

U.S. Energy Information Administration

Office of Energy Statistics

Office of Oil, Gas, and Coal Supply Statistics

Supporting Statement for Survey Clearance

U.S. Energy Information Administration's (EIA) Oil and Gas Reserves System Surveys:

FORM EIA-23L, Annual Survey of Domestic Oil and Gas Reserves (Field Version)

Form EIA-23S, Annual Survey of Domestic Oil and Gas Reserves (Summary Version) – Requesting Suspension

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

OMB No. 1905-0057

Part A:

Background and Proposal

Original Date: February 2013

Table of Contents

INTRO	ODUCTION	.1
CHAN	IGES	.1
A.	JUSTIFICATION	.2
A.1	Legal Authority	.2
A.2	Needs for and Uses of the Data	3
A.3	Use of Information Technology	.4
A.4	Efforts to Reduce Duplication	.4
A.5	Burden Reduction for Small Entities	.5
A.6	Consequences of Less Frequent Data Collection	5
A. 7	Compliance with 5 CFR 1320.6	.6
A.8	Summary of Consultations outside the Agency	.6
A.9	Remuneration	.6
A.10	Disclosure of Information	.6
A.1 1	1 Justification for Sensitive Questions	.7
A.12	2 Reporting Burden Estimates	.7
A.13	3 Total Annual Cost to Respondents	.8
A.14	4 Annualized Costs to the Federal Government	.8
A.15	Reasons for Changes in Burden	.9
A.16	Schedule for Collecting and Publishing Data	10
A.17	7 OMB Number and Expiration Date	10

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, by law, its data, analyses, and forecasts are independent of approval by any other officer or employee of the U.S. Government.

Request is made for approval of the Energy Information Administration's (EIA) Oil and Gas Reserves System Surveys (OMB No. 1905-0057). These surveys are:

- EIA 23L, Annual Survey of Domestic Oil and Gas Reserves
- EIA-23S, Annual Survey of Domestic Oil and Gas Reserves
- EIA-64A, Annual Report of the Origin of Natural Gas Liquids Production

CHANGES

The requested approval is for a three-year extension with changes of the Form EIA-23L data collection, extension of the Form EIA-64A data collection without changes, and the suspension of the Form EIA-23S data collection, all starting in the year 2013.

EIA proposes to enhance the statistical methods for deriving the sample and calculating estimated summary-level data for publication for the Form EIA-23L data collection. This data collection will now involve a cut-off sampling approach, while the Form EIA-64A data collection will continue to utilize a census of the survey frame. (These sampling methods are described in the Supporting Statement, Part B). The published reserves data for the States of Illinois, Indiana, and Tennessee under the "Miscellaneous States" grouping will be published "as reported" (i.e., will no longer estimate reserves for these three states). EIA also proposes to suspend the Form EIA-23S and collect similar data in a revised sample for the Form EIA-23L data collection. In addition, EIA proposes to update the Form EIA-23L instructions with the current EIA definitions of terms used.

The proposed change in sampling for the Form EIA-23L is estimated to decrease total burden hours for respondents in completing the surveys and decrease survey error. EIA will use a production database from Drilling Info (DI) as the basis for the cutoff sampling. However, DI does not have current data for three small-volume oil and gas production states (Illinois, Indiana, and Tennessee), so the cutoff sampling process cannot be used.

Natural gas and oil production from the three small-volume states, Illinois, Indiana and Tennessee, accounted for 0.1 percent, 0.1 percent, and 0.5 percent, respectively, of total U.S. production in 2011. Instead of using DI information, samples of operators in these states must be built from lists of oil and gas companies licensed to do business in the state, Internet searches, and past reports on the Forms EIA-23L and EIA-23S. Summary-level data (U.S. level) may be published including "as reported" quantities for these states; no estimation for the total state population will be generated for these states. The reserves for these individual states

will not be published individually, but will be included under the Miscellaneous States category in EIA publications.

A. JUSTIFICATION

A.1 Legal Authority

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

- (a) Section 13(b), 15 U.S.C. 772(b), of the Federal Energy Administration Act of 1974 (FEA Act), Public Law 93 275, 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) Section 5(b), 15 U.S.C. 764(b), of the FEA Act, states that to the extent authorized by Section 5(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 Section 5(b), above, Section 5(a), 15 U.S.C. 764(a), of the FEA Act 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 Section 5(a) of the FEA Act is provided by Section 52, 15 U.S.C. 790a, of the FEA Act which 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
 - (1) 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."

