

Independent Statistics & Analysis U.S. Energy Information Administration

Supporting Statement for Survey Clearance

Part A: Justification

Form EIA-23L Annual Survey of Domestic Oil and Gas Reserves

Form EIA-23S Annual Survey of Domestic Oil and Gas Reserves

Form EIA-64A Annual Report of the Origin of Natural Gas Liquids Production

OMB No. 1905-0057



Table of Contents

Part A: Justificationi
Introduction2
A.1. Legal Justification3
A.2. Needs and Uses of Data4
A.3. Use of Technology
A.4. Efforts to Identify Duplication7
A.5. Provisions for Reducing Burden on Small Businesses8
A.6. Consequences of Less-Frequent Reporting8
A.7. Compliance with 5 CFR 1320.58
A.8. Summary of Consultations Outside of the Agency8
A.9. Payments or Gifts to Respondents8
A.10. Provisions for Protection of Information8
A.11. Justification for Sensitive Questions9
A.12. Estimate of Respondent Burden Hours and Cost9
A.13. Annual Cost to the Federal Government10
A.14. Changes in Burden11
A.15. Reasons for Changes in Burden12
A.16. Collection, Tabulation, and Publication Plans12
A.17. OMB Number and Expiration Date13
A.18. Certification Statement13

Introduction

The U.S. Energy Information Administration (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, pursuant to 42 USC 7035 (d), EIA is not required to obtain the approval by any other officer or employee of the U.S. Government with respect to the substance of any statistical or forecasting technical reports.

Request is made for approval of the EIA Oil and Gas Reserves System Surveys (OMB No. 1905-0057) with changes. These surveys are:

- EIA 23L, Annual Report of Domestic Oil and Gas Reserves (County-level Report)
- EIA-23S, Annual Report of Domestic Oil and Gas Reserves (Summary Version)
- EIA-64A, Annual Report of the Origin of Natural Gas Liquids Production

Changes to survey forms

The requested approval is for a three-year extension with changes.

There is one minor change to Form EIA-23L. Coalbed methane is removed as a response category choice for *Type Code* reported in section 2. Fields previously classified as coalbed methane will be merged into the conventional gas category. Coalbed methane, used to have its own type code, CB, but as of December 31, 2017 coalbed methane proved reserves have shrunk to represent only 2.6% of total U.S. natural gas proved reserves. EIA will not include coalbed methane proved reserves as a separate category of natural gas proved reserves in its annual report. Coalbed reservoirs should be labeled as conventional, type code C.

The changes to Form EIA-64A are:

Report the following natural gas plant liquid products separately instead of reporting total natural gas liquids production

Ethane Propane Normal Butane Isobutane Natural Gasoline Plant condensate

Discontinue collecting total natural gas plant liquid (NGL) production. The form will calculate total NGL production by summing the reported values for the separate NGL products reported on the form.

Additionally, three new data elements are added to Form EIA-64A.

1. Total outlet of residue natural gas (dry) produced,

- 2. Natural gas and electricity used on site at the plant. Natural gas plants that use grid electricity for fuel instead of generating their own electricity from natural gas (consuming some of their processed gas) do not require state or federal air quality permits for a new or modified source of emissions.
- 3. Quantity of outlet residue natural gas sent to the pipeline so EIA can accurately measure the amount of gas shrinkage from the NGL extracted from the gas stream.

Adding these data elements also reduces the errors caused by the respondents' calculating gas shrinkage by using the conversion factors shown in the Instructions, to perform the calculation manually for determining the volumetric shrinkage factor by natural gas liquid component. Cognitive interviews of a sample of respondents indicated that these 3 additional data elements are information that respondents keep in their records as part of their normal course of business and is accessible by respondents.

A.1. Legal Justification

The authority for this mandatory data collection is provided by the following provisions:

(a) 15 U.S.C. 772(b) states:

"All persons owning or operating facilities or business premises who are engaged in any phase of energy supply or major energy consumption shall make available to the (Secretary) such information and periodic reports, records, documents, and other data, relating to the purposes of this Act, including full identification of all data and projections as to source, time and methodology of development; as the (Secretary) may prescribe by regulation or order as necessary or appropriate for the proper exercise of functions under this Act."

