

STATE OF VERMONT  
PUBLIC UTILITY COMMISSION

Case No. 21-1090-INV

2021 standard-offer prices for existing hydroelectric plants with a nameplate capacity of 5 MW or less	
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Order entered: 03/16/2021

**2021 ADJUSTMENTS FOR STANDARD-OFFER PRICE FOR EXISTING HYDROELECTRIC PLANTS**

**I. INTRODUCTION**

In today’s Order, the Vermont Public Utility Commission (“Commission”) recalculates and adjusts the standard-offer price elements for energy, capacity, and environmental attributes for use in standard-offer contracts for existing hydroelectric plants.

In addition, we seek additional participant input on the price elements of avoided line losses and the value of a long-term contract.

**II. BACKGROUND**

The Commission is required to establish the standard-offer price for existing hydroelectric plants less than or equal to 5 MW in nameplate capacity as the sum of five elements identified in the statute.<sup>1</sup>

The five elements of the standard-offer price are: (1) the two-year rolling average of the ISO New England Vermont zone hourly locational marginal price for energy; (2) the two-year rolling average of the value of the plant’s capacity in the ISO New England Forward Capacity Market; (3) the value of avoided line losses; (4) the two-year rolling average of the market value of environmental attributes, including renewable energy credits; and (5) the value of a 10- or 20-year contract.<sup>2</sup>

The Commission is required annually to recalculate and adjust the price elements of energy, capacity, and environmental attributes for all executed contracts.<sup>3</sup> The Commission may also periodically adjust the value of environmental attributes of an executed contract based upon

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<sup>1</sup> 30 V.S.A. § 8005a(p)(3).

<sup>2</sup> 30 V.S.A. § 8005a(p)(3)(A) through (E).

<sup>3</sup> 30 V.S.A. § 8005a(p)(4)(A)(i).

whether the unit becomes certified by the Low-Impact Hydropower Institute of Portland, Maine (“LIHI”)<sup>4</sup> or loses such certification.<sup>5</sup>

The price elements of avoided line losses and the value of a long-term contract remain fixed at their values at the time a contract is signed for the duration of an executed contract. The Commission may annually adjust the two elements for inclusion in future executed contracts.<sup>6</sup>

### **III. DISCUSSION AND CONCLUSION**

#### **Energy, Capacity, and Environmental Attributes**

Consistent with statutory requirements, in previous Orders, the Commission established methodologies to annually recalculate and adjust the price elements of energy, capacity, and environmental attributes.<sup>7</sup>

The 2021 energy price element is 2.65 cents per kWh. This value is calculated using the two-year rolling average of the ISO New England Vermont zone hourly real-time locational marginal price for calendar years 2019 and 2020.

The 2021 capacity price element is \$6.16 per kW-month. This value is calculated based upon the two-year average payment rate for Forward Capacity Auction 2019-2020 results and 2020-2021 results. Consistent with past determinations, for units that serve as load reducers, a 15% adder shall be made to the capacity revenue value to reflect that the unit is reducing the utility’s capacity reserve requirement. The total amount paid for capacity each month shall be the capacity price element multiplied by the ISO New England Forward Capacity Market-qualified winter and summer capacity ratings for the hydroelectric plant, adjusted further by the contract adder. If the plant is a load-reducer, the capacity rating is its generation at the time of the ISO New England peak for the previous two years.

The price element reflecting the value for environmental attributes is determined based on the category of renewable energy credits that the output of an existing hydroelectric plant

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<sup>4</sup> LIHI is a non-profit 501(c)(3) organization dedicated to reducing the impacts of hydroelectric generation through the certification of hydroelectric projects that have avoided or reduced their environmental impacts pursuant to LIHI’s criteria. In order to be LIHI-certified, a hydroelectric facility must meet criteria in the following eight areas: river flows, water quality, fish passage and protection, watershed protection, threatened and endangered species protection, cultural resource protection, recreation, and facilities recommended for removal.

<sup>5</sup> 30 V.S.A. § 8005a(p)(4)(A)(ii).

