

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

Cognitive Testing Protocol

March 2018

(This protocol is a guide – the questions presented here won't necessarily be asked exactly as worded in the protocol or in this order. It is important to note that not all questions will be asked in every interview.)

Research Goals:

- To assess EIA-64A respondents' ability to report their inlet natural gas and natural gas plant liquids by area of origin.
- To determine if respondents can report the dry natural gas they use as fuel at the processing plant, and their consumption of electricity purchased from the grid.
- To determine if respondents can report the outlet residue gas produced by the plant and the volume of that gas sent to a pipeline for consumption.
- To estimate any changes in reporting burden associated with collecting this information and obtain feedback on appropriateness of current reporting burden

Purpose of Interview

Let me start by telling you a little about what we will be doing today:

- Introduce self and observers
- The questions are about potential changes to Form EIA-64A Annual Report of the Origin of Natural Gas Liquids Production

Part A – Introduction

- Before we start, could you please share with us a little more about yourself and your company?
- Do you fill out Form EIA-64A?
- How long have you been completing this form?
- Do you complete any other EIA surveys for your company?
- Are you familiar with the current instructions for Form EIA-64A?
 - Are the instructions helpful/useful?

Part B Burden (Current burden is 6 hours)

Now let's talk about how much time and effort it takes you to currently complete this form.

- How long does it take you to fill out the form?
- Does filling out this form require data or input from anyone else?
- How much time does it take you to gather the information for this report?
 - Briefly describe your process for gathering the data needed to fill out the current form?

- o Using the current form, you have to take your plant's total NGPL production and then breakout the quantity of each subcomponent and then apply the conversion factors shown on page 4 of the instructions, how long did that step take you?
 - *[NOTE: Whatever time the respondent provides, this should be subtracted from burden at the end when you are calculating burden because respondents will no longer need to do this step in the reporting process.]*
- Once you have gathered the information needed, how long does it take you to fill out the report and submit your data to EIA?
- Adding the time it takes you to gather the information and the time it takes for you to complete the report and submit your data, what is the total amount of time it takes you to file your report? *[NOTE: Burden for this form is 6 hours, if respondent indicates that it takes < 3 hours or > 12 hours ask how they are able to report so quickly or why it takes so long.]*
 - o (If the sums do not equal total burden) What other aspect of gathering and filling out this form do you factor into your burden figure?
- In the past, is this the usual time that it takes your company to report this information?

Part C- Overview

EIA is considering modifying Form EIA-64A to collect detailed information on natural gas liquids production. With these changes, respondents no longer need to apply conversion factors to convert their barrels to cubic feet. Respondents only need to report their NGPL production in thousands of barrels and EIA will apply the conversion factors when processing the data. Also, some additional data items were added such as the plant's outlet of residue gas, residue gas sent to a pipeline, and electricity use.

Part D - Terminology

EIA is interested in ensuring that the language and terminology we use is understood and reflective of the industry

- What term do you use to refer to the natural gas coming into the plant?
- What do you call the processed natural gas that leaves the plant?
- What is your definition of the term "Tailgate Gas"?
 - o Is this the same as the term "Tail Gas"?
- What is your definition of the term "Residue Gas"?
- What is your definition of the term "Outlet Gas"?
 - o Are these terms synonyms? If not, how do they differ?
 - o Are there terms commonly used in the industry/your organization?
- What is your definition of the term "Plant shrinkage"?
 - o (If needed) What factors does your company use to determine this figure?

Part E - Gas Processing

Let's discuss your facility's gas processing activity. EIA is interested in collecting natural gas inlet volumes and individual NGPL component information on an Area of Origin basis. The next few questions pertain to your company's records on gas processing and NGPL production.

- What kind of gas processing facility do you report for on Form EIA-64A?

- (Cryogenic, absorption, refrigeration, CO2 cycling, gas sweetening, straddle plan, Joule-Thompson, isomerization, standalone fractionator, etc.)
- Do you report for more than one gas processing facility? How many?
- Does this facility have an onsite fractionator?
- Does your company measure the volume of wet inlet gas that comes into the plant?
 - How does your company track that information?
 - Is it metered or does the supplier provide that data?
- Does your company measure the volume of [use Interviewee's terminology or as a prompt] Outlet Gas, Residue Gas, or Tailgate Gas that is produced after processing the wet gas?
- Is all of the Outlet/Residue gas, produced from this plant, sent to the pipeline? Or are there other uses for the residue gas, other than as a fuel for processing? (Ex. sent back to the field for injection or for other field use)
- Which NGPL components does your facility track in its gas processing? [For in-person interviews, show participant sheet with components listed]
 - Ethane
 - Propane
 - Normal Butane
 - Isobutane
 - Natural Gasoline
 - Condensate
 - Total NGPL Products
 - Do you track anything else? (Helium, nitrogen, hydrogen sulfide, sulfur, CO2, LNG, methane, etc.?)
- What units of measurement does your facility use to track its NGPL component production and inlet wet gas?
- Do you process condensate at this plant?
 - (If needed) Do you track the products generated from the condensate separately from the products generated from the inlet natural gas?
 - (If needed) How do you currently report that information on Form EIA-64A?
 - (If needed) Can you report only the NGPL products and outlet gas generated from the natural gas inlet stream?
- (For those companies with more than 1 Area of Origin) How does your company track the inlet gas and NGPL components by area of origin?
 - Do you always know the origin of the inlet gas and NGPLs?
- If EIA asked you to report your inlet gas and NGPL components on an area of origin basis, could you explain the process of gathering that information?

- EIA compares the calculated volume of outlet/residue gas to the reported volume of outlet/residue gas. (The sum of wet gas received minus the gas equivalent volume of all the NGPLs minus the gas used as fuel equals total outlet residue gas.). Does your company make similar comparisons on the production runs at the plant?
 - (If needed) What is your expected or acceptable difference between the two figures? 5%? 10%? 15?
 - (If needed) What are common reasons the two figures differ?
 - Meter differences
 - Water vapor from processing
 - Removal of non-hydrocarbon gases
 - Sulfur production, etc.
 - (If needed) If the difference between the two figures is above a certain threshold, what steps would you take to verify the accuracy of your numbers?

- Do you track the outlet/residue gas sent to a pipeline?
 - How do you track that information?
 - Is this measurement provided by the pipeline?

- Does your company track the amount of electricity consumed and purchased at your gas processing facility?
 - Do you generate your own electricity? What portion? From gas?
 - If EIA asked you to report the amount of electricity your gas processing facility uses, could you describe how you would go about gathering and reporting that information?
 - How much additional time would it take for you to gather and report that information to EIA?

- Does your plant ever use NGPLs as fuel use? Before or after the NGPLs are officially measured?
 - How does your company track that information?

Additional Burden

- We talked about some changes to this form if it takes approximately x hours to file Form EIA-64A, would these changes reduce or increase the amount of time it currently takes you to complete this form? Is reporting NGPL component information in barrels on an Area of Origin basis without converting to a gas equivalent volume easier than the current process? (Include both the time it would take to gather the information, record it on the form and report it to EIA)
 - If yes, how much less time?
 - If no, what will cause you more time? How much more time?
 - [If a lot more] Probe why it takes a lot more time
 - Earlier in the beginning of the interview, you stated that it took you x time to convert the subcomponent NGPL barrels to MCF gas equivalent, would this time be saved if EIA applied the conversion factors to the quantities of NGPL components that you report?

Part H – Wrapping Up

- Do you have any suggestions on how to improve this report?

- Do you have any problems when completing the current Form EIA-64A?

Thank you for your time!