(b) 15 U.S.C. 764(b) states that to the extent authorized by 15 U.S.C. 764(a), the (Secretary) shall:

(2) ... Assess the adequacy of energy resources to meet demands in the immediate and longer range future for all sectors of the economy and for the general public;...

(9) ...collect, evaluate, assemble, and analyze energy information on reserves, production, demand, and related economic data; ...

(12) ...perform such other functions as may be prescribed by law."

(c) As the authority for invoking 15 U.S.C. 764(b), 15 U.S.C. 764(a) in turn states:

"Subject to the provisions and procedures set forth in this Act, the (Secretary) shall be responsible for such actions as are taken to assure that adequate provision is made to meet the energy needs of the Nation. To that end, he shall make such plans and direct and conduct such programs related to the production, conservation, use, control, distribution, rationing, and allocation of all forms of energy as are appropriate in connection with only those authorities or functions...

(a) ... specifically transferred to or vested in him by or pursuant to this Act...

(c) ... otherwise specifically vested in the (Secretary) by the Congress."

(d) Authority for invoking 15 U.S.C. 764(a), 15 U.S.C. 790a, states that the Administrator of the EIA:

"...(Shall) establish a National Energy Information System which shall ... contain such information as is required to provide a description of and facilitate analysis of energy supply and consumption...

"(b) ...the System shall contain such energy information as is necessary to carry out the Administration's statistical and forecasting activities, ..., such energy information as is required to define and permit analysis of –

- the institutional structure of the energy supply system including patterns of ownership and control of mineral fuel and nonmineral energy resources and the production, distribution, and marketing of mineral fuels and electricity;
- (2) the consumption of mineral fuels, nonmineral energy resources, and electricity by such classes, sectors, and regions as may be appropriate for the purposes of this Act;
- (3) industrial, labor, and regional impacts of changes in patterns of energy supply and consumption."

In addition, section 657 part 2 of the DOE Reorganization Act 1977, states:

... Secretary shall, as soon as practicable after the end of each fiscal year, make a report to the President . . . The report shall include:

(2) an estimate of (A) the domestic and foreign energy supply on which the United States will be expected to rely to meet such needs in an economic manner with due regard for the protection of the environment, the conservation of natural resources, and the implementation of foreign policy objectives, and (B) the quantities of energy expected to be provided by different sources (including petroleum, natural and synthetic gases, coal, uranium, hydroelectric, solar, and other means) and the expected means of obtaining such quantities;

A.2. Needs and Uses of Data

Estimates of U.S. oil and gas reserves are reported annually to comply with the reporting requirement of section 657 of the DOE Reorganization Act. Many U.S. government agencies need information on proved oil and gas reserves and the quality, reliability, and usefulness of reserves estimates to support their mission and official use. Among these are the U.S. Energy Information Administration (EIA), Department of Energy (DOE); Bureau of Ocean Energy Management (BOEM), Department of Interior; Internal Revenue Service (IRS), Department of the Treasury; and the Securities and Exchange Commission (SEC). Each of these organizations has specific purposes for collecting, using, or estimating proved reserves. EIA has a congressional mandate to provide accurate annual estimates of U.S. proved crude oil, natural gas, and natural gas liquids reserves, and EIA presents annual reserves data in EIA reports to meet this requirement. The BOEM maintains estimates of proved reserves to carry out their responsibilities in leasing, collecting royalty payments, and regulating the activities of oil and gas companies on Federal lands and water. Accurate reserve estimates are important, as the BOEM is second only to the IRS in generating Federal revenue. For the IRS, proved reserves and

occasionally probable reserves are an essential component of calculating taxes for companies owning or producing oil and gas. The SEC requires publicly traded petroleum companies to annually file a reserves statement as part of their 10-K filing. The basic purpose of the 10-K filing is to provide public investors with a clear and reliable financial basis to assess the relative value, as a financial asset, of a company's reserves, especially in comparison to other similar oil and gas companies.

The Government also uses the resulting information to develop national and regional estimates of proved reserves of domestic crude oil and natural gas to facilitate national energy policy decisions. These estimates are essential to the development, implementation, and evaluation of energy policy and legislation. Data are used directly in EIA Web reports concerning U.S. crude oil and natural gas reserves, and are incorporated into a number of other Web reports and analyses.

