STATE OF VERMONT
PUBLIC UTILITY COMMISSION

The Village of Ludlow Electric Light Department's tariff filing requesting an overall rate increase in the amount of 21.50%, to take effect July 1, 2025	))))	Case No. 25-_____

PREFILED TESTIMONY OF

HEATHER D'ARCY

ON BEHALF OF
VILLAGE OF LUDLOW ELECTRIC DEPARTMENT

Ms. D'Arcy's testimony supports the level of power costs included in the revenue requirement.

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HEATHER D'ARCY

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Q1. Please state your name, position, and business address.

A1. My name is Heather D'Arcy, and I am the Manager of Power Resources at the Vermont Public Power Supply Authority ("VPPSA"), 5195 Waterbury-Stowe Road, Waterbury Center, Vermont 05677.

Q2. Please provide a summary of your background and experience.

A2. I have a BS in Animal Science from the University of Vermont. Since then, I have worked at an agricultural energy efficiency company where I managed energy efficiency programs throughout the country. I also managed the engineering team and performed some energy analysis. I have worked at VPPSA as a Power Analyst since 2019.

Q3. Have you previously testified before the Public Utility Commission ("Commission" or "PUC")?

A3. Yes, I've testified in various rate cases before the PUC.

Q4. What is the purpose of your testimony?

A4. This testimony will support the level of power supply costs and the cost of complying with the Renewable Energy Standard ("RES"). RES costs are summarized in Exhibit VLED-HD-10, which is included with my testimony, and are explained in more detail below.

Q5. Please summarize Village of Ludlow Electric Department's ("VLED" or "Ludlow") power supply costs, as included in the revenue requirement.

A5. Please refer to Exhibit VLED-HD-1. Total Costs during the Test Year were $6,504,946. After making known and measurable adjustments, total costs during the Rate Year are $6,983,76, which is a $478,930 (7.4%) increase from the Test Year.

Q6. Can you provide an overview of what is causing the increase?

A6. Resource energy charges increase by $214,938. Resource capacity charges increase by $91,263. The energy market is increasing by $1,475,278 due to higher forecasted energy prices than Test Year actuals. The capacity market increases costs by $17,502. The Open Access Transmission Tariff costs are increasing by $248,396 due to a higher Schedule 9 rate. The VTA Common Facilities charge is increasing the cost by $55,017. The McNeil resource had a one-time credit from the contingency fund in 2024 that is not recurring in the rate year that accounts for a $24,929 increase.

Q7. Are there any known and measurable changes that are reducing Ludlow's power supply costs during the Rate Year?

A7. Yes. Increased REC credits reduce costs by $85,697. Resource energy credits reduce costs by $1,455,769. The Mystic Cost of Service agreement and the Inventoried Energy Program also expired between the Test Year and the Rate Year reducing costs by $147,274.

Q8. Please summarize the impact that Rate Year resource adjustments have on power supply costs.

A8. Please refer to column T of Exhibit VLED-HD-1. In total, resource adjustments decrease power supply costs by $1,169,990.

Q9. Are there any adjustments that apply to most of Ludlow's resources?

A9. There are two categories of adjustment that apply to most of Ludlow's resources.

1. Market Price Adjustments

Most of Ludlow's resources settle in ISO-NE's energy and capacity markets. As a result, the adjustments that are made to energy and capacity prices impact almost every resource. Forward energy prices increase in the rate year compared to the test year. This increases the energy credits for market resources. Forward Capacity Market ("FCM") prices have also increased which increases the value of market resources. These price-related adjustments are shown in columns I and M of Exhibit VLED-HD-1. For brevity, these adjustments are not explained separately for each and every resource in the following section. Instead, the Resource Adjustments focus on adjustments to the MWH Entitlements (Column E of Exhibit VLED-HD-1), the price adjustments (if any) to the resources, and other relevant adjustments.

