MASSACHUSETTS PETROLEUM COUNCIL
A DIVISION OF AMERICAN PETROLEUM INSTITUTE

JOHN E. QUINN
Executive Director

11 BEACON STREET BOSTON, MASSACHUSETTS 02108
Telephone (617) 227-4227 Fax (617) 227-5743

STEPHEN C. DODGE
Associate Director

November 12, 2013

Senator Benjamin Downing
Representative John Keenan
Chairmen, Joint Committee on Public Service
Room 473B, State House
Boston, MA 02133

Re: H2940

Dear Chairmen Downing and Keenan and Members of the Committee,

I appreciate the opportunity to provide written testimony in opposition to H2940, An Act Involving Hydraulic Fracturing. The Massachusetts Petroleum Council is a division of the American Petroleum Institute. API represents over 500 companies engaged in the oil and natural gas business.

This bill would force all natural gas utilities to identify that portion of the natural gas it distributes that is produced through hydraulic fracturing and then "identify and describe" the fluids used in the hydraulic fracturing (HF) process – a nearly impossible and over burdensome task. The bill then also requires utilities to certify that the hydraulic fracturing process – done hundreds of miles away in other states – complies with a federal law that does not apply to HF.

Currently, hydraulic fracturing is heavily regulated by both federal and state laws and regulations. That portion of the process which includes the direct injection of fluids into the ground to produce natural gas – a process that been used in the oil and natural gas industry for over 60 years – is primarily regulated by the individual states where HF occurs. That is as it should be. HF has traditionally been overseen by states since geologic conditions vary from state to state. We can only assume then, that the intent of H2940 is to force additional and unnecessary regulations over states that already have extensive, on-the-ground experience with onshore oil and natural gas development. Why would Massachusetts want to meddle into the oversight and regulatory affairs of other states?

Last session, the Committee sent this bill to study. During the public hearing on the bill in 2011, proponents stated that the bill would only apply to natural gas extracted by hydraulic fracturing in Massachusetts. While the language is clearly ambiguous to that point, we also wish to point out that according to DEP officials, both hydraulic fracturing and the treatment of so-called fracked waste through re-injection into the ground are already banned in Massachusetts by virtue

of 310 CMR 27:00 which bans the use of "Class II" injection wells which are used in connection with "oil and natural gas production." In addition, DEP stated in a recent letter to local Boards of Health, "[Fracking] is not a concern for Massachusetts since productive hydrocarbon deposits do not exist in New England." The State Geologist has made similar comments.

Clearly, this bill has been filed by those who are opposed to hydraulic fracturing. Many of the sponsors of this bill have filed bills to ban HF. Those bills are currently before the Environment, Natural Resources and Agriculture Committee. As I explained to that Committee during its HF hearing in September, hydraulic fracturing is here to stay and is responsible for greenhouse gas reductions, more jobs, lower heating bills and lower electric bills. HF is propelling the country towards energy independence, an unthought-of concept just several years ago. Hydraulic fracturing currently accounts for approximately 60% of the natural gas being produced in this country, and that is expected to increase to 80% before the next decade. About 90 percent of current wells drilled are fractured. Over 50 percent of electricity generated in New England is produced by natural gas, and much of that gas is produced through hydraulic fracturing.

The debate over the safety of hydraulic fracturing has been defined largely through a broad array of misinformation and factual inaccuracies. HF activity has been conducted in this country safely for over 60 years. As stated above, oil and gas operations are highly regulated under a number of federal statutes, as well as state regulations which are tailored to specific concerns that can vary from state to state. The contents of fracturing fluids (which are typically 90 percent water and 9.5 percent sand) are publicly disclosed. As former Energy Secretary Steven Chu said recently as reported in the Columbus Dispatch, "Environmental groups have campaigned for stricter controls on fracking. But Chu said it is a 'false choice' to say that the country must decide between inexpensive natural gas and preserving the environment. 'This is something you can do in a safe way,' he said." We believe that goals for energy development and environmental stewardship can advance together. Effective regulation, led by states, combined with industry standards that are regularly updated to incorporate what's being learned in the field can manage the production of the oil and natural gas our economy needs while protecting water and air.

