TO: Representative Tim Briglin, Chair, House Committee on Energy and Technology

Representative Laura Sibilia, House Committee on Energy and Technology

CC: Representative Mary Hooper, Chair, House Committee on Appropriations

Senator Jane Kitchel, Chair, Senate Committee on Appropriations Senator Ann Cummings, Chair, Senate Committee on Finance

Senator Chris Bray, Chair, Senate Committee on Natural Resources & Energy

Representative Marty Feltus, House Committee on Appropriations

FROM: VPPSA, Vermont Electric Co-op Washington Electric Co-op, Green Mountain Power, Burlington Electric

Department, Stowe Electric, VELCO

RE: Vermont Electric Utility Federal and State Infrastructure Funding Request

DATE: February 10, 2022

Please see our update below, following our initial testimony on this topic on January 14, 2022.

As stated in our original communication, clean electricity and a strong, connected grid are key to reducing greenhouse gas emissions to fight climate change because the strategies in the transportation and thermal sectors rely on electrification. As we look towards the future, we know we need to support our customers with clean, reliable electricity to support them in meeting their own and the state's greenhouse gas reduction targets.

The Vermont utilities have continued meeting to prioritize and refine the original funding request. This updated list reflects the investment priorities necessary to prepare Vermont's grid for the future. As previously stated, this request does not, however, include funds for transmission and/or subtransmission grid investments that VELCO may pursue alone or in partnership with other Vermont utilities through the bipartisan Infrastructure Investment and Jobs Act (IIJA). Given dedicated funds, Vermont's utilities have the crews, equipment, and know-how to put these investment dollars to work on "shovel-ready" projects to deliver these improvements right away to customers.

Further, per your request in our January 14, 2022, testimony, we have identified potential state and federal funding opportunities for this work. There are several programs in the Governor's recommended budget and appropriations in the IIJA that directly or indirectly support grid modernization efforts (although the IIJA funding amounts to Vermont and Vermont Utilities as well as eligibility criteria are still unknown). Some of the programs we identify in the Governor's recommended budget may require legislative tweaks, such as the broadening of weatherization to include electric service upgrades, which we notate in 'next steps' subheading of the table. We also understand the budget is in the purview of the Legislature and programs and funding amounts recommended by the Governor are subject to change.

Ultimately, federal and state infrastructure investments in the grid and for resiliency are needed in Vermont to keep electrification affordable, increasingly equitable and renewable, and reliable. Existing dollars already here in Vermont through the American Rescue Plan Act of 2021 and the federal infrastructure investments made in the bipartisan Infrastructure Investment and Jobs Act can make a large and once in a lifetime impact on Vermont's energy future.

Thank you for your consideration of this request and we look forward to discussing further.















Funding for Grid Modernization and Resilience [Budget or replace 30 V.S.A. § 8016 (ARRA Funds)]

- Seek funds from federal stimulus (ARPA) and infrastructure bill (IIJA), to defray costs for customers of utility resilience upgrades to accelerate electrification and support a
 more reliable, two-way grid.
- Funding coordinated through Distribution Utilities (DUs) or for the benefit of their customers. Amounts expended from public moneys shall not be included in rates; any additional amounts expended directly by DUs for these projects to be reviewed by Public Utilities Commission for rate treatment consistent with ratemaking or regulation plan approval authority. Where applicable, members of VPPSA may propose projects and manage grant funds in the aggregate through VPPSA.
- Sec. X [likely ARPA Funds Climate Change]
 - \$11,000,000 to DUs that have locations in their service territory without established Advance Metering Infrastructure capable of 15-minute interval data for purposes of deploying such devices consistent with any order or rules existing or established by the PUC. AMI not only helps accelerate load control and other grid management programs but also does not have any other current ready source for federal support, and lack of AMI is a barrier to receiving other federal energy sector grants.
 - \$20,000,000 to the Department of Public Service to provide financial and technical assistance for low- and moderate- income Vermonters to upgrade home electrical systems to enable installation of energy technologies designed to enable carbon reduction, load control, or resiliency. Funding should be distributed to utilities based on a pro rata share, or if by others means, on a geographically equitable basis.
 - \$30,000,000 to DUs on load share basis for strategic upgrades to substations and distribution across the Vermont grid for resiliency in light of climate change and additional capacity needed to accelerate the state's ability to meet renewable generation and electrification (load hosting) goals
 - DUs project plans to be submitted to State Energy Office (DPS) by 12/1/22 and completed by 12/31/26 (or latest date allowed by ARPA), stating how plan conforms with intent of statute and state energy policy, and presents least cost solution
 - DPS to establish reporting criteria on project deployment
 - \$15,000,000 to the Department of Forest, Parks & Recreation for the Urban and Community Forestry Program for targeted Ash tree removal in rights of way to aid overall system resilience and reliability. Of this, \$1,000,0000 is set aside to plant up to 5,000 trees to improve air quality and reduce heat island effect in town center areas. FPR shall establish a process for DUs to receive funding based upon vegetation management Ash removal needs in their territories. DUs shall utilize such funding for EAB removal and may partner with other DUs, municipalities or other public landowners to coordinate such removals.
- Sec. X [likely IIJA or other funds]
 - \$20,000,000 for establishing Resilience Zone program: DUs may seek funding to create RZs utilizing batteries installed at or near critical facilities, potentially paired with local RE, EV infrastructure, and with a microgrid/islanding where possible, to allow areas to continue to operate in the event of extended disruptions to electric service. DUs to submit project plans to DPS by 6/30/23; DPS to establish reporting criteria for deployment. Funding could either be distributed to utilities based on load share, or via a competitive application process.
 - \$1,500,000 for expansion of registered electrician apprenticeship program [VDOL] and additional training (telecom) for current electric line workers