2. Energy Volume Adjustments

The generation for resources was set to the five-year average. These averages reflect operation between 2020 and 2024 and they provide a common assumption that captures the most recent physical and financial operating conditions of each resource. The five-year average generation as well as long term generation for resources appears in Exhibit VLED-HD-3.

Q10. Please summarize the Rate Year adjustments to the 2019 Planned Purchase resources.

A10. Please refer to Exhibit VLED-HD-1, rows 7-9. The adjustments to these three resources appear in Column T of Exhibit VLED-HD-1, and they collectively decrease costs by a total of $66,072 in the Rate Year. These resources, which provided low cost, fixed-price, fixed-volume energy, expired during Test Year. They are being replaced by increased volume of the Stetson Wind 2023-2027 resource.

Q11. Please summarize the Rate Year adjustments to the Brookfield 2023-2027 resource.

A11. Please refer to Exhibit VLED-HD-1, row 10. The adjustments to this resource decrease costs by $436,107. This resource volume is firm. The volume and price increase from the test year to the rate year.

Q12. Please summarize the Rate Year adjustments to the Chester Solar resource.

A12. Please refer to Exhibit VLED-HD-1 (row 11) and VLED-HD-3. Chester Solar reduces costs by $36,374. Rate year volumes were adjusted up from the Test Year. Additionally, the multi-year rate election for the FCM expired following the Test Year which decreases the Rate Year capacity market rate and, therefore, value.

Q13. Please summarize the Rate Year adjustments to the Fitchburg Landfill resource.

A13. Please refer to Exhibit VLED-HD-1 (row 12) and VLED-HD-3. The adjustments to this resource decrease costs by $178,018. The volume was adjusted upward from the Test Year to the Rate Year. There is also additional REC revenue due to an increase in REC price and volume.

Q14. Please summarize the Rate Year adjustments to the HQUS resource.

A14. Please refer to Exhibit VLED-HD-1 (row 13). The adjustments to this resource decrease costs by $62,338. The volume is firm. The price is reduced from the Test Year.

Q15. Please summarize the Rate Year adjustments to the Internal Sale resource.

A15. Please refer to Exhibit VLED-HD-1 (row 14). The adjustment to this resource increases costs by $2,248. Please note that no Internal Sale transactions are assumed to take place in the Rate Year because these decisions are made on a month-ahead basis and are not known and measurable as a result. The adjustment serves only to reverse the activity that occurred in the Test Year.

Q16. Please summarize the Rate Year adjustments to the Kruger Facility resource.

A16. Please refer to Exhibit VLED-HD-1 (row 15) and VLED-HD-3. The generation was adjusted up to the five- year average. Capacity credits were adjusted down. The price increases from the Test Year. The adjustments to this resource reduce costs by $141,743.

Q17. Please summarize the Rate Year adjustments to the McNeil Facility resource.

A17. Please refer to Exhibit VLED-HD-1 (row 16) and VLED-HD-3. The generation was adjusted up to the five-year average. The capacity costs were adjusted up. Capacity credits were adjusted up. REC credits were adjusted up based on price and volume. The adjustments to this resource reduce costs by $15,706.

Q18. Please summarize the Rate Year adjustments to the New York Power Authority resources.

A18. Please refer to Exhibit VLED-HD-1 (rows 17 and 18) and VLED-HD-3. These resource adjustments reduced costs by $91,059 (Niagara) and $1,426 (St. Lawrence). Niagara generation was adjusted upward to the five-year average (2020-2024), and St. Lawrence generation was adjusted downward to match the same period. The energy price and

capacity costs of the contract were held constant at Test Year levels.

Q19. Please summarize the Rate Year adjustments to the Phase I/II Transmission Facility.

A19. Please refer to Exhibit VLED-HD-1 (row 19). The Rate Year capacity was adjusted down. This adjustment increased costs by $2,323.

Q20. Please summarize the Rate Year adjustments to the Project 10 resource.

