Executive Order 59 Preliminary Progress Report - Dominion Millstone Viability Study

CT DEEP and PURA asked Boston based energy management consulting firm, Levitan & Associates, Inc. (LAI) to evaluate Millstone's financial prospects going forward. Preliminary financial results based on the best available information show Millstone is likely to operate profitably from 2022 the first year for which Millstone does not have an existing obligation to run through the Forward Capacity Market through 2035, the end date for the study. Even under harsh market and operating cost assumptions, LAI has concluded that Millstone's financial prospects are bright. Under expected market conditions, the present value of Millstone's after-tax cash flows from mid-2021 through mid-2035 is about \$2.3 billion. Under lower than anticipated natural gas prices the present value would be about \$1.4 billion. Under low natural gas prices and higher than anticipated Millstone operating costs, the present value is \$1.2 billion, which is deep-in-the- black.

LAI has concluded that Millstone is likely to experience strong positive cash flows from its sale of energy and capacity into the New England wholesale market. The value of the energy and capacity products reflect LAI's reasonable expectation of wholesale market conditions over the long term, in particular, the value of natural gas delivered to New England, a key driver of electricity prices in Connecticut. DEEP and PURA asked Dominion to provide LAI with proprietary cost data associated with Millstone's fuel costs, O&M costs, and capital expenditures. Dominion declined to provide such information, thereby requiring LAI to derive reasonable proxies for each cost category. In performing the analysis, LAI relied on industry data from the Nuclear Energy Institute as well as on plant specific data from Millstone's sister nuclear units in Virginia –North Anna and Surry, which are also owned and operated by Dominion.

To account for uncertainty, LAI performed detailed simulation modeling of the New England wholesale energy market under several scenarios covering natural gas prices, renewable energy build-out, and generation entry and retirements. Expected market conditions are labeled the Reference Case in Figure 1 below. While there are both upside and downside scenarios primarily driven by higher or lower delivered natural gas prices, LAI focused on lower gas prices (the Low Gas Case) in order to stress test the resiliency of Millstone's cash flows if underlying commodity prices remain low every year through 2035. Under the Low Gas Case, Millstone's profits from energy sales are lower than the Reference Case, but remain positive. Because LAI cannot be certain that its proxy operating costs for Millstone are right, LAI tested the impact of much higher fuel costs, O&M costs and capital expenditures each year through 2035.

In Figure 1, annual after-tax cash flows are presented three ways: Reference Case, Low Gas Case, and Low Gas Case with a 10% across-the-board increase in fuel costs, O&M expense, and capital expenditures. Upside financial cases are not shown.

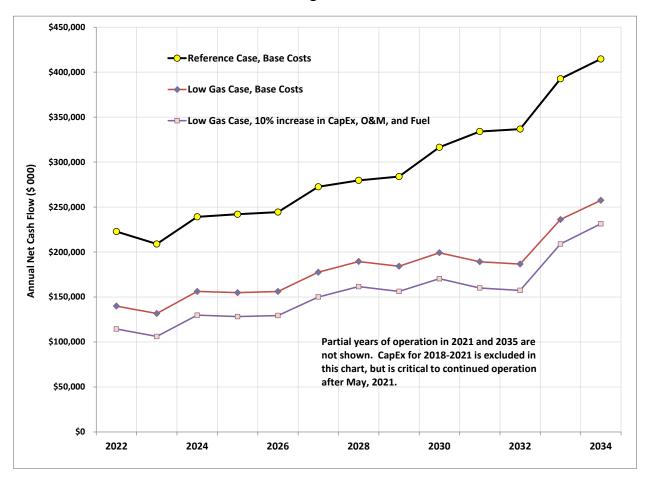
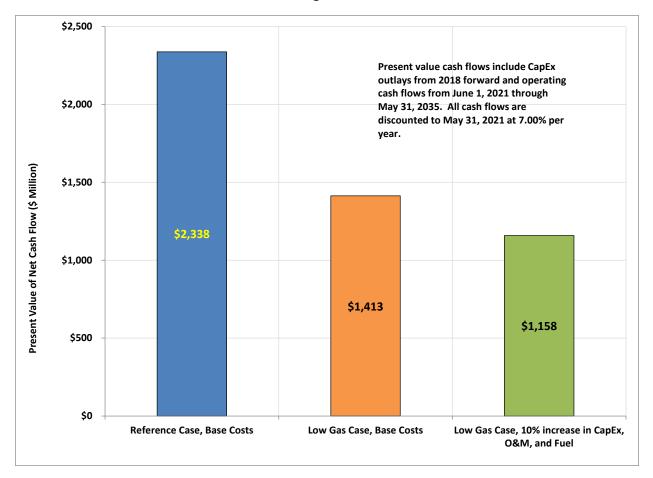


Figure 1

Annual after-tax net cash flow in 2022 ranges from about \$100 million (Low Gas Case + high operating costs) to over \$200 million (Reference Case). Under the Low Gas Case, net after-tax cash flow increases gradually through 2034, driven primarily by increased margin from energy sales. Based on the United States Department of Energy's Long Term Energy Outlook, the Reference Case incorporates a higher gas price outlook, resulting in a comparatively rapid increase in profits derived from energy sales.

Over the study period, the cash flows have present values as indicated for each tested case in Figure 2. The present values include Dominion's anticipated capital spend through 2021. Operating cash flows (energy and capacity revenues, fuel costs, O&M costs, and income tax effects) are modeled from June 1, 2021 through May 31, 2035, the end date for Millstone Unit 2's NRC operating license. Under the Reference Case, the present value of Millstone's after-tax cash flows is about \$2.3 billion. This number is reasonably representative of Millstone's enterprise value. Under the Low Gas Case, with all costs increased by 10% the present value is \$1.2 billion.





In the absence of information from Dominion showing assumptions on Millstone's going forward costs to be significantly different than what is assumed in the modeling, Richard Levitan, President of LAI, believes that the Low Gas Case with the increased costs represents a "worst case" scenario for purposes of stress testing Millstone's financial viability. While any given year might have impacts more severe than those tested, in his opinion it is highly unlikely that such conditions would persist year over year for 14 years. LAI preliminarily concludes that under all reasonable market conditions there is no "missing money" required to ensure Millstone's financial viability through the existing term of Millstone's Unit 2 operating license. Absent any information being provided by Dominion, it is unlikely that LAI's analysis will change prior to finalization of the study.