The information provided by the Oil and Gas Reserves System (OGRS) data collections is used by the Department of Energy as input into the following web products issued by EIA:

- U.S. Crude Oil and Natural Gas Proved Reserves Annual Report, <u>http://www.eia.doe.gov/oil_gas/natural_gas/data_publications/crude_oil_natural_gas_reserves</u> /cr.html
- Natural Gas Monthly, http://www.eia.gov/naturalgas/monthly/pdf/ngm_all.pdf
- Natural Gas Annual, https://www.eia.gov/naturalgas/annual/pdf/nga16.pdf
- Annual Energy Review, <u>http://www.eia.gov/emeu/aer/contents.html</u>
- Annual Energy Outlook, <u>http://www.eia.gov/forecasts/aeo/er/</u>
- Short-Term Energy Outlook, <u>http://www.eia.gov/forecasts/steo/</u>

Form EIA-23L Annual Report of Domestic Oil and Gas Reserves, collects data on U.S. proved reserves of crude oil and natural gas. Each operator selected as part of the sample each year must file Form EIA-23L regardless of their total survey year production levels. These data are used to develop national and regional estimates of proved reserves of domestic crude oil, natural gas, and lease condensate, and to facilitate national energy policy decisions. Data reported on this survey provide credible, verifiable national and regional information on the proved reserves of crude oil, natural gas, and natural gas liquids. These data include proved reserves and production for crude oil, lease condensate, and natural gas by state and federal offshore regions.

Form EIA-23S, Annual Survey of Domestic Oil and Gas Reserves, collects less detailed data from a sample of small operators on reserves of crude oil, natural gas, and natural gas liquids. These data are used to generate summary reports at a State or geographic subdivision level.

Form EIA-64A provides data that are used to estimate natural gas plant liquids production and reserves by state and federal offshore regions. Data collected are plant and respondent identification, origin of natural gas received and natural gas liquids produced, plant fuel use, gas shrinkage resulting from natural gas liquids extracted, and dry natural gas. These data are used by EIA in many reports and analysis that discuss crude oil and natural gas reserves and production. The EIA-64A data are used for generating estimates of EIA's dry natural gas production (natural gas that remains after natural gas liquids are extracted). The estimate for production of total natural gas plant liquids (NGPL) generated from the EIA-64A data is used by EIA to calculate the extraction loss from wet natural gas production so that EIA may accurately estimate dry natural gas production. All EIA publications are available on EIA's Internet site (<u>http://www.eia.gov</u>).

Every year the Oil and Gas Journal (<u>http://www.ogj.com/index.cfm</u>) copies and publishes the EIA's proved reserves estimates as the official reserve estimates for the U.S. as part of their coverage of international crude oil reserves. EIA's proved reserves data series is widely used in the petroleum industry by consultants and the trade press. Recent articles citing EIA proved reserves data include:

- February 14, 2018: <u>https://texasenergyreport.com/blog/2018/02/14/oil-natural-gas-proved-</u>reserves-increased-in-2016/
- February 15, 2018: https://www.upi.com/Even-though-Texas-improved-total-US-proved-oilreserves-held-steady/5941518703242/

The Trade Press Articles below reprinted EIA's Press Release on proved reserves verbatim:

- <u>https://www.oilandgas360.com/u-s-natgas-reserves-oil-stands-pat-2016-eia/</u>
- <u>http://www.4-traders.com/news/EIA-Energy-Information-Administration-U-S-proved-reserves-of-natural-gas-increase-5-oil-reserve--25986388/</u>

The data series from these surveys provide additional benefits, such as:

- Fulfilling EIA's mission to provide credible, reliable, and timely energy information
- Providing a data base for use in forecasting, policy making, planning and analysis activities
- Serving as an official data bank available to Congress and other government agencies on the proved reserves of crude oil, natural gas, and natural gas liquids in the United States
- Providing a source of data for other government agencies, business firms, trade associations, and private research and consulting organizations for analysis, projections, and monitoring purposes.

A.3. Use of Technology

In an effort to reduce respondent burden, multiple reporting options for the Forms EIA-23L and EIA-64A are provided.

