

**Written Testimony of Commissioner Tony Clark
Federal Energy Regulatory Commission**

**Before the
Committee on Energy and Commerce
Subcommittee on Energy and Power
United States House of Representatives**

**Hearing on
Evaluating the Role of FERC in a Changing Energy Landscape**

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Mr. Chairman, Ranking Member Rush, and members of the Subcommittee, thank you for the invitation to appear before you today. I am Tony Clark, and it is my honor to serve as a Commissioner of the Federal Energy Regulatory Commission (FERC).

Your hearing is a timely one. Major changes in the energy landscape are having a significant impact on the work of the FERC.

It would be difficult for any one concise piece of testimony to adequately describe all of the major subject matters in energy today. So rather than attempt to cover all areas of potential interest, I will confine my prepared testimony to a few areas of the Commission's work. And of course, I would be pleased to address any of these topics, or any other area of Commission jurisdiction you may wish to explore during the question and answer period.

In my opinion, the biggest story in energy today, perhaps the biggest story in decades, is the emergence of the shale oil and gas plays, brought about by advancements in horizontal drilling and fracking technologies.

My own home state of North Dakota hosts one of the most prominent plays, the Bakken. In my previous job, as a Commissioner and Chairman of the North Dakota Public Service Commission, I had first-hand experience with both the benefits and challenges that come along with the development of these resources.

Not only is the shale revolution a major domestic story, it is a major global story. The long-held assumption that America was destined to be dependent on other nations for our natural gas through increasing imports, much as we have traditionally been for our crude oil, has been proven false.

According to the Energy Information Administration (EIA), in an economy that consumes nearly 25 Tcf of gas a year, we only import a little over 3 Tcf. And about 95% of that total comes from a friendly neighbor, Canada.

LNG imports, which are global in nature, now account for only about 5% of our total imports – most of that at just two terminals. There were only 64 LNG cargoes in 2012. Total LNG imports are down 50% from just one year before, and down from a peak in 2007, when LNG made up 16% of all our imported natural gas.

This flood of domestic gas has upended utility planning models and market fundamentals. Gas at the sustained prices we are now seeing is dramatically impacting where utilities are putting their money. As an example, in 1990, coal was responsible for 53% of electricity production, with just 13% coming from natural gas. By 2040, the EIA projects 35% of electricity coming from coal, and 30% from natural gas. I would note however, that predicting these sorts of things is highly speculative. Environmental Protection Agency rules

will have a dramatic impact on this future, and coal prohibitive rules could drive these numbers in even more dramatic directions.

Such nationwide projections also tend to gloss over the highly regional nature of our electricity grid. Some regions of the nation, such as the Central, the South and Appalachia are much more reliant on coal than others such as New England or the Northwest, so the implications of potential fuel switch will differ greatly.

The Commission is heavily engaged in the work of assessing these fuel mix changes and responding to the regional implications of it. For example, the FERC has undergone significant efforts with regard to the implications of gas-electric interdependency as more electric generators simultaneously turn to natural gas as a fuel source. This effort is important nationwide, but is particularly crucial for a region like New England, where geography and state-level policy choices have created an electricity delivery network that is very dependent on a constrained supply of natural gas.

This analysis takes on a different shade in other regions. For example, in the Midwest, coal has traditionally been the primary source of electricity. But today a combination of affordable shale gas and impending EPA regulations is creating a situation in which there are increasing concerns about the adequacy of electricity generating reserve margins in the 2016 timeframe.

Nonetheless, under any scenario, it is clear gas will play a much bigger role than any of us thought ten years ago.

On the liquid petroleum side of the equation, as a result of the drilling taking place on non-federal lands, our dependence on foreign oil has decreased steadily since 2005. Again,

according to the EIA, today, our nation produces about 60% of what it consumes. We are the world's largest consumer of oil and the world's second largest producer of crude oil, with some analysts projecting the U.S. to soon be the world's top producer.

