DEPARTMENT OF ENERGY AND ENVIRONMENTAL PROTECTION

GOVERNOR'S EXECUTIVE ORDER NUMBER 59: DEEP AND PURA JOINT PROCEEDING

PUBLIC UTILITIES REGULATORY AUTHORITY

DOCKET NO. 17-07-32 - DEEP AND PURA JOINT PROCEEDING TO IMPLEMENT THE GOVERNOR'S EXECUTIVE ORDER NUMBER 59

<u>DATA REQUESTS FOR DOMINION ENERGY, INC.</u> (AUGUST 29, 2017)

The Department of Energy and Environmental Protection (DEEP) and the Public Utilities Regulatory Authority (PURA) opened the above-referenced uncontested proceedings for administrative purposes for DEEP and PURA to jointly conduct a study and produce a report in accordance with the attached Executive Order Number 59 issued by Governor Malloy on July 25, 2017 (Executive Order). To assist DEEP and PURA in conducting this assessment, DEEP and PURA request that Dominion Energy, Inc. (Dominion) respond to the attached data requests.

Dominion is requested to file its data request responses on or before 1:00 p.m. on **Tuesday, August 29, 2017.** This information is necessary for DEEP and PURA to model the most accurate going forward costs of Millstone units two and three in order to assess the economic viability of the units in accordance with the Executive Order. In the event that this information is not provided, DEEP and PURA, with input from their consultant, will estimate the going forward costs based on best available information. All correspondence, written comments, and data request responses submitted to DEEP and PURA relating to the scope of the study, including emails, will be posted on the DEEP and PURA websites, unless Dominion requests protected treatment for certain information filed and the request is approved by DEEP and PURA. If you need information about the process for how to request confidential treatment of certain information, please contact a DEEP or PURA Case Coordinator identified below.

Any filings made in these proceedings shall be submitted to both DEEP and PURA through their respective website filing systems, the process for which is explained below. All documents submitted in these proceedings should contain the above caption referencing both proceedings and should be filed in both proceedings.

When filing documents with DEEP, documents may be filed electronically on DEEP's website or submitted to DEEP.EnergyBureau@ct.gov. Persons filing electronically for the first time will be required to register prior to submission. Please create your account at least 24 hours in advance to ensure timely filing. If you have a problem with the electronic web filing system, you can contact the DEEP IT help desk at 860-424-4169 or at DEEP.Helpdesk@ct.gov. All materials submitted by stakeholders in this proceeding will be posted on the DEEP website. Any questions

can be directed to Debra Morrell at (860) 827-2688 and/or via e-mail at DEEP.EnergyBureau@ct.gov.

PURA encourages electronic submission of all filings through the Web Filing Account Management System at http://www.ct.gov/pura/. Persons filing electronically must create an account through the Authority's website under Docket Services (Make a Web Filing). Once registered, you may proceed to the Docket Database Web Filing System to log on and submit your filing. The date and time of filing shall be the date and time the Authority first receives a complete electronic version or the paper version and the required number of paper copies. If a complete electronic version of the filing is submitted through the Authority's Web Filing System, only one paper version of the filing is generally required. For exceptionally voluminous or complex filings, the Authority reserves the right to request additional paper copies. If a complete electronic version of the filing is not web filed, submit an original and one copy.

Additional information is available at DEEP's website: www.ct.gov/deep/energyfilings and PURA's website: http://www.ct.gov/pura. The DEEP case coordinator assigned to this proceeding is Debra Morrell, who can be reached at (860) 827-2688 or via e-mail at DEEP.EnergyBureau@ct.gov. The PURA case coordinator assigned to this proceeding is Laura Lupoli, who can be reached at (860) 827-2631 or via e-mail at Laura.Lupoli@ct.gov.

The Connecticut Department of Energy and Environmental Protection is an Affirmative Action and Equal Opportunity Employer that is committed to complying with the Americans with Disabilities Act. To request an accommodation, contact us at (860) 418-5910 or deep.accommodations@ct.gov.

Dated at New Britain, Connecticut, this 15th day of August, 2017.