An electronic version of the Form EIA-23L is provided on the EIA website as a download. This electronic system is called "Reserves Information Gathering System" (RIGS). RIGS is a self-executable database software a user can download from the EIA website and use to fill out and submit the form. It allows a user to upload the previous year's RIGS data, which saves time filling out the form. The RIGS program has to be downloaded anew each year from the EIA website.

Operators may complete the Form EIA-23L using the RIGS software. In the rare instance where an operator cannot successfully download or install RIGS software, the operator can request from EIA a CD-ROM version of the RIGS application.

EIA provides Adobe Acrobat (PDF) file format versions of all the Oil and Gas Reserves System survey forms and instructions on EIA's website. Respondents may print the materials, complete them, and return them to EIA via U.S. Mail or fax. A file created by the RIGS software can be sent by secure file transfer.

EIA provides spreadsheet versions of the EIA-64A on its website. Survey respondents may download this version, complete it, and return it to EIA by Secure File Transfer, fax, or U.S. Mail.

A.4. Efforts to Identify Duplication

The OGRS data collections do not duplicate other information collections. Also, EIA survey staff are very familiar with U.S. oil and natural gas proved reserves data, and there are no other independent, reliable, and accurate data that can serve as a substitute for the information collected on the OGRS surveys.

Several sources collect production of natural gas and crude oil from the same respondents, but these data cannot replace the collection of production on Form EIA-23 because it is critical that the production numbers collected reflect production from the reported reserves (See Supporting Statement Part B). Matching reserves numbers reported on Form EIA-23 to production numbers collected from another source would be invalid due to changes in operator holdings and estimates over time.

Information from state, federal, or commercial listings of oil and gas well operators has failed to provide the information that the OGRS data collections provide. At this time, state agencies do not collect proved reserves information from oil and/or gas well operators.

The Department of the Interior (DOI) and Bureau of Land Management (BLM) do not collect proved reserves information – their data collection is on acreage of land leased, drilling permits issued, and production from leases on federal land. The DOI Bureau of Ocean Energy Management (BOEM) collects proved reserves and water depth information on developments in the Federal Offshore region, but publishes its own reports one year later than EIA. Because of the limited geographic coverage and the delay in releasing reserves data, the DOI information is not an acceptable alternative to the Form EIA-23L survey.

Oil and gas well operators who are publically-owned companies are required to file their estimate of proved reserves with the Securities and Exchange Commission (SEC). However, these SEC estimates of proved reserves are not sufficient to replace EIA's estimates for the entire U.S., because only publically-held companies file with the SEC (though many operators in the U.S. are privately-owned), and the companies report to the SEC only the percentage of the reserves they own, which can be an amount significantly less than the total volume of reserves within a field.

EIA has determined that other sources of proved oil and gas reserve data cannot replace or approximate the information provided by the OGRS data collections, because of differences in classifying the data,

inconsistent data quality, incomplete and infrequent reporting, and data unavailability. Form EIA-64A is the only source of natural gas liquids production data by area of origin known to EIA.

A.5. Provisions for Reducing Burden on Small Businesses

The largest respondents to the Form EIA-23L have wells in 200 counties or more across the United States, while the smallest respondents have wells in 10 counties or fewer. The reporting burden for the remaining small operators combined, is slightly less than the old burden for all small operators because the number of entries on Line 2.1 on Form EIA-23L is expected to be similar, but production estimates by county should be less burden than field-level estimates for small operators. EIA selects the largest producers to report in the sample for Form EIA-23L and minimizes the reporting burden for small operators.

A.6. Consequences of Less-Frequent Reporting

Less frequent reporting from survey respondents would not permit EIA to meet its mandate of providing timely, reliable information on oil and gas reserves.

A.7. Compliance with 5 CFR 1320.5

The data are being collected consistent with the guidelines in 5 C.F.R. 1320.6, to reduce the public's paperwork burden.

A.8. Summary of Consultations Outside of the Agency

On August 10, 2018, EIA published a Federal Register Notice (Volume 83, Number 155, page 39738) inviting public comments on the proposed extension of the survey forms. In addition, a copy of the notice was placed on EIA's website. Notices are also sent to respondents and several lists serves of customers that EIA maintains. Cognitive testing interviews were held with operators of natural gas processing plants regarding the proposed changes to Form EIA-64A. As a result of these interviews, improvements were made to the revised Form.

