August 21, 2014

New Hampshire's List of Questions (due 8/21) for 8/26 10:00 call with EPA on 111(d)

1. Building block #1 calls for a 6% reduction in the CO_2 emission rate from coal plants. Is this achievable, given that Merrimack Station already did a heat rate improvement project?
2. Building block #2 calls for total redispatch from 2012 generation (1,281,341 MWh from coal, 6,946,869 MWh from natural gas combined cycle (a 53% capacity factor based on nameplate capacity), and 72,614 MWh from oil) to 8,300,824 MWh from natural gas only (a 63% CF). Last winter when demand for natural gas increased for home heating purposes, coal plants had to come back on line to meet electricity demand. Does this assume that a natural gas pipeline project will be completed? What timeframe? If so, given that electricity generation is regional in nature, why did EPA limit redispatch to just in-state generation? Why didn't EPA allow the maximum 70% CF? Plants in other New England States have already announced intended shutdowns, and that power generation will have to be replaced, possibly by increased generation from NH NGCC plants.
3. Building block #3: The "Alternative Renewable Energy Approach" based upon technical and economic potential as described in EPA's Technical Support Document posted on EPA's website seems to be more reasonable for NH. In 2012, NH's non-hydro renewable generation was primarily from wood. One new 70 MW biomass plant has come on line, but additional biomass plants are not anticipated, because the forests may not be capable of additional sustainably harvested supply. Also, significant amounts of new wind capacity are not anticipated, because siting new wind farms has been a very difficult process recently in NH. Also, NH DES understands that EPA intends to prevent double counting of RE in the final guidelines by stipulating that whichever state's RPS requires a given REC to be retired will get credit for that RE, regardless of which state the RE was generated in. New England REC markets are such that RECs go first to MA (highest REC price), then CT, then NH (lowest REC price). This is yet another reason why NH projects that future RE will be significantly less than that in EPA's proposed approach. In EPA's proposed approach, EPA looked at an average of the New England States' RPS aspirational targets. ME's 40% (including hydro) skewed that average (25%), and ME is already close to meeting their target, but other states don't have that same potential. Can EPA confirm that the recalculated the individual NH state goals (558 lb/MWh with hydro and 619 lb/MWh without hydro) using the alternative approach as shown on the attached spreadsheet are correct? Which one is appropriate? Is EPA leaning toward going with the Alternative RE Approach for the final guidelines?
4. Building block #4: ISO-NE forecasts near-term future EE. As an alternative to EPA's projected EE estimates, could NH extend the ISO-NE forecast based on a multi-year average of the latest years and use that?
5. EPA included updated RGGI in the base case, awarding no credit for reducing from 91 million ton 2014 cap to 78.2 million 2020 cap, in addition to no credit for 40+% reduction from 2005 to 2012. For mass-based programs, can equivalency be demonstrated based on a percent reduction from 2005 greater than 30%, rather than a "conversion" of the 486 lbs/MWh rate-based goal? If no, what amount of RE (and nuclear) and EE can NH include in its projection? Only 2012 levels? Why can't NH include all of the RE and EE that EPA included in its calculation

of the rate-based goal? EPA's building block #2 for NH assumes that all coal-fired generation is re-dispatched to gas, resulting in projected NH 2020-2030 annual emissions of 3,644,062 tons, providing an incentive for increased operation of existing lower-emitting (878 lb/MWh) NGCC plants. Would EPA agree that NH's mass-based goal should be at least 3,644,062 tons?

6. Has EPA been asked by NGOs to provide EPA's presumptive translation of the rate-based goal to the mass-based goal, for all 49 States? If so, is EPA leaning toward doing so? When?
7. The RGGI States are planning to do modeling. Can EPA review the assumptions made by each state prior to the modeling runs? Did EPA recently have a call with NY? While NH is much smaller than NY, NH shares many of the same issues. Is there anything that was discussed on the call with NY that NH is forgetting to raise here?