Rates

Labor Category	Labor Rates (2018)		
	Unloaded ^a	Overhead Multiplier (60%)	Loaded
EPA Headquarters			
Technical (Grade 13, Step 5)	\$41.07	1.6	\$65.71
Managerial (Grade 15, Step 5)	\$57.09	1.6	\$91.34
Clerical (Grade 9, Step 5)	\$23.82	1.6	\$38.11

^a Unloaded labor rates from U.S. Office of Personnel Management < https://www.opm.gov/policy-data-oversight/pay-leave/salaries-wages/salary-tables/pdf/2018/GS_h.pdf >

Exhibit 2b. Year 2025: Total Annual Burden and Cost to the Agency, Emission Guidelines for GHG Emissions for EGUs (40 CFR part 60, subpart UUUU)

Activity	(A) Hours/ Occurrence	(B) Occurrences/ Facility/Year	(C) Hours/ Facility/Year (A x B)	(D) Facilities/ Year	(E) EPA Total Hours/Year (C x D)	(F) EPA Technical Hours/Year (E x 0.79)	(G) EPA Managerial Hours/Year (E x 0.09)	(H) EPA Clerical Hours/Year (E x 0.12)	(I) Cost, \$
1. REPORTING SYSTEMS									
Program ECPMS system	N/A								
2. REPORT REVIEW, MODELING, ENERGY EFFIC., ADMIN.	N/A								
TOTAL ANNUAL LABOR BURDEN AND COST					0	0	0	0	\$0

EPA Staff Labor Rates

Labor Category	Labor Rates (2018)		
	Unloaded ^a	Overhead Multiplier (60%)	Loaded
EPA Headquarters			
Technical (Grade 13, Step 5)	\$41.07	1.6	\$65.71
Managerial (Grade 15, Step 5)	\$57.09	1.6	\$91.34
Clerical (Grade 9, Step 5)	\$23.82	1.6	\$38.11

^a Unloaded labor rates from U.S. Office of Personnel Management <https://www.opm.gov/policy-data-oversight/pay-leave/salaries-wages/salary-tables/pdf/2018/GS_h.pdf>

Exhibit 2c. Year 2030: Total Annual Burden and Cost to the Agency, Emission Guidelines for GHG Emissions for EGUs (40 CFR part 60, subpart UUUUa)

Activity	(A) Hours/ Occurrence	(B) Occurrences/ Facility/Year	(C) Hours/ Facility/Year (A x B)	(D) Facilities/ Year	(E) EPA Total Hours/Year (C x D)	(F) EPA Technical Hours/Year (E x 0.79)	(G) EPA Managerial Hours/Year (E x 0.09)	(H) EPA Clerical Hours/Year (E x 0.12)	(I) Cost, \$
1. REPORTING SYSTEMS									
Program ECPMS system	N/A								
2. REPORT REVIEW, MODELING, ENERGY EFFIC., ADMIN.	N/A								
TOTAL ANNUAL LABOR BURDEN AND COST					0	0	0	0	\$0

EPA Staff Labor Rates

Labor Category	Labor Rates (2018)		
	Unloaded ^a	Overhead Multiplier (60%)	Loaded
EPA Headquarters			
Technical (Grade 13, Step 5)	\$41.07	1.6	\$65.71
Managerial (Grade 15, Step 5)	\$57.09	1.6	\$91.34
Clerical (Grade 9, Step 5)	\$23.82	1.6	\$38.11

^a Unloaded labor rates from U.S. Office of Personnel Management <https://www.opm.gov/policy-data-oversight/pay-leave/salaries-wages/salary-tables/pdf/2018/GS_h.pdf>

**EXHIBIT 2d. Year 2035: Total Annual Burden and Cost to the Agency, Emission Guidelines for GHG E
FGUs (40 CFR part 60, subpart UUUUa)**

Activity	(A) Hours/ Occurrence	(B) Occurrences/ Facility/Year
1. REPORTING SYSTEMS		
Program ECPMS system	N/A	
2. REPORT REVIEW, MODELING, ENERGY EFFIC., ADMIN.	N/A	
TOTAL ANNUAL LABOR BURDEN AND COST		

EPA Staff Labor Rates

Labor Category	Labor Rates (2018)	
	Unloaded ^a	Overhead Multiplier (60%)
EPA Headquarters		
Technical (Grade 13, Step 5)	\$41.07	1.6
Managerial (Grade 15, Step 5)	\$57.09	1.6
Clerical (Grade 9, Step 5)	\$23.82	1.6

^a Unloaded labor rates from U.S. Office of Personnel Management < <https://www.opm.gov/policy-d>

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(C) Hours/ Facility/Year (A x B)	(D) Facilities/ Year	(E) EPA Total Hours/Year (C x D)	(F) EPA Technical Hours/Year (E x 0.79)	(G) EPA Managerial Hours/Year (E x 0.09)	(H) EPA Clerical Hours/Year (E x 0.12)	(I) Cost, \$
		0	0	0	0	\$0

3)
Loaded
\$65.71
\$91.34
\$38.11

[ata-oversight/pay-leave/salaries-wages/salary-tables/pdf/2018/GS_h.pdf](https://www.ata-oversight.com/pay-leave/salaries-wages/salary-tables/pdf/2018/GS_h.pdf)>

Exhibit 2e. Years 2023, 2025, 2030, and 2035: Summary of Agency Burden and Cost, Emission Guidelines for GHG Emissions for EGUs (40 CFR part 60, subpart UUUUa)

Totals	Total Annual Labor Burden (Hours)	Total Annual Costs
Total		
Year 2023	200	\$12,941
Year 2025	0	\$0
Year 2030	0	\$0
Year 2035	0	\$0
Average per Response		
Year 2023	0	\$0
Year 2025	0	\$0
Year 2030	0	\$0
Year 2035	0	\$0