DATA REQUESTS

Expected Performance

- 1. For the period January 1, 2007 through June 30, 2017, please provide the annual capacity factor of Millstone 2 and Millstone 3, including total capacity and energy sold by unit.
- 2. Provide the expected refueling schedules for Millstone 2 and Millstone 3 for the period 2017 through 2035.
 - a. Will the expected refueling schedule by unit differ significantly from the historical refueling scheduled over the last ten years? If so, why?
 - b. Over the next five to ten years, does Dominion expect the unit capacity factors to materially change? If so, why?
- 3. Has Dominion uprated the installed capacity of Millstone 2 and Millstone 3?
 - a. If yes, identify the total incremental capacity by unit.
 - b. For each unit, please breakdown the additional capacity associated with measurement uncertainty recapture, stretch power, and extended power uprates.
 - c. Identify the additional uprate capacity planned for Millstone 2 and/or Millstone 3 in the next five years.
 - d. Does Dominion have any plants to perform additional capacity uprates at Millstone 2 and/or Millstone 3?
 - e. Provide the ISO-NE Forward Capacity Market (FCM) qualified capacity reports for each unit from 2007 through 2017.
- 4. Since 2007, has the NRC issued any Significant Enforcement Actions or any Notices of Violation? If yes, please provide each NRC action or notice and the action(s) taken by Dominion to respond the NRC's action or notice.
- 5. Since 2007 has Dominion had to pay any Civil Penalties? If yes, provide all related documents including NRC communications and orders, and Dominion responses to the NRC.
- 6. Regarding future performance.
 - a. What operational or market factors may result in a material change in unit availability in 2018?
 - b. Next five years?
 - c. Next ten years?
- 7. Please identify current water discharge temperature limitations in Long Island Sound affecting plant availability.

- a. Since 2007 how many times has Dominion been forced to limit unit operation or dispatch offline due to thermal discharge limitations?
- b. Provide the duration and dates of the curtailment or interruption of Millstone generation due to thermal discharge limits.
- 8. To what extent have the scheduling or length of refueling outages by unit changed over the last ten years?
 - a. Relative to the normal historical average, please summarize the circumstances leading to any significant change in scheduling or length of time for refueling outages.
 - b. Does Dominion expect the duration or scheduling of refueling outages going forward to be the same or approximately the same as that experienced over the last ten years? If not, why not?
- 9. Under what circumstances would Dominion pursue a second license extension for one or both Millstone units?

Revenues

- 10. For the period January, 2007 through June, 2017, please provide total energy and capacity revenues by year and unit.
- 11. Has Dominion been able to sell ancillary services through ISO-NE from either or both units? If yes, please identify the ancillary service(s) by year and unit over the past ten years and total annual revenue derived from the sale of all ancillary service(s).
- 12. Other than refueling outages, what market or operational factors explain any significant differences from historic average energy sales?
- 13. Regarding Dominion's sale of energy and capacity in New England,
 - a. To what extent is it Dominion's standard business practice to sell unhedged energy into the ISO-NE spot market?
 - b. Over the last ten years, has Dominion significantly altered its sales strategy in regard to the forward sale of energy and/or capacity to ISO-NE and/or creditworthy counterparties in New England? If yes, please summarize any noteworthy changes in Dominion's sale strategy and the timing of such changes.
 - c. Does Dominion enter into bilateral contracts with counterparties in New England on a unit specific basis? If no, does that mean that any contractual obligation is backstopped by generation output from both units?
 - d. How far out (forward) does Dominion enter into financial hedges and/or bilateral contract arrangements?
 - e. Has the term of any financial hedges and/or bilateral contract lengthened or otherwise changed over the last five years? Going forward does Dominion anticipate entering into five year hedges for

- unit production? If no, what is the appropriate term for all or the majority of Millstone output?
- f. Under what circumstances would Dominion elect not to hedge all or the majority of Millstone's output in the forward financial market?
- g. Please explain the extent to which Dominion's hedges are heat rate call options, put option, gas basis swaps, or other financial derivatives linked to the Chicago Mercantile Exchange?
- h. Does Dominion's Risk Oversight Committee set risk management standards for Millstone? If no, are they the same, or approximately the same, for other nuclear generation units in Dominion's portfolio? If they are different, provide a brief summary of the reasons why.
- i. Who decides whether or not to alter Millstone's hedge ratio from year to year or season to season?

Expenses

- 14. From January 2007 through June 2017, please provide the annual non-fuel O&M expenses for each unit by the following cost categories including, but not limited to:
 - a. Operating labor
 - b. Plant maintenance
 - c. Property taxes and/or Payments in Lieu of Taxes
 - d. Spent fuel storage
 - e. General & Administrative
 - f. Insurance
 - g. Security and site maintenance
 - h. Total non-fuel O&M expense
- 15. From January 2007 through June 2017, provide the annual fuel expenses for each unit, including but not limited to:
 - a. A description of any significant differences in fuel costs/quality between the two units.
 - b. A summary of the price and term of any fuel supply contract, I including any unilateral extension provision incorporated therein.
 - c. A brief discussion regarding any reliance by Dominion on the spot market, if any, for uranium fuel.
 - d. A budget estimate for nuclear fuel for the next five years.
- 16. What non-fuel variable O&M costs do Millstone units 2 and 3 incur? How do costs for the two units differ?
 - a. For the historic ten year period, provide financial data identifying non-fuel VOM expenses by unit is available.
 - b. Identify the total annual expense associated with spent fuel cask construction, maintenance and security.