A20. Please refer to Exhibit VLED-HD-1 (row 20) and VLED-HD-3. The adjustment to this resource increases costs by $17,924. This is the result of multiple factors including pay for performance credits in the Test Year which are assumed to not occur in the Rate Year because, by definition, they are not known and measurable, as well as the end of the Inventoried Energy Program through which P10 received credits. Other adjustments include a decrease in generation to match the five-year average (2020-2024), and a decrease in the energy cost to match current fuel oil prices. Finally, no adjustments are being proposed to the Other Credits, which consist of Blackstart and Forward Reserve Market credits.

Q21. Please summarize the Rate Year adjustments to the Ryegate resource.

A21. Please refer to Exhibit VLED-HD-1 (row 21) and VLED-HD-3. The adjustment to this resource decreases costs by $24,572. The generation was adjusted down to match the five-year average (2020-2024) and change in entitlement. REC revenues were adjusted down to reflect current REC market prices and lower REC volumes.

Q22. Please summarize the Rate Year adjustments to the Short Term Coverage resource.

A22. Please refer to Exhibit VLED-HD-1 (row 22). The adjustment to this resource decreases costs by $1,550. Please note that no Short Term Coverage transactions are assumed to take

place in the Rate Year because these decisions are made on a month-ahead basis and are not known and measurable as a result. The adjustment serves only to reverse the activity that occurred in the Test Year.

Q23. Please summarize the Rate Year adjustments to the Standard Offer Program.

A23. Please refer to Exhibit VLED-HD-1, row 23. No adjustments are being proposed to this resource. Although new projects are expected to come online during the Rate Year, the timing is uncertain and not known and measurable as a result.

Q24. Please summarize the adjustments to the Stetson Wind resource.

A24. Please refer to Exhibit VLED-HD-1 (row 24) and VLED-HD-3. The adjustment to this resource decreases costs by $125,939. The volume was set to the five year average and the entitlement was adjusted up per the PPA. The energy price was adjusted to the applicable years, increasing from the Test Year. Other credits, which included NCPC, were set to Test Year actuals.

Q25. Please summarize the adjustments to the Stony Brook Station resource.

A25. Please refer to Exhibit VLED-HD-1 (row 25) and VLED-HD-3. The adjustment to this resource reduces costs by $11,580. The volume was set to the five-year average. Credits from the Inventoried Energy Program were not included in the Rate Year because the program ended prior to the Rate Year. Other credits, which included NCPC, were set to Test Year actuals.

Q26. Please summarize the impact that Rate Year Markets & Other Adjustments have on power supply costs.

A26. The energy market adjustment increases power supply costs by $1,475,278. The capacity

market adjustment increases power supply costs by $17,502. Please refer to Exhibits VLED-HD-12 and VLED-HD-13 for adjustments regarding the Mystic contract which accounts for a decrease in costs by $95,592 as well as the Inventoried Energy Program which decreases costs by $51,682. Both the Mystic and Inventoried Energy Program costs will not be recurring in the Rate Year which is why both of those adjustments reduce costs. In total these adjustments increase the power supply costs by $1,345,506.

Q27. Please summarize the adjustments to energy market costs.

A27. Please refer to Exhibit VLED-HD-1, line 29, and VLED-HD-4. The cost of energy in the Rate Year at the Vermont Zone totals $4,045,793. This is an increase of $1,475,278 compared to the Test Year. This is a result of higher energy market prices during the Rate Year. The adjustment to energy market prices is calculated using broker prices between January and April 2025. There are a total of thirteen data points (dates) and a weighted average was calculated such that the most recent dates were given the most weight.

Q28. Please summarize the adjustments to capacity market costs.

A28. Please refer to Exhibit VLED-HD-1 and VLED-HD-5. The cost of capacity in the FCM increased by $17,502. Capacity market prices ($/kW-month) increased from an average of about $2.28/kW-month in the Test Year to $2.54/kW-month during the Rate Year.

Q29. Please explain how VLED's capacity market requirements are determined.

