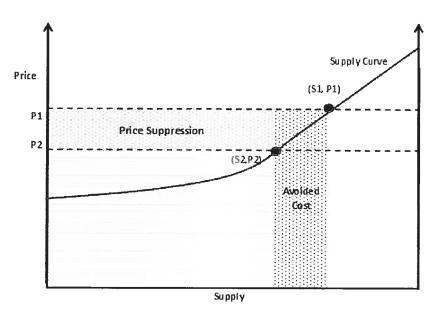
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Support for ROP DRIPE - New Hampshire Electric and Natural Gas Utilities

DRIPE refers to the reduction in wholesale market prices for energy and/or capacity expected from reductions in demand for energy and/or capacity resulting from energy efficiency and/or demand reduction programs (Figure 1, below).

Figure 1: Supply and Demand Curve illustrating avoided costs and price suppressions (DRIPE)



DRIPE benefits have been quantified for nearly 15 years with New England states leading the nation in quantifying DRIPE benefits. Electric DRIPE was first quantified in the 2005 AESC, and natural gas DRIPE was first quantified in the 2013 AESC. The DRIPE values in these studies were based on a detailed analysis of the energy markets in New England. The 2018 AESC is updating existing DRIPE benefits for New England and quantifying additional DRIPE values including oil DRIPE and DRIPE for "super-peak" electric hours. Outside of New England, other states including New York, Maryland, Delaware and Ohio have quantified DRIPE benefits. In addition, in 2009, the PJM Interconnection published an analysis of how increased energy efficiency

could reduce prices in the PJM market?.¹ For additional information on DRIPE and the methodology used to quantify DRIPE, pleaes refer to the 2015 AESC.²

New Hampshire is part of a larger energy market, and therefore, DRIPE benefits are also regional (New England and beyond). DRIPE benefits originating in one state will flow both into that state (referred to as Intrastate, Zone-on-Zone, or Own DRIPE) as well as surrounding areas (referred to as Interstate, Rest-of-Pool ("ROP"), or Zone-on-ROP DRIPE).

Rest-of-Pool (ROP) DRIPE as they pertain to New Hampshire are benefits resulting from New Hampshire energy efficiency programs that flow into surrounding regions. The New Hampshire Utilities support inclusion all forms of DRIPE from 2018 AESC originating in New Hampshire, including ROP DRIPE that flows into other New England states. The New England energy market is not confined by state borders and benefits are not always localized. For example, energy efficiency in New Hampshire may impact the energy market in surrounding states just as the addition or removal of a generator New Hampshire may impact surrounding states' costs, and vice-versa. Therefore, ROP DRIPE (2018 AESC) benefits should be counted in benefit-cost screening in recognition that New Hampshire is also the recipient of ROP DRIPE from surrounding states including, in some cases, states from outside of New England.³

¹ Price Effects of Energy Efficiency: Does More Industrial EE Equal Lower Energy Prices for All, Colin Taylor, Bruce Hedman and Amelie Goldberg, Institute for Industrial Productivity; Sandy Glatt, U.S. Department of Energy

² http://www.ct.gov/deep/lib/deep/energy/aescinnewengland2015.pdf

³ Some forms of DRIPE benefits including gas supply DRIPE and oil DRIPE are not confined to New England states. The New Hampshire utilities are proposing to limit ROP benefits to New England (consistent with 2018 AESC) recognizing that these values may be somewhat conservative.