PUC Workshop Question	Question Translation	Barton	Enosburg	Hardwick	Jacksonville	Johnson	Ludlow	Lyndon	Morrisville	Northfield	Orleans	Swanton
1) Each utility's policies for responding to customer requests for service upgrades that require upgrading utility-owned equipment (e.g., lines, transformers), including:												
a) Whether and when customers requesting service upgrades are or would be responsible for costs associated with upgrading utility-owned equipment when upgrades are necessary.	**Customer Pays**	YES	YES **(See note 1)**	YES	YES	YES	YES	YES	YES	YES **(See note 3)**	YES **(See note 5)**	YES
	DU Pays	NO	YES **(See note 2)**	NO	NO	NO	NO	NO	NO	YES **(See note 4)**	YES **(See note 6)**	NO
b) Whether the entity responsible for costs is or would be different if the upgrade purpose is to enable the installation of EVSE.		NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO
c) Where your policies are documented (e.g., tariff, internal written procedures).	**Policy Documentation:**	Terms & Conditions and VT Utilities Service Requirements Manual	Terms & Conditions, Section 5	Terms & Conditions and VT Utilities Service Requirements Manual	Terms & Conditions and VT Utilities Service Requirements Manual	Terms & Conditions and VT Utilities Service Requirements Manual	Terms & Conditions and VT Utilities Service Requirements Manual	Terms & Conditions and VT Utilities Service Requirements Manual	Terms & Conditions and VT Utilities Service Requirements Manual	N/A	N/A	Terms & Conditions and VT Utilities Service Requirements Manual
2) If your utility provides rebates for EVSE-related service upgrades, please explain if you have ever denied a rebate. If so, how many times and for what reason.	**Rebates for EVSE-related Service Upgrades?:**	NO	NO	YES **(See note 7)**	NO	NO	NO	NO	YES **(See note 7)**	NO	NO	NO
	Rebates denied?	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO
3) If customers are or would be responsible for upgrade costs, please explain whether your utility allocates the costs for shared infrastructure among customers.	**How do you Allocate Costs for Shared Infrastructure across customers?:**		When a customer is deemed responsible for the upgrade costs, VOEF does not charge other customers for the upgrade.	Customer requiring the upgrade pays their share of the upgrade. If, in the future, others also upgrade, then a "rebate" % of the first cost is paid by the second mover to the utility and then to the original upgrade party.	Customer looking for the upgrade would pay the full amount of upgrade	Customer looking for the upgrade would pay the full amount of upgrade		Customer looking for the upgrade would pay the full amount of upgrade	Customer requiring the upgrade pays their share of the upgrade. If, in the future, others also upgrade, then a "rebate" % of the first cost is paid by the second mover to the utility and then to the original upgrade party.	Not applicable since NED covers costs of EVSE-related upgrades	Not applicable since NED covers costs of EVSE-related upgrades	Customer looking for the upgrade would pay the full amount of upgrade
4) The frequency and typical costs of EVSE-related service upgrades over the past three years, if you have performed any EVSE-related service upgrades.	**Typical Costs (See note 8):**											
	Upgraded Service Line Only (including wire, labor, & equipment)		Total of $4,000 for service upgrade, transformer and time & materials.	$300	Total cost range: $2,000-$4,000	Total cost range: $2,000-$4,000		Total cost range: $2,000-$4,000	$400-$2,250			Total cost range: $2,000-$4,000
	Transformer only			$1,300-$1,800					$500-$750			
	Total Cost (includes both line and transformer)			$1,600-$2,100					$900-$3,000			
	Frequency of Requests (See note 9)		~1 per quarter	~ 2 /month	~1 per quarter	None yet		Have had a few requests, but no actual upgrades	At least 1 per month			1 request per year but those have *only been Commercial* EVSE requests. **(See note 10)**
5) Any ratepayer impacts that have or would result due to EVSE-related service upgrades.	**Rate Impact**											
	Estimated ratepayer impact:	**Estimated -2.6% ratepayer impact**. Actual ratepayer impact will vary by member due to differences in Power Supply costs, actual retail rates, and by actual EVSE-upgrade costs in each upgrade scenario **(see note 11)**										

Note 1: Enosburg: Enosburg Falls Terms & Conditions state that "Any customer requiring a transformer of 37.5 kva or above shall be responsible for the purchase of that transformer." Enosburg Falls only charges customer for 37.5kv and up for transformers, so that size or larger would call for the change, and charge.

Note 2: Enosburg: Enosburg Falls Terms & Conditions state that Enosburg Falls only pays for transformers that are less than 37.5 kva

Note 3: Northfield: Developers or customers pay for distribution transformer upgrades when needed for generation projects.

Note 4: Northfield: Northfield pays for distribution transformer upgrades when needed for increased loads, particularly when the transformer is undersized for the number of meters served.

Note 5: Orleans: Developers or customers pay for distribution transformer upgrades when needed for generation projects.

Note 6: Orleans: Orleans pays for distribution transformer upgrades when needed for increased loads.

Note 7: Rebates for EVSE-related upgrades were utilized by income-qualifying customers of **Morrisville and Hardwick** as part of the now expired (as of May 2024) PowerShift Program. Rebates were given up to $5,000 to qualifying participants. This was part of the VPPSA Tier III rebate offering funded by a VLITE grant. No rebates were denied.

Note 8: Sometimes EVSE-related upgrade projects only require line upgrade, while others only require transformer upgrade, and while other require upgrades to both.

Note 9: Sometimes DU is **not** made aware of whether the request is specifically EVSE-related or due some other reason.

Note 10: Swanton has **not** had requests yet for Residential EVSE-related upgrades, but has given estimates for what those would cost. Swanton also provided costs and frequency for *Commercial EVSE installs* . $8,000-$25,000 or more for typical Commercial EVSE installs.

Note 11: Proxy ratepayer impact calculated based on the assumptions, below:

Estimation of EVSE Upgrade rate impact based on one EV

annual EV kwh calculation	
kwh/mile vehicle efficiency	0.35
miles	13,500
annual kwh	4,725

Average Typical EVSE-related	$	2,500		
Depreciation Life Years)		25		
Deprecation per Year			$	100
Interest per year (60/40 capital structure)		4%	$	40
Depreciation + Interest Per Year			$	140
Statewide Blended rate (average revenue proxy) $/kWh	$	0.18398		
Annual Incremental EV load kWh				4,725
Statewide Blended rate (average revenue proxy) $/kWh			$	0.18398
Estimated Incremental EV Revenue			$	869.31
Power Supply average proportion of cost structure		70%		
Estimated Incremental Power Supply Cost			$	608.51
Estimated Depreciation + Interest Cost			$	140.00
Estimated impact on Revenue Requirement			$	(120.79)
Estimated Rate Impact:				**-2.6%**