Quite frankly, H2940 makes no sense, either from a practical or philosophical standpoint. It forces utilities to do something they cannot do, and forces them to certify a process that doesn't exist.

We ask the Committee to report this bill as "ought not to pass." We would be happy to discuss this issue further with you or your staff at any time.

Sincerely,

Stephen C. Dodge
Associate Director
Massachusetts Petroleum Council

energy API

AMERICAN PETROLEUM INSTITUTE

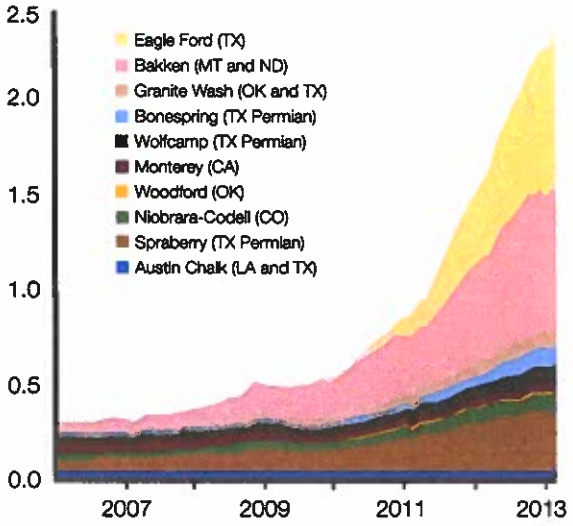
What is Fracking and Unconventional Oil and Natural Gas Development?

Hydraulic fracturing and horizontal drilling are safely unlocking vast U.S. reserves of oil and natural gas found in shale and other tight-rock formations. Developing energy from shale is an advanced process that uses the latest drilling technologies and equipment. As for what fracking means to the United States – the answers, are security, economic growth and jobs, jobs, jobs.

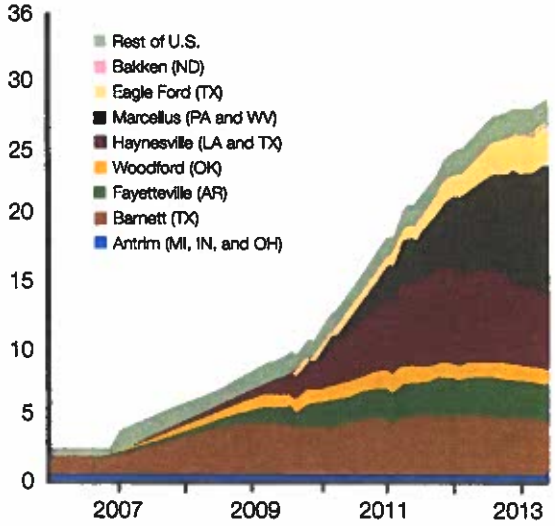
The U.S. Energy Information Administration (EIA) details how surging domestic oil production is narrowing net petroleum imports – from 60 percent of what the United States used in 2005 to 45 percent in 2011.

This change is driven by production from unconventional reserves using fracking and horizontal drilling.

Shale And Tight Oil Production
million barrels per day



Dry Shale Gas Production
billion cubic feet per day



" There's a fairly significant, long-standing relationship between spare production capacity in OPEC and what the pricing environment is for oil. So the 2-million-barrel-per-day increase in U.S. oil production that surprisingly took place over the past five years has resulted in higher OPEC spare capacity, and undoubtedly, has been a factor in why Brent oil prices are $103 to $104 per barrel rather than $125 to $130 per barrel." EIA Administrator Adam Sieminski

In other words, increased U.S. domestic oil production puts downward pressure on global crude prices. The United States is in a stronger position economically and in a general security sense when it produces more oil here at home. And it is, thanks largely to fracking. A study by IHS Global estimates tight oil production will reach 4.5 million barrels per day (mbd) by the end of this decade, double what we produce today.

HOUSEHOLD INCOME:

- Average household disposable income is estimated to have been $1,200 higher in 2012 due to unconventional development.
- Average household disposable income is estimated to be $3,500 higher in 2025 due to unconventional development.