A.2 Needs for and Uses of the Data

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, Natural Gas, and Natural Gas Liquids Reserves Annual Report, http://www.eia.doe.gov/oil gas/natural gas/data publications/crude oil natural gas reserves/ cr.html
- Natural Gas Monthly, http://www.eia.gov/naturalgas/monthly/pdf/ngm_all.pdf
- Annual Energy Review, http://www.eia.gov/emeu/aer/contents.html
- Annual Energy Outlook, http://www.eia.gov/forecasts/aeo/er/
- Short-Term Energy Outlook, http://www.eia.gov/forecasts/steo/

Form EIA-23L provides credible, verifiable national and regional data 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-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, and gas shrinkage resulting from natural gas liquids extracted.

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 is 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 (http://www.eia.gov).

Every year the Oil and Gas Journal (http://www.ogj.com/index.cfm) publishes the reserves estimates from the EIA-23 as the official reserve estimates for the U.S. as part of their coverage of international crude oil reserves. Both the Forms EIA-23 and EIA-64A data series are also widely used in the petroleum industry by consultants and the trade press. Recent articles citing EIA proved reserves (Form EIA-23) data include:

- August 2, 2012: *U.S. proved reserves increased sharply in 2010* http://www.eia.gov/todayinenergy/detail.cfm?id=7370
- July 20, 2012: *Geology and technology drive estimates of technically recoverable resources* http://www.eia.gov/todayinenergy/detail.cfm?id=7190
- November 2, 2011: Bakken formation oil and gas drilling activity mirrors development in the Barnett http://www.eia.gov/todayinenergy/detail.cfm?id=3750
- July 8, 2011: *Review of Emerging Resources: U.S. Shale Gas and Shale Oil Plays* http://www.eia.gov/analysis/studies/usshalegas/
- December 3, 2012 Oil and Gas Journal: Worldwide Production and Proved Reserves

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 Information 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). 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 OGRS 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, email, fax, or U.S. Mail.

A.4 Efforts to Reduce Duplication

The OGRS data collections do not unnecessarily duplicate other information collected by EIA. Also, EIA survey staff is very familiar with U.S. oil and natural gas proved reserves data, and there are not any 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 this data cannot replace the collection of production on the 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 the 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 embargoes the release of proved reserves data for at least 3 years. 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 known to EIA.

A.5 Burden Reduction for Small Entities

Some respondents to the EIA-23L survey will be small businesses that typically operate in only a small number of fields that produce crude oil and/or natural gas. (Reserves and production data are collected by field.) As a result, their reporting burden is less than that for large operators which operate in a large number of fields. In addition, the proposed sample methodology for the Form EIA-23L will require fewer of the small operators to report. Only the largest of the small operator group (those that formerly reorted on the 23S) will be required to report on the EIA-23L form. Because they are more likely to have records that correspond with the data request, this change should not have a significant impact on them. Most of the small operators will no longer be surveyed. The burden hours per response for the largest small operators that will now report on the EIA-23L will increase slightly, on average, from 8 hours per response to 15 hours. This is not a significant impact on them. Previously, operators reporting on the EIA-23S only reported their production by state, and reporting their reserves was optional. An insignificant amount of reserves data was collected on the EIA-23S form. The EIA-23L will require all respondents to report reserves and production by field.

The largest respondents to the Form EIA-23L may have roughly 1,000 fields, while the smallest respondents will have five or fewer. The new reporting burden for the remaining small operators combined, is slightly less than the old burden for all small operators because a greatly reduced number of small operators will be reporting on the Form EIA-23L. The reduction in smaller respondents from the proposed suspension of the Form EIA-23S more than offsets the per respondent burden increase for those small operators that will complete the more detailed Form EIA-23L. Note that Form EIA-23L is mandatory for all sampled operators.

A.6 Consequences of Less Frequent Data Collection

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 1320.6

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 the Agency

On June 6, 2012, EIA published a Federal Register Notice (Volume 77, Number 109, page 33453) inviting public comments on the proposed extension of the survey forms. In addition, a copy of the notice was placed on EIA's website. No comments were received regarding these notices.

A.9 Remuneration

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

A.10 Disclosure of Information

Form EIA-23L

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

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) for statistical purposes, only, 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 Reporting Burden Estimates

The overall annual burden for the OGRS data collections is estimated to be 43,635 hours. This total is based on the per response burden hours used in the previous authorization. For the EIA-23L that is 120 hours per response for the largest producers by volume (an estimated 160 respondents), and 40 hours per response for mid-sized producers (an estimated 420 respondents). Small producers in the new sample will complete Form EIA-23L instead of the Form EIA-23S. The burden estimate for these small producers (an estimated 270 respondents) is 15 hours per response. 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 per response burden of 6 hours. This results in a total aggregate across the two surveys of 1,450 respondents per year with 30.1 hours per response, for a total annual burden of 43,635 hours.