One comment was received by email on September 26, 2018 regarding the proposed changes, disputing the change in burden assessment for Form EIA-64A. EIA replied directly to the email sender in a response email on October 26, 2018.

A.9. Payments or Gifts to Respondents

Payments or gifts will not be provided to respondents as incentives to report data to EIA.

A.10. Provisions for Protection of Information

Form EIA-23L and Form EIA-23S contain the following data protection statement:

The annual data on the production of crude oil, lease condensate, and natural gas reported on Form EIA-23L are considered public information. These data elements may be released in company-identifiable form and will not be protected from disclosure in identifiable form when releasing statistical aggregate information. All other information reported on Form EIA-23L will be protected and not disclosed to the public, to the extent that the information satisfies the criteria for exemption under the Freedom of Information Act (FOIA), 5 U.S.C. §552, the DOE regulations, 10 C.F.R. §1004.11, implementing the FOIA, and the Trade Secrets Act, 18 U.S.C. §1905.

The Federal Energy Administration Act requires EIA to provide company-specific data to other federal agencies when requested for official use. The information reported on the Form EIA-23L may also be made available, upon request, to another component of the Department of Energy (DOE); to any Committee of Congress, to the Government Accountability Office, or to other federal agencies authorized by law to receive such information. A court of competent jurisdiction may obtain this information in response to an order. The information may be used for any non-statistical purposes such as administrative, regulatory, law enforcement, or adjudicatory purposes.

Disclosure limitation procedures are applied to the protected statistical data published from Form EIA-23L survey information to ensure that the risk of disclosure of identifiable information is very small.

Confidential information collected on Form EIA-23L may be provided to United States Department of the Interior offices (BOEM and the United States Geological Survey [USGS]) for statistical purposes, only, in conducting their resource estimation activities.

Form EIA-64A

Form EIA-64A contains the following data protection statement:

The data reported on Form EIA-64A will be protected and not disclosed to the public, to the extent that it satisfies the criteria for exemption under the Freedom of Information Act (FOIA), 5 U.S.C. §552, the DOE regulations, 10 C.F.R. §1004.11, implementing the FOIA, and the Trade Secrets Act, 18 U.S.C. §1905.

The Federal Energy Administration Act requires EIA to provide company-specific data to other federal agencies when requested for official use. The information reported on this form may also be made available, upon request, to another component of the Department of Energy (DOE); to any Committee of Congress, the Government Accountability Office, or to other federal agencies authorized by law to receive such information. A court of competent jurisdiction may obtain this information in response to an order. The information may be used for any non-statistical purposes such as administrative, regulatory, law enforcement, or adjudicatory purposes.

Disclosure limitation procedures are applied to the statistical data published from Form EIA-64A survey information to ensure that the risk of disclosure of identifiable information is very small.

Confidential identifiable information collected on Form EIA-64A may be provided to United States Department of Interior offices (BOEM and USGS) in conducting their resource estimation activities.

A.11. Justification for Sensitive Questions

There are not any questions of a sensitive nature in the OGRS data collections.

A.12. Estimate of Respondent Burden Hours and Cost

The overall annual burden for the OGRS data collections is estimated to be 30,100 hours. This total is based on the following per response burden hours shown in Table A.1. For the EIA-23L the weighted average burden per response is 45 hours (22,500 hours/500 respondents). This estimate is based on 110 hours per response for the largest producers by volume (an estimated 120 respondents), and 40 hours per response for mid-sized producers (an estimated 140 respondents), and 15 hours per response

for small producers (an estimated 240 respondents) as shown in Table A2. This estimate was based on the profile of small producers and the average number of fields to be reported per response, which, at 15 hours per response, is less than half the 40 hours of burden per response from each mid-sized producer. There are 600 respondents to the EIA-64A, with a burden per response estimate of 6 hours. This results in a total annual burden of 30,100 hours shown in Table A1. The annual costs of the OGRS data collections to the public are estimated to be \$2,228,002 based on an hourly wage of \$74.02 x 30,100 hours.