A29. ISO-NE operates the capacity market on a June 1st to May 31st schedule, and it uses the current year's coincident annual peak load to set the next year's capacity market requirements (MW). As a result, the annual coincident peak with ISO in 2024 set the capacity requirements between June 1, 2025 and May 31, 2026.

Please refer to Exhibit VLED-HD-5. VLED's annual coincident peak with ISO-NE in the

prior year is used to calculate VLED's share of the Northern New England peak. This ratio is multiplied by the Capacity Supply Obligation ("CSO") in Northern New England to arrive at VLED's CSO. Finally, the CSO is multiplied by the FCM Clearing Price to determine VLED's monthly capacity costs.

Q30. Please summarize the impact that Rate Year Transmission Adjustments have on power supply costs.

A30. There are two adjustments to transmission. The first is due to higher Schedule 9 rates (Regional Network Service or "RNS") under the NEPOOL Open Access Transmission Tariff ("OATT"). The second adjustment is to the VELCO 1991 VTA Common Facilities charge.

Q31. Please summarize the adjustments to the OATT charges.

A31. Please refer to Exhibit VLED-HD-1 and VLED-HD-6. The adjustment to the NEPOOL OATT increases costs by $248,396. The difference is due to an increase in the RNS component of the OATT, which is increasing by about 20% between the Test Year and Rate year. The exhibit shows the Test Year actual charges, peak loads including resettled volumes, and the RNS rate. This rate is compared to the 2025 RNS rate that was presented by the Participating Transmission Owners Administrative Committee on August 13, 2024 as well as a rate for 2026 as reported by the Participating Owners Administrative Committee.

Q32. Please summarize the adjustments to the VTA Common Facilities charges.

A32. Please refer to Exhibit VLED-HD-7 for methodology in calculating VLED's Rate Year share of this charge. VELCO provides an annual revenue forecast as well as the monthly allocation percent for each utility. The revenue forecast is multiplied by the allocation percent to determine Ludlow's portion of the charge. This increases costs by $55,017.

Q33. Please explain Ludlow's RES costs during the Test Year.

A33. Please refer to Exhibit VLED-HD-10 and VLED-HD-11. Ludlow's RES costs during the Test Year were $321,075. Tier I costs were $157,005, Tier II costs were $94,111 and Tier III costs were $69,959. This includes the cost of incentives, program marketing and administration, as well as a true up for the prior year's actual costs.

Q34. Please explain the known and measurable adjustments to Ludlow's RES costs.

A34. Exhibit VLED-HD-10 shows the budget for calendar year 2025 for each Tier, including administrative costs and the prior year true up. These costs total $335,849, which results in an increase in Rate Year costs of $14,774.

Ludlow's RES costs are known before the compliance year begins because VPPSA bills the RES budget itself to Ludlow throughout the compliance year. Any differences between the budgeted billings and the actual compliance costs are rolled into the following year's RES budget as a "Prior Year True Up" as shown in the Exhibit.

Q35. Does this conclude your testimony?

A35. Yes it does.

EXHIBIT LIST

Exhibit VLED-HD-1	Test Year Power Costs & Rate Year Adjustments
Exhibit VLED -HD-2	Forward Energy Market Prices
Exhibit VLED -HD-3	Historical Generation by Resource
Exhibit VLED -HD-4	Vermont Zone Energy Cost Calculation
Exhibit VLED -HD-5	Rate Year Capacity Volumes and Costs
Exhibit VLED -HD-6	NOATT Adjustments
Exhibit VLED-HD-7	VELCO VTA Common Facilities Adjustment
Exhibit VLED -HD-8	Renewable Energy Credit Prices
Exhibit VLED -HD-9	Rate Year REC Volumes and Revenues
Exhibit VLED -HD-10	Renewable Energy Standard Adjustments
Exhibit VLED -HD-11	Direct RES Compliance Costs in Rate Year
Exhibit VLED -HD-12	Mystic Cost of Service
Exhibit VLED -HD-13	Inventoried Energy Program