For the EIA-23L form the reduction in the number of respondents comes from the change in sampling methodology, from a combination cutoff and proportional-to-size sample to a pure cutoff sample. This eliminates many of the very small respondents. The cutoff was selected using a relative standard error (RSE) target of 5% or less for each basin/state area. Previously, the cutoff portion of the combination sample was based on a national production cutoff. The new pure cutoff sample is based on a cutoff for each basin/state area determined by a 5% RSE. This reduces the number of respondents from roughly 1200 down to 850. The new sample maintains the high national coverage (90 plus percent) and improves the RSE in some individual areas with high RSEs.

The table on the next page shows the burden hours calculated for the proposed OGRS surveys package.

Table 1: OGRS Surveys Burden Information						
EIA Form Number	Title	Number of Respondents Per Year	Number of Reports Annually	Total Number of Responses	Burden Hours Per Response*	Annual Burden Hours
Form EIA- 23L	Annual Survey of Domestic Oil and Gas Reserves (Field Version)	850	1	850	47.1	40,035
Form EIA- 23S (Proposed to be suspended)	Annual Survey of Domestic Oil and Gas Reserves (Summary Version)	0	0	0	0.0	0
Form EIA- 64A	Annual Report of the Origin of Natural Gas Liquids Production	600	1	600	6.0	3,600
Total OGRS Surveys		1,450		1,450		43,635

^{*} Note: the Burden Hours per Response is a weighted average across different sizes of respondents.

Table 1: OGRS Surveys Burden Information

A.13 Total Annual Cost to Respondents

The estimated total cost of respondent burden hours is \$2,981,143 (43,635 hours x \$68.32 per hour). An average per hour cost of \$68.32 is used because that is the average loaded (salary plus benefits) cost for an EIA employee. EIA assumes that the survey respondent workforce completing surveys for EIA is comparable with the EIA workforce.

EIA does not believe that respondents incur any additional start-up or operational costs in connection with the OGRS surveys other than the costs associated with the burden hours.

A.14 Annualized Costs 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 \$1,400,000.

A.15 Reasons for Changes in Burden

Total respondent reporting burden for the OGRS data collection, estimated at 43,635 hours, will be reduced by over 2,700 hours from the previously-approved OGRS burden hours, because the burden from adding respondents to the Forms EIA-23L and EIA-64A will be more than offset by the reduction in the

number of respondents from the proposed suspension of the Form EIA-23S survey and the revised sample methodology for the EIA-23. The total burden for respondents to Form EIA-64A increases because the survey is a census, and new natural gas processing plants are being built to tap new production areas with significant tight oil and shale gas reserves. These new processing plants are therefore added to the survey frame. The total burden for the Form EIA-23L increases because of the proposed addition to the sample of small volume respondents that previously completed the Form EIA-23S.

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

Table 2: OGRS Surveys Change in Annual Burden								
EIA Form and Title	Old Number of Respondents Per Year	New Number of Respondents Per Year	Old Number of Annual Responses	New Number of Annual Responses	Change (Annual Responses)	Old Burden (Hours)	New Burden (Hours)	Change (Burden Hours)
Form EIA-								
23L, "Annual								
Survey of								
Domestic Oil								
and Gas								
Reserves								
(Field	6.40	050	6.40	050	202	20.000	40.005	4.055
Version)"	648	850	648	850	202	38,960	40,035	1,075
Form EIA-								
23S, "Annual								
Survey of								
Domestic Oil and Gas								
Reserves								
(Summary								
Version)"	544	0	544	0	-(544)	4,352	0	-(4,352)
Form EIA-	544	, ,	544	0	(344)	4,552	Ů	(4,332)
64A, "Annual								
Report of the								
Origin of								
Natural Gas								
Liquids								
Production"	509	600	509	600	91	3,054	3,600	546
T . LOGDS								
Total OGRS	1,701	1,450	1,701	1,450	(251)	46,366	43,635	(2.721)
Surveys	1,/01	1,450	1,/U1	1,430	(231)	40,300	43,033	-(2,731)

Table 2: OGRS Surveys Change in Annual Burden

A.16 Schedule for Collecting and Publishing Data

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 (Field-level version)	March (June 2013*)

Due Date For Response:

Item	Date:
EIA 64A	April
EIA 23L (Field-level version)	May (July 12, 2013*)
Final data for tabulation (EIA-64A)	June
Final data for tabulation (EIA-23)	October 31

Publication Schedule:

Item	Date:
Reserves Report	January
Supporting materials	January 31

^{*}Dates in parenthesis are revised dates for collecting 2012 data, only. Schedules for collecting data for calendar years 2013 and 2014 are anticipated to revert to traditional deadlines.

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 and EIA-64A).