EIA Form Number/Title	Annual Reporting Frequency	Number of Respondents	Annual Number of Responses	Burden Hours Per Response	
Form EIA-23L/Annual Survey of Domestic Oil and Gas Reserves (County Version)	1	500	500	45.00	22,500
Form EIA-23S/Annual Survey of Domestic Oil and Gas Reserves (Summary Version)	1	500	500	8.00	4,000
Form EIA-64A/Annual Report of Natural Gas Liquids Production	1	600	600		,
TOTAL		1.600	1.600		30.100

Table A1. Estimated Respondent Burden

Table A2. Distribution Of Respondents To Form EIA-23L By ProductionVolume Size Categories

EIA Form Number/Title	Annual Reporting Frequency	Number of Respondents		Burden Hours Per Response	
Large	1	120	120	110	13,300
Mid-Sized	1	140	140	40	5,600
Small	1	240	240	15	3,600

A.13. Annual Cost to the Federal Government

The annual costs of the OGRS data collections to EIA, including personnel, for development/maintenance, collection, processing, analysis, and publication, are estimated to be \$2,228,002 based on an hourly wage of \$74.02 x 30,100 hours.

A.14. Changes in Burden

The following table summarizes the changes to annual respondent reporting burden.

											Annual	Number of Re	psonses		Annual Burden Ho	ırs
	EIA Form Number/Title	Annual Reporting Frequency	Number of Respondents (Previously Approved)	Number of Respondents (Requested)	Annual Number of Responses (Previously Approved)	Annual Number of Responses (Requested)	Burden Hours Per Response (Previously Approved)	Burden Hours Per Response (Requested)	Hours	(Requested)	Change Due to Agency Discretion	Change Due to Adjustment in Agency Estimate		Change Due to Agency Discretion	Change Due to Adjustment in Agency Estimate	Adjustment
23L		1	650	500	650	500	45.0	45.0	29,250	22500	-150	0	-150	-6,750	0	-6,750
235	i	1	0	500	0	500	8.0	8.0	0	4000	500	0	500	4,000	0	4,000
644	A	1	600	600	600	600	6.0	6.0	3,600	3600	0	0	0	0	0	0
TO	ΓAL		1,250	1,600	1,250	1,600			32,850	30,100	350	0	350	-2,750	0	-2,750

Table A3. Changes in Burden

A.15. Reasons for Changes in Burden

Total respondent reporting burden for the OGRS data collection is estimated at 30,100 hours. This is a reduction of 2,750 hours from the previously-approved clearance. The reduction in the number of responses and burden hours is due to a reduction in the sample size for Form EIA-23L from 650 to 500 respondents and is shown as a Change Due to Agency Discretion in Table A.3. There is no change in the burden per response for Form EIA-23L. No burden numbers were submitted for Form EIA-23S during the last clearance in 2016 so that shows as increase of 500 responses because that is the size of the sample and an increase of 4,000 hours because the burden per response for Form EIA-23S remains unchanged at 8 hours. There are no changes either in the number of respondents or the burden per response for Form EIA-64A, as shown in Table 3. Cognitive research showed that when asked whether the changes to Form EIA-64A would increase or decrease their burden, 47% of the participants responded "no change", 20% responded "less time" and 33% responded that their reporting time would "increase". Based on these findings, no changes in the burden per response for Form EIA-64A is requested.

	Requested	Program Change Due to Agency Discretion	Change Due to Adjustment in Agency Estimate	Previously Approved
Total Number of Responses	1,600	350	0	1,250
Total Time Burden (Hr)	30,100	-2,750	0	32,850

Table A4. ICR Summary of Burden

A.16. Collection, Tabulation, and Publication Plans

Plans to tabulate and publish data collected by the OGRS surveys are as follows:

Approximate Time Survey Forms are Initially Made Available:

Item	Date*:
EIA 64A	February
EIA 23L	February
EIA 23S	February
Due Date For Response:	
Item	Date:
EIA 64A	April
	Арп
EIA 23L	April

Final data for tabulation (EIA-64A)	June
Final data for tabulation (EIA-23)	September
Publication Schedule:	
Item	Date:
Item Reserves Report	Date: October 31

A.17. OMB Number and Expiration Date

The OMB approval expiration date and OMB number will be displayed on all of the Oil and Gas Reserves System survey forms (Forms EIA-23L, EIA-23S and EIA-64A).

A.18. Certification Statement

Explain each exception to the certification statement identified in Item 19 of OMB Form 83-I.