

Vermont Public Power Supply Authority

Board of Directors Meeting

April 3, 2019

9:30 a.m.

VPPSA Office

5195 Waterbury-Stowe Road, Waterbury Ctr., Vermont

CALL IN NUMBER: 1-773-231-9226 MEETING ID: 802 244 7678#

DIRECTORS

Evan Riordan, Barton	Jonathan Elwell, Enosburg	Mike Sullivan, Hardwick
Carol Robertson, Hyde Park	Pamela Moore, Jacksonville	Meredith Birkett, Johnson
James Pallotta, Ludlow	Bill Humphrey, Lyndonville	Craig Myotte, Morrisville
Steve Fitzhugh, Northfield	John Morley III, Orleans	Reginald Beliveau, Swanton

AGENDA

Allotted number of minutes set forth in bold type after each item

1. Call to Order
2. Consideration of changes/modifications to agenda (**3**)
3. Public Comment (**2**)

Action Items

4. Minutes of the Regular Board of Directors Meeting – February 6, 2019 (**2**)
5. Minutes of the Special Board of Directors Meeting – March 28, 2019 (**2**)
6. Treasurer's Report through February 28, 2019 (**10**)
7. Resolution 2019-04 – Audit Report and Acceptance (**20**)

Discussion Items

8. Northview Weather LLC Proposal (**10**)
9. VPPSA Board Meeting in southern Vermont (**10**)

Reports

10. Generation & Assets Committee (**5**)
11. Legislative Committee (**5**)
12. VELCO Board and Operating Committee (**5**)
13. Staff Reports (**5**)

Executive Session

14. Personnel Discussion (**25**)
 - a. Open Staff Positions
 - b. General Manager Review

15. Other Business

CC:

Tin Barton-Caplin, Barton	Clayton O. Bailey, Lyndonville
Gary Denton, Enosburg	Penny Jones, Morrisville
Frederika French, Hyde Park	Jeff Schulz, Northfield
Mac Butova, Jacksonville	Marilyn Prue, Orleans
Walter Pomroy, Johnson	Lynn Paradis, Swanton
Vacant, Ludlow	

DRAFT

Vermont **Public Power** Supply Authority

MINUTES OF THE BOARD OF DIRECTORS MEETING

February 6, 2019

Directors present (X indicates attendance in person, P indicates attendance by phone):

X	Evan Riordan, Barton	P