- 17. From January 2007 through June 2017, identify Dominion's total annual plant capex, including a brief description of the nature of the expenditure.
 - a. Please identify any anticipated major equipment / systems replacements or enhancements, e.g. reactor vessel head and nozzles, or other major equipment component.
- 18. Regarding manpower at Millstone,
 - a. How many full time equivalent (FTE) staff members does Dominion employ at Millstone?
 - b. What percentage of Dominion's total labor force at Millstone is part-time?
 - c. What are the aggregate salaries and benefits of Millstone staff?
- 19. Please provide an overview of the changes in station-wide operating expenses and capital expenditures associated with the retirement of one Millstone unit while the other remains in operation, as follows:
 - a. What categories of cost are decreased or avoided for the retired unit, e.g., fuel cycle costs, operator labor, routine maintenance labor, operating materials, routine maintenance materials, planned capital replacements and improvements?
 - b. What categories of cost are newly incurred or increased for the retired unit, e.g., preparation for decommissioning, security, spent fuel management?
 - c. Over what period of time would the retired unit transition from normal operation in anticipation of eventual decommissioning?
 - d. Would full decommissioning of the retired unit be deferred until the eventual retirement of the second unit, or would its decommissioning be performed while the second unit is in operation?
- 20. Please identify categories of cost that are presently considered common to the two Millstone units. With the retirement of one unit, how would these costs be affected once the retired unit is either decommissioned or placed in a stable mode for deferred commissioning?
- 21. From 2007 through 2017, please provide annual local (Waterford and CT) spending on goods and services.
- 22. What are the projected costs for complying with §316(b) of the Clean Water Act and what degree of uncertainty is associated with the costs? In what years would these expenditures be made?
 - a. How would these costs be affected if Unit 2 and Unit 3 were to operate beyond the term of the existing NRC licenses?
 - b. How would these costs be affected if Unit 2 or Unit 3 were to retire?

Financial

- 23. Provide annual statements of cash flow, earnings, and EBITDA for each unit from January 2007 through June 2017 specifying revenues, expenses, depreciation / amortization, taxes, and other necessary adjustments.
- 24. For the ten year historic period,
 - a. Provide the total cost base, accumulated depreciation, annual capital additions, annual capital retirements, and annual depreciation expense separately for each Millstone unit and for any shared Millstone assets.
 - b. Provide the amount of state income taxes paid in CT.
 - c. Does Dominion have any taxable property in CT other than the Millstone plant? If yes, provide a breakdown for state income taxes paid for Millstone versus other properties.

Shutdown and Decommissioning

- 25. If Millstone 2 and/or 3 were to shut down, how long would it take the nuclear fuel to be placed in storage casks? What level of personnel would be required post-shutdown to monitor the spent fuel pools, place the spent fuel in storage casks, and provide site security and maintenance services?
- 26. Once all the spent fuel was placed in storage casks, what level of personnel would be required to monitor the spent fuel and provide site security and maintenance services?
- 27. Are there any changes to your past statements that the decommissioning funds should be adequate to fund the actual decommissioning cost for Millstone 2 and 3?
- 28. Will the early retirement of one unit affect the adequacy of the retirement fund(s) to cover the eventual full decommissioning of both units?
- 29. Please provide a forecast of annual non-fuel operating, maintenance, capital expenditure and net decommissioning cash flows for the Millstone station through full decommissioning assuming,
 - a. Continued operation of both units through 2035 and 2045, respectively.
 - Retirement of both units the first year Dominion does not have a CSO.
 - c. Retirement of one unit the first year Dominion does not have a CSO and the second unit at the end of its operating life.

ISO-NE Priced Retirement Bid Worksheet

30. Please fill out and provide a copy of the ISO-NE Priced Retirement Model and Retirement Cost Solver Worksheets available at https://www.iso-ne.com/static-assets/documents/2017/03/de-list_models_and_user_guides.zip for both Millstone 2 and 3 assuming a priced retirement for FCA 13.