<sup>6</sup> 30 V.S.A. § 8005a(p)(4)(B)(ii).

<sup>7</sup> See Docket 7874, Order of 3/6/15; Docket 7874, Order of 4/18/16; Case No. 17-3148-INV, Order of 5/25/17; Case No. 17-3148-INV, Order of 3/13/18; and Case No. 18-0360-INV, Order of 9/17/19.

under the standard-offer program may qualify to receive. For use in 2021 standard-offer contracts, the two-year average price for Massachusetts Class II renewable energy credits shall be 2.35 cents/kWh, the two-year average price for Connecticut Class I renewable energy credits shall be 3.36 cents/kWh, and the two-year average price for Maine Existing renewable energy credits shall be 0.12 cents/kWh. These values represent the two-year rolling average of the market value of environmental attributes, consistent with the statutory requirements of Section 8005a(p)(3)(D). The Standard Offer Facilitator submits an annual filing of the broker data used to determine these values.<sup>8</sup>

#### Avoided Line Losses and Value of Long-Term Contract

With respect to the price elements addressing avoided line losses and the value of long-term contracts, the Commission is not required to revise its previously determined values for the two price elements but is seeking participant input before making a final determination.

The Commission previously determined that the value for avoided line losses is either 3% or 5% of the sum of the value of the energy and capacity elements.<sup>9</sup> If there is one transformation (from 115 kV to interconnection voltage), then the losses are assumed to be 3%. If there is an additional transformation (from sub-transmission voltage to interconnection voltage), then the losses are assumed to be 5%. In previous determinations, based on participants' recommendations, the Commission has made no adjustments to the price element addressing avoided line losses, reflecting that average line losses across the system remain mostly unchanged from year to year.<sup>10</sup>

With respect to the price element reflecting the value of a long-term contract, the Commission previously established 1% and 2% adders to the value of the energy and capacity components of the price for 10-year and 20-year contracts.<sup>11</sup> In 2019, the Commission concluded that contract values of 1% and 2% represent an appropriate balance between the

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<sup>8</sup> See Case No. 21A-0812.

<sup>9</sup> See Docket 7874, Order of 3/6/15; Docket 7874, Order of 4/18/16; Case No. 17-3148-INV, Order of 5/25/17; Case No. 17-3148-INV, Order of 3/13/18; and Case No. 18-0360-INV, Order of 9/17/19.

<sup>10</sup> See Case No. 17-3148-INV, Order of 5/25/17; Case No. 17-3148-INV, Order of 3/13/18; and Case No. 18-0360-INV, Order of 9/17/19.

<sup>11</sup> See Case No. 18-0360-INV, Order of 9/17/19.

somewhat competing statutory goals of promoting existing hydroelectric plants and providing distribution utilities and ultimately ratepayers with affordable, long-term, stably priced power.<sup>12</sup>

Before making a final determination on these values for any 2021 executed contracts, we will provide participants with the opportunity to file comments on the two price elements addressing avoided line losses and the value of long-term contracts.<sup>13</sup> The deadline for comments is March 26, 2021, and the deadline for reply comments is April 9, 2021.

#### IV. ORDER

IT IS HEREBY ORDERED, ADJUDGED, AND DECREED by the Vermont Public Utility Commission (“Commission”) that:

1. Effective for any standard-offer contract executed after the issuance of this Order, the standard-offer price elements for energy, capacity, and environmental attributes for existing hydroelectric plants under 30 V.S.A. § 8005a(p) shall be as determined in this Order.

2. The following schedule for comments is adopted:

March 26, 2021     Deadline for comments on the price elements addressing avoided line losses and the value of a long-term contract.

April 9, 2021     Deadline for reply comments.

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<sup>12</sup> Case No. 18-0360-INV, Order of 9/17/19 at 13-16.

<sup>13</sup> We note that, in Case No. 19-3542-INV, the Vermont Independent Power Producers Association requested that the Commission convene a hearing on the price element addressing the value for 10- and 20-year contracts.



PUC Case No. 21-1090-INV - SERVICE LIST

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Other Entities Receiving Notice:

Service List for #19-3542-INV