



Parsing the EIA oil and gas forecasts

The U.S. Energy Information Administration (EIA) collects and analyzes energy data, and makes projections. It is one of the world's foremost energy analytical agencies. Its work strongly influences U.S. energy policy and is critical for all aspects of the energy market.

In December, a small group of us met with the EIA administrator and several key aides. The meeting followed a letter that the Association for the Study of Peak Oil and Gas-USA sent to Energy Secretary Steven Chu outlining key questions regarding information that EIA provides. The meeting was held to discuss EIA's oil and gas data collection, analysis and projections. We hoped to better understand the agency's methodology, procedures, and constraints and to establish ongoing communication with EIA on its work. We wanted to learn more about how EIA compiles data that lead to its projections, and to offer alternative sources of data and expertise to aid that effort.

EIA officials were forthcoming and discussed their priorities and the challenges they face, while we discussed our goals and concerns. We stressed that: 1) oil and gas (O&G) supply projections should properly consider technical and economic factors that may constrain U.S. production; and 2) EIA should recognize broader trends that may increase the risk of a world oil crisis. The major benefit of the meeting was that we gained a better understanding of the factors that shape EIA's work, and of the opportunities for providing constructive, ongoing input.

For example, we learned that EIA information on drilling costs and other expenses for O&G production may not be very robust, and their projection models may underestimate the significance of increasing production costs as a supply constraint. Further, EIA's projections seem to be more demand-driven than supply-driven. This has been a long-standing concern of analysts. We are reviewing the assumptions and inputs of EIA's models to assess how supply constraints may be

factored into their projections. In addition to offering assistance in evaluating such cost data, we suggested tracking different types of oil and gas separately, to more properly assess their varying technical and cost constraints.

As regards production and consumption, we found that EIA, despite being the nation's central source of energy information, does not have a clear mandate to track global trends or to collect and report international energy data. This is an area where outside experts could provide assistance. We recognize that there are major problems with inconsistent data from different countries. However, interpretations of global trends can be made, based on data from reliable sources.

We learned that EIA's interaction with experts on technical O&G issues may not be regular and rigorous. EIA works with the American Statistical Association's Committee on Energy Statistics, but this focuses on statistical methods. EIA participates in meetings and conferences, where technical issues are discussed, but these events seem to be ad hoc and lack continuity. To build a closer relationship with EIA, as well as promote input from diverse outside experts, we offered to help organize a series of meetings to address questions and issues raised. We also posited the need for a broader advisory body of outside experts.

Other issues seem to lie outside EIA's defined scope of work. For example, examining global oil export trends—oil supply and consumption in general—seems to be something that EIA is not focused on. Global net oil export issues, however, will continue to present serious risks to the U.S. and the world. Focusing attention on U.S. "energy independence" can be misleading.

Even though EIA has little mandate (or budget) to collect international data, there may be an opportunity for highlighting issues identified by examining global information from other reliable sources. We plan to pursue future workshops, meetings, and other opportunities to develop and enhance EIA's information in this area.

The original letter to Secretary Chu highlighted a fundamental concern about global oil supply, observing that it has not increased substantially since 2005, despite a near-tripling in inflation-adjusted oil prices. We noted that it may be appropriate for EIA to examine such fundamental issues.

It is important to recognize the constraints—budgetary and political—that EIA operates under. EIA produces "projections" rather than "forecasts," because they must be based on legislation in place at the time that the projection is made. For example, any projections made do not include carbon taxes, cap-and-trade regulations, or strict federal pricing rules, because such policies have not, at present, been legislated.

Cost and price issues are central to the oil industry. It is not about how much oil is in the ground, but the *rate* at which oil can be economically brought to market, and the prices that different global consumers can afford to pay. EIA agrees that this is important, and we hope to help EIA develop and enhance work in this area.

We agreed with EIA on many issues, including the workforce. There is a huge impending wave of personnel retirements coming by the end of the decade, and adequate numbers of experienced staff may not be available to replace them. This is a serious concern for everyone.

We discussed evaluations of past EIA oil and gas projections. Among EIA's problems, its projections over the past decade for U.S. natural gas supplies and prices have often been incorrect. However, in an evaluation I conducted several years ago on U.S. long-range energy forecasts, EIA's work turned out to be as good as, or better than, that of any other organization. Most importantly, credit is due to EIA for engaging outside experts, who have sometimes criticized the agency. **WO**

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