| Priority | Dollar Amount | Purpose | Potential Source of Funding | Next Step |
|----------|------------------|--|---|---|
| #1 | \$11,000,000 | For DUs to establish Advance Metering Infrastructure capable of 15-minute interval data for purposes of deploying such devices. Will put all DUs on level footing to pursue grid modernization and enable further federal grant opportunities. | - Gov Recommend: \$2,000,000 for load management and storage. The proposal specifies funding for 'municipal and coop utilities to capture and share benefit of load management' - IIJA: \$3,000,000,000 earmarked to expand 'Smart Grid Investment Matching Grant program' of 2007, though initial guidance indicates Vermont utilities might not be eligible for the competitive grant process and will require an appropriation, or ARPA-backed application if possible. VPPSA can provide further information. | IIJA funding starts at the end of 2022; grants are intended for utilities that have AMI but also will be expected to provide some portion of match. To mitigate rate pressure, we are requesting a state fund appropriation in the budget to help utilities start this work now as well as secure these grants over the next four years. |
| #1 | \$20,000,000 | Incentive program for low-income Vermonters and multifamily housing for service amp, panel, wiring upgrades in conjunction with and additional to any efficiency/weatherization improvements or Tier 3 equipment upgrade, to aid carbon reduction, load control or resiliency. | Residential Electric Service Upgrades: - Gov Recommend: \$20,000,000 for electric service upgrades for income eligible Vermonters (ARPA SFR) - Gov Recommend: \$80,000,000 to support weatherization for income eligible Vermonters (\$45m to OEO; \$35m to EVT – ARPA SFR) - Gov Recommend: \$10,000,000 for level 1 and 2 charging for multi-family dwellings (ARPA SFR) | The Gov Recommend includes \$20,000,000 for residential electric service upgrades for income eligible Vermonters; however, there are several other programs relating to economic development and climate change that can be leveraged to support this work, which is a critical first step in helping Vermonters adopt fossil fuel displacing technologies like electric vehicles and cold weather heat pumps, along with load control and resiliency devices like storage. Without 200-amp service, even the most weatherized home cannot run all these devices effectively. |
| | | | Commercial/Municipal Electric Service Upgrades: Gov Recommend: \$30,000,000 for a rural grand list enhancement program (ARPA SFR) Gov Recommend: \$50,000,000 for the Capital Investment Grant Program created in Act 74 of 2021 (ARPA SFR) H.518, municipal fuel switching: \$46m for municipalities for thermal upgraded/electrification (Note: not for residential customers) Capital BAA (Gov Recommend): \$44M for public building improvements such as HVAC, air quality, weatherization, electric efficiency, EV infrastructure, broadband access, solar power, etc. Maximum grant of \$1M for approximately 44 grant awards | To the extent the programs are funded in the 'as-passed budget' and it is allowed under ARPA guidance, we request the state consider making electric service upgrades an allowable use of funds within these programs. |

¹ P. 169: https://www.whitehouse.gov/wp-content/uploads/2022/01/BUILDING-A-BETTER-AMERICA_FINAL.pdf

| 0,000,000 To DUs on a load share basis for strategic upgrades to substations and distribution across the Vermont grid for resiliency in light of climate change and additional capacity needed to accelerate and enable the state's renewable generation and electrification (load hosting) goals | ARPA eligible potential if focused in targeted Census tracts? One-time state General Funds would be clearest fit No clear program candidates in IIJA; not funded in Gov Recommend Budget | Direct appropriation of funds required in State FY2023 budget Because IIJA does not fit this category well, these important upgrades will be a cost barrier for Vermonters if not defrayed by state appropriation. |
|---|--|--|
| the Vermont grid for resiliency in light of climate change and additional capacity needed to accelerate and enable the state's renewable generation and electrification (load hosting) | - No clear program candidates in IIJA; not funded in Gov | Because IIJA does not fit this category well, these important upgrades will be a cost barrier for Vermonters if not defrayed |
| to accelerate and enable the state's renewable generation and electrification (load hosting) | | upgrades will be a cost barrier for Vermonters if not defrayed |
| l goals | | of state appropriation. |
| | Cay Pagammand | Coordinate with VDOL or other entities offering registered |
| apprenticeship program. Additional training (telecom) for current electric line workers and focus on attracting non-traditional and disadvantaged candidates. | \$3M for VSAC trades scholarships \$1.5M for VSAC opportunity grants | apprenticeships and other eligible training for expansion of program opportunities. |
| 5,000,000 Department of Forest, Parks & Recreation for the Urban and Community Forestry Program for targeted Ash tree removal in rights of way to aid overall system resilience and reliability. Of this, \$1,000,0000 is set aside to plant up to 5,000 trees to improve air quality and reduce heat island effect in urban areas. Funding through FPR and recipients may partner with other DUs | -Gov Recommend: \$1,000,000 to FPR to plant 5,000 trees -IIJA: \$5,000,000,000 for preventing outages and enhancing the resilience of the electric grid ² | IIJA program allocates funding through competitive grants. Distribution utilities are eligible to apply and funding is directed activities that are supplemental to existing hardening efforts and reduce the risk of power lines causing a wildfire; or reduce the likelihood and consequences of disruptive events. |
| 5,000, | apprenticeship program. Additional training (telecom) for current electric line workers and focus on attracting non-traditional and disadvantaged candidates. Department of Forest, Parks & Recreation for the Urban and Community Forestry Program for targeted Ash tree removal in rights of way to aid overall system resilience and reliability. Of this, \$1,000,0000 is set aside to plant up to 5,000 trees to improve air quality and reduce heat island effect in urban areas. Funding through | apprenticeship program. Additional training (telecom) for current electric line workers and focus on attracting non-traditional and disadvantaged candidates. Department of Forest, Parks & Recreation for the Urban and Community Forestry Program for targeted Ash tree removal in rights of way to aid overall system resilience and reliability. Of this, \$1,000,0000 is set aside to plant up to 5,000 trees to improve air quality and reduce heat island effect in urban areas. Funding through FPR and recipients may partner with other DUs \$3M for VSAC trades scholarships \$1.5M for VSAC opportunity grants Gov Recommend: \$1,000,000 to FPR to plant 5,000 trees IIIJA: \$5,000,000,000,000 for preventing outages and enhancing the resilience of the electric grid² |

² P. 276: *BUILDING-A-BETTER-AMERICA_FINAL.pdf (whitehouse.gov)

| Priority | Dollar Amount | Purpose | Potential Source of Funding | Next Step |
|----------|------------------|---|---|--|
| #5 | \$20,000,000 | Resiliency Zone program across utilities. DUs to seek funding for RZs utilizing batteries, potentially paired with local renewables, EV infrastructure, microgrid/islanding where possible to allow communities to continue to operate in the event of extended disruptions to electric service. DUs to submit plans for award by DPS by 6/30/23. | - IIJA: \$5,000,000,000 - IIJA: \$550,000,000 for energy efficiency and renewable energy block grants ⁴ | If IIJA funding is utilized, through the new program, 'Program Upgrading our Electric Grid and Ensuring Reliability and Resilience.' Funding will be allocated through competitive grants to states, groups of statesor public utility commissions. Utilities are not eligible to apply directly. Grants awarded to those who demonstrate innovative approaches to transmission, storage, and distribution infrastructure to harden and enhance resilience and reliability; and (B) to demonstrate new approaches to enhance regional grid resilience, implemented through States by public and rural electric cooperative entities on a cost-shared basis. Grant application expected to open in Q4 of 2022. DPS or PUC should apply for these funds. H.518: new draft of the bill could accommodate this funding request IIJA energy efficiency and renewable energy block grants: this source is probably the broadest in terms of eligible uses of all new programs, and one such allowed use is the development/installation of on-site renewable energy projects on government-owned buildings or lots; may not apply more broadly to other properties however. |
| .1 | \$97,500,000 | | | |

³ P. 163: <u>BUILDING-A-BETTER-AMERICA_FINAL.pdf (whitehouse.gov)</u>
⁴ P. 181: <u>BUILDING-A-BETTER-AMERICA_FINAL.pdf (whitehouse.gov)</u>