Of the 40% that is imported, nearly a third comes from Canada and 10% from Mexico. Put another way, approximately three-quarters of our U.S. daily consumption is covered by production from the U.S., Canada and Mexico.

In sum, our nation's newfound liquid petroleum and natural gas wealth is making us economically better-off than we otherwise would be, and also making us more energy secure than we have been in decades.

As you might expect, the shale revolution in both liquids and natural gas production is having a tremendous impact on the work of the FERC. We see this in a number of our different jurisdictional areas, which I will now highlight.

One of the areas where the FERC is seeing an impact on our operations as a result of these activities is with regard to pipelines.

As a former state regulator in an energy producing state, I saw first-hand the importance of pipelines in serving new and expanding production areas. Pipelines are not fool-proof, no method of transportation is, but pipelines are still the safest, most efficient way to get a vitally important product to market. For those producing regions of the country, pipelines help decrease over-the-road traffic; a very real problem in certain areas. Producers, mineral rights owners and all levels of government benefit by being able to receive greater value for the product when there is access to available takeaway capacity.

For consumers, pipelines mean better access to affordable supplies of energy. For businesses, this means a lower cost of production and greater global competitiveness.

For all of us, and our environment included, pipeline access, along with new associated processing facilities mean reduced flaring and conservation of an important natural resource.

As the Committee is aware, the FERC has broad oversight of both economic and siting regulation of the natural gas pipeline industry. In recent years, the Commission has seen a shift in this type of work as industry responds to the burgeoning shale plays.

Shale gas basins have seen significant pipeline investment. Shale basin pipeline projects that are either in-service or in some stage of FERC permitting total 3,427 miles of pipe, delivering 31,412 MMcf/d of capacity, with a total investment of over \$18 billion.

The large amount of natural gas in the U.S. is also creating an impetus for something that was nearly unimaginable ten or fifteen year ago, LNG *export*, as opposed to *import* terminals. This is an area of significant workload increase for the Commission.

Presently, the FERC has thirteen proposed LNG export terminals and three LNG import terminals in some phase of the permitting process. As you would expect, the reviews that entail safely siting large multi-billion dollar energy projects such as these are extensive.

Given this influx of natural gas siting work, I believe that the FERC must continually assess our staffing levels and priorities to ensure that we task enough resources to process these projects in a timely and thorough manner. In addition, while the FERC has no control over the other federal agencies that inform our siting processes, I would encourage them to help us by also doing what they can to be timely in their assessment work.

The locations of the new shale gas plays are also having an impact on the business models of some existing gas pipelines. The FERC has seen a number of filings in response. In some cases, changing industry dynamics have caused pipelines to revise tariffs, in other cases we have seen proposals to repurpose entire segments of underutilized pipe.

Finally, with regard to the oil pipelines themselves, FERC has seen a jump in activity in this sphere as well. While the Commission's legal authority over oil pipelines is much different than that of natural gas pipelines, it has nonetheless seen an increase in the number of petitions for declaratory order (PDOs) from oil pipeline companies seeking FERC review of certain tariff and rate principles prior to undertaking new investment projects. As an example, the Commission processed just three oil pipeline PDOs in FY 2011. In FY 2012, that jumped to ten PDOs. In FY 2013, it increased to fifteen. And since the beginning of FY 2014, we have already received six PDOs. The increase of such petitions is indicative of an industry that is actively building out our nation's infrastructure through new investments, much of which are related to the new flow of domestic crude.

In conclusion, as I noted in my introductory comments, no concise prepared testimony could cover all of the important issues at the FERC today. In addition to the topics I have formally explored, the Commission is also involved in the midst of electric industry reliability standards, cyber security efforts, Order No. 1000 compliance filings, electric transmission rate cases, significant anti-market manipulation enforcement matters, various regional market construct proceedings, hydroelectric dam licensing reforms, and dockets related to addressing significant new pipeline safety costs, to name a few. In short, this appears to be no ordinary time in the world of energy and its regulation. During your question and answer time, I would be happy to address any of these topics you may wish to explore.