The story of natural gas produced using hydraulic fracturing is equally dramatic. The U.S. energy outlook has changed from one of having to import natural gas to having ample supply to both meet domestic needs and export gas to friendly nations around the world. A little more than a decade ago natural gas production from shale accounted for 2 percent of total U.S. output. Today that figure is 37 percent, and another IHS study projects that natural gas developed through the use of hydraulic fracturing will rise to more than 75 percent of the domestic supply by 2035.

energy API

AMERICAN PETROLEUM INSTITUTE

What is Fracking and Unconventional Oil and Natural Gas Development?

The Economic Lift

The economic lift is being felt strongly in the U.S. manufacturing sector and will continue according to IHS. It estimates that between now and 2025, one out of every eight U.S. jobs supported by unconventional oil and natural gas development will be in manufacturing. Labor income – a measure that includes earnings and employer-provided benefits – from unconventional oil and natural gas is projected to surpass $278 billion by 2025 (from $149 billion in 2012). Job creation in the energy-related chemicals sector is projected to increase from about 53,000 last year to 149,000 in 2015 and almost 319,000 in 2025. Hydraulic fracturing means individual opportunity for prosperity and overall economic growth.

What is hydraulic fracturing? It's energy and opportunity – for better lives and a stronger, more energy-secure country. It is largely responsible for changing America's energy narrative from one of limited options to one of nearly limitless plenty. David Garman, former energy undersecretary (2001-2005) at a natural gas forum hosted by the Bipartisan Policy Center said:

"We are in the midst of a great policy reset. Our energy policy heretofore had been based on scarcity is now confronting a tremendous abundance. The shale gas boom … is a cause for a tremendous celebration."

With the right policies, strong industry standards and effective state oversight the celebration can continue as we safely and responsibly build on the ongoing shale energy revolution.

The Columbus Dispatch, covering [former] [Energy Secretary Steven Chu]:
"Environmental groups have campaigned for stricter controls on fracking. But Chu said it is a "false choice" to say that the country must decide between inexpensive natural gas and preserving the environment. "This is something you can do in a safe way," he said.

Then-EPA Administrator Lisa Jackson in 2012: "In no case have we made a definitive determination that the fracking process has caused chemical contamination of groundwater."

Former Interior Secretary Ken Salazar:
"(Hydraulic fracturing) is creating an energy revolution in the United States. I would say to everybody that hydraulic fracturing is safe."

JOB CREATION and ECONOMIC GROWTH

Increased production of domestic oil and natural gas has profound job and economic impacts for the U.S. Here are estimates from IHS Global on the economic benefits of unconventional development under current energy policies.

JOBS

- Unconventional development supported 2.1 million jobs (direct, indirect and induced) in 2012.
- Unconventional development is projected to support nearly 3.9 million jobs in 2025.

GDP

- Unconventional development increased US GDP by $284 billion in 2012.
- Unconventional development is projected to increase US GDP by $533 billion in 2025.

GOVERNMENT REVENUE AND TRADE

- Unconventional development in the years 2012 – 2025 is projected to increase total government revenue (federal, state and local – including royalty payments) by $1.6 trillion.
- By 2022, unconventional development will reduce our trade deficit by $180 billion annually.

HOUSEHOLD INCOME:

- Average household disposable income is estimated to have been $1,200 higher in 2012 due to unconventional development.
- Average household disposable income is estimated to be $3,500 higher in 2025 due to unconventional development.

Source:
1. http://www.eia.gov/todayinenergy/detail.cfm?id=13451
2. http://breakingenergy.com/2013/05/15/eliminate-up-tight-oil-growth- bolsopec-spare-capacity/
3. http://www.ihs.com/info/ecc/a/americas-new-energy-future.aspx?cid=anef-21350:consulting:print:0001
4. http://www.api.org/~/media/Files/Policy/American-Energy/Americas_New_Energy_Future_Mfg_Renaissance_Main_Report_4Sept13.pdf
5. http://press.ihs.com/press-release/economics/us-unconventional-oil-and-gas-revolution-increase-disposable-income-more-270