

Telephone Conference Call Presentation to the NYS League of Women Voters on Hydraulic Fracturing and Related Topics, January 22, 2014, Hosted by Elisabeth Radow, Chair of the Committee on Energy, Agriculture and the Environment

Thank you to Carol Mellor for organizing this call. Thank you to the members of the committee on energy, agriculture and the environment for their ongoing work and support and thank you to all who have called in today.

In the brief time that we have, I am going to address the current status of issues our committee has supported during the past year with special focus on unconventional gas drilling in New York. Then we will take your questions.

This past year The LEAGUE OF WOMEN VOTERS OF NEW YORK STATE supported PASSAGE of (i) the Hazardous Waste Bill A1046/S674 (ii) a Bill which Suspends Hydraulic Fracturing for the Extraction of Natural Gas or Oil; Suspends the Issuance of New Permits for Such Drilling (S012010); and legislation which encourages the development of solar energy throughout NYS. None of those bills made it to a full vote.

High Volume Slick water hydraulic fracturing combined with horizontal drilling characterizes the current practice used to extract methane gas –what we call “natural gas” from shale. This is often referred to as “fracking” even though technically, fracturing the shale is only one phase of the process. As shorthand, I will refer to the multi-step gas drilling/fracturing/extraction/processing/disposal process as “unconventional gas drilling” or “fracking” to mean the entire lifecycle.

Since fracking was introduced as a topic of importance in New York State, several League chapters throughout New York have been engaged in ongoing public education on the topic by inviting experts to speak on issues relating to potential environmental impacts, health impacts and economic impacts. Because of the depth and breadth of the subject, please bear with me for not touching on a point that may be of interest in your community. In certain instances, the League’s attention to unconventional gas drilling is addressed at the local level, such as the Algonquin/Spectra and Constitution pipelines-and proposed compressor stations. Tonight’s focus

is more on the State perspective but I will refer to certain local initiatives as examples of the important work being done. If you have questions about the localized efforts, we have members from local leagues on the line who I will defer to as they arise. Or we can follow up separately with you after this call.

There is also a robust interstate collaboration. For example, the states of New York, New Jersey, Pennsylvania and Delaware work together on matters impacting the Delaware River Basin and the Susquehanna River Basin, such as joint letters to the respective River basin Commissions. We also coordinate with the national League on issues of national importance relevant to our issues. The current major concern is President Obama's push to fast-track the Trans Pacific Partnership Agreement- an international trade agreement which has the potential to supersede and undermine the work we do at the state level to keep our air, water and food safe, since it potentially grants to global corporations a right to seek recourse against America on matters relating to perceived over-regulation of energy, agriculture and the environment using a separate set of rules. I wrote to the LWVUS this summer requesting the League to alert members to the importance of TPP as did my counterparts in other states. To date, our requests have gotten no attention. I would encourage each person on this call to learn about the Trans Pacific Partnership. Google it and write to your elected official asking Congress not to put this agreement on a fast track without calling for the full disclosure and examination of its contents.

For those who are wondering, The New York State League has no official position which specifically supports or does not support hydraulic fracturing. Instead we are addressing the issue through the League's nationally established positions which support the conservation and preservation of natural resources (air/ water/soil in particular) to assure their future availability and pollution control of natural resources in order to preserve the physical, chemical and biological integrity of ecosystems and to protect human health. There is also an interest in preserving our minerals/fossil fuel for domestic use (not as exports). In addition, LWVUS has a national position to fight climate change to which hydraulic fracturing has the potential to be a major contributor since methane is a potent greenhouse gas. We approach fracking with the goal of supporting this national League position.

I would like to mention that the national website inaccurately states that “[T]he League **supports safe drilling and mining practices** [and the significant strengthening of appropriate

regulation, oversight, inspection, and penalties associated with the development of fossil fuel resources through hydraulic fracturing. Preservation of a healthy environment is a top priority.”]

There is no affirmative position at the national level which has been agreed to by League members in support of hydraulic fracturing. The mistake has been acknowledged by the national League but the website has not yet been revised. I and others will follow up with National on this.

In addition, the LWV of NYS supports a moratorium on gas drilling while the State Health Commissioner makes a thorough, transparent review of available health studies. Currently, New York State has in place a de facto moratorium while NYS Health Commissioner Shah reviews health studies; the source of those studies, however, has not been publicly disclosed.

Further, The League has supported in our written comments to the draft supplemental generic environmental impact statement (known as the SGEIS) and the proposed regulations, a moratorium for a period of 120 days after completion of the EPA’s water study on hydraulic fracturing and its potential impact on drinking water sources. The EPA water study is still in process. Unfortunately, EPA has withdrawn from the study locations such as Dimock PA and Pavillion WY once an apparent link was determined between drilling operations and contamination which calls into question the wisdom of our committee’s reliance on this study.. This is something our committee has to revisit Requests have been made by the River Basin Leagues to return these locations to the EPA water study.

Even though we are not performing the high volume gas drilling in New York, there are issues which require our constant oversight. Here are the issues of current concern:

1. Home Rule: The right of municipalities to decide whether or not to permit unconventional gas drilling, and if so, where, is still being decided in the Dryden and Middlefield lawsuits. Both legal actions are with the New York Court of Appeals, the state’s highest court. Thus far, the appellate court decisions support the right of local government to decide whether and where to allow the gas drilling. The Court of Appeals is expected to issue a decision this year.

- 2 The proposed regulations we commented on over one year ago have expired. We await Albany’s decision to determine our next step.

3 Even though we are not gas drilling in New York, we are a conduit for transporting and storing oil and gas and a recipient of the waste. As alluded to earlier, high pressure pipelines are going in through residential and farm land; compressor stations have been proposed to process the gas and caverns have been designated as gas storage facilities. Examples of League input include the following:

(i) The Westchester County League recently wrote to the Federal Energy Regulatory Commission to oppose Spectra Energy's proposal to greatly enlarge its Algonquin natural gas pipeline, lengthen its route and expand five existing compressor stations through ecologically sensitive areas.

(ii). The New York City League took a stand against President Obama authorizing the Rockaway lateral because of the unstable Rockaway Peninsula and coastline due to Hurricane Sandy.

(iii). Watkins Glen is the proposed site for expanding the use of a salt mine cavern to store liquefied butane. The roof of the cavern earmarked to store the butane once collapsed in an earthquake. There is also extensive surface infrastructure proposed involving two large open brine pits, an active burning flare stack, compressor stations, 6-track rail siding, a truck depot, and above-ground storage tanks. Both DEC and the Federal Energy Regulatory Commission have authority over approving aspects of this site. It is directly across Seneca Lake where wineries intend to expand; this industrial site may interfere with the wine region's expansion. One of our committee members, Joyce Hunt owns Hunt Country Vineyards and has been following this development.

(iv). In addition to pipelines, the big push to build up the natural gas infrastructure in the state has included the proposed conversion of coal plants to natural gas (instead of turning to renewables). According to Kay Wagner our committee member in Tompkins County, the Cayuga and Dunkirk plants represent the first two of a number of proposed coal fire plant conversions. The alternate proposal is to close these plants if the grid is upgraded, as is needed in any case.

We are now seeing that oil-by-rail is driving much of the U.S. shale energy boom while companies also push to install pipelines. Global Companies LLC has been using the New York rail lines for a period of years and is currently legally entitled to transport as much as 120,000

barrels of oil per day. Last fall in Albany a Global Partners subsidiary sought permission from DEC to add on a boiler room for an existing rail terminal. This would allow the Global Partners subsidiary to heat certain types of oil before transferring them to barges en route to East Coast refineries. Global also has a second rail to barge proposal in the works. Global's application has triggered our attention, particularly in light of the deadly oil train derailment and explosion in Lac-Mégantic , Quebec on July 6, 2013 which killed over 30 people followed by the explosion just weeks ago in North Dakota which revealed routine improper labeling of the large volumes of volatile cargo and lack of regulatory oversight. Some of you may have read about the derailment of oil rail cargo in Philadelphia just a few days ago which brought the concern of transporting oil by rail closer to home. This expanded use of our rails raises the question of the competency of rail infrastructure to handle this magnitude of the oil and gas. Our committee will continue to follow this issue.

4. Port Ambrose. Liberty Natural Gas LLC has proposed to install a liquefied natural gas facility off of Port Ambrose in the New York Harbor. The LWV NYC supports sending a letter to Governor Cuomo opposing Port Ambrose on the grounds that it would be in direct conflict with a proposal to build a wind farm in the area where Liberty proposes to locate its LNG facility, would prolong America's dependence on fossil fuels and would pose a security risk to shipping lanes that serve the Port of New York-New Jersey; it is the largest port on the East Coast. I had the pleasure of moderating a standing room only educational forum this fall hosted by the NYC League with a representative of Liberty Natural Gas and the executive director of Clean Ocean Action. The tape of the event is available for viewing at the NYC LWV's website.

Marcellus shale gas from Pennsylvania is now being delivered to New York City residents. Marcellus shale gas is known to contain high levels of radon which are not being measured before delivery to residences. Radon is the leading cause of lung cancer in non-smokers. NYC Representative Linda Rosenthal has proposed a bill to measure the radon in the gas before delivery. The City League supports its passage. Our committee will also look at the Radon Bill.

Waste

Even though the *de facto* moratorium on gas drilling New York State continues, the disposal of waste from fracking operations is occurring in New York. The extraction of natural gas using fracking produces large amounts of liquid and solid waste that can contain a number of harmful

pollutants, including salts (sometimes called total dissolved solids or TDS); chemical additives, which may include ethylene glycol, naphthalene, and sulfuric acid; metals; organic compounds; and other contaminants. Fracking waste from extraction activities in the Marcellus Shale can also contain naturally-occurring radioactive materials (NORMs) such as radium-226 and radium-228, the precursor to radon has, as just mentioned.

In 2012 alone, New York State accepted in excess of 100 thousand tons of hydraulic fracturing waste from Pennsylvania. The New York State League and our committee co-authored a letter to the editor of the Albany Times Union, published in June 2013, voicing our support for passage of the hazardous waste legislation. While the bill (A1046 and S674, respectively) was passed by the Assembly, it did not make it to the floor of the Senate even though the bill was supported by 34 state senators, enough for its passage into legislation. We will try again this year.

Specifically, the law, if reintroduced and passed in 2014 will amend the Environmental Conservation Law Section 27-0903 to characterize all waste from hydraulic fracturing as “hazardous waste.” **"Hazardous waste" under ECL § 27-0901 means “ a waste or combination of wastes, which because of its quantity, concentration, or physical, chemical or infectious characteristics may: a. Cause, or significantly contribute to an increase in mortality or an increase in serious irreversible, or incapacitating reversible illness; or b. Pose a substantial present or potential hazard to human health or the environment when improperly treated, stored, transported, disposed, or otherwise managed.”**

In response to a FOIA request to DEC, Riverkeeper learned that natural gas well brine Beneficial Use Determinations indicated that the road spreading of natural gas production brine has been approved in at least 23 municipalities in 7 western New York counties: Wyoming, Erie, Cattaraugus, Chautaugua, Genessee, Niagara, and Seneca. Road spreading of natural gas brine from natural gas storage has been approved in at least 10 municipalities in 2 western New York counties: Allegany and Steuben. In addition, the New York State Department of Transportation Region 6 received approval to spread what appears to be brine from natural gas storage on state roads in portions of Steuben, Allegany, Chemung, Schuyler, and Yates Counties.

Riverkeeper also received brine testing results from both natural gas production brine and brine from natural gas storage facilities which showed extremely high levels of chloride. Chloride can corrode infrastructure and negatively affect aquatic life and vegetation. In addition, Riverkeeper received results for brine from natural gas storage facilities which revealed the presence of benzene and toluene. Benzene is a carcinogen and has been linked to blood disorders such as anemia, while toluene has been linked to nervous system, kidney, and liver problems.

In addition to road spreading, we are concerned about disposal of fracking waste at New York landfills and wastewater treatment facilities that are unequipped to handle it. Albany, Nassau, Orange, Putnam, Rockland, Suffolk, Tompkins, Ulster and Westchester Counties have passed resolutions or legislation which prohibits waste from hydraulic fracturing from being deposited into their landfills, their waste treatment facilities or spread on roads for de-icing or dust control with varying language in each local law. The New York City League seeks to encourage passage of similar legislation in the City. I have testified in person or through a proxy at several of the county hearings prior to passages of these county laws.

Legislation was introduced last year into the State legislature to ban importation of waste from hydraulic fracturing. It has not yet been acted on.

Solar

Gov. Cuomo pledged \$1Billion in new funding for solar energy projects in his State of the State address. Our committee will review the Solar bills that are introduced this year. We support expansion of renewable energy sources throughout New York with solar energy as one such important option.

State Energy Plan

The New York State Energy Planning Board has just approved an energy plan. The public comment period in connection with the plan ends on or about March 7th. Our committee will look at the plan in the coming month. As reported in the news, here is what I can tell you: The plan calls for a reduction of carbon emissions from the energy sector of 50 percent by 2030. Building codes will be changed to increase energy efficiency. Money will be put into an expansion of solar, wind, bioenergy, geothermal and hydrokinetic energy sources. The plan

includes expanded access to natural gas but does not mention hydraulic fracturing. New York's energy grid will be updated to withstand extreme weather events, such as Hurricane Sandy. More customers will be able to operate off the grid if the grid goes down. There will be a significant focus on expanding clean energy technology. NYSERDA will work with the state Education Department to increase science, technology, engineering and math classes so more students are prepared for careers in clean technology. Committee member Kay Wagner informs us that this plan acknowledges carbon dioxide as a greenhouse gas which contributes to climate change but fails to refer to methane-natural-gas as a potent greenhouse gas; this observation can be included in comments to this plan which our committee prepares.

That concludes my presentation. I would now like to open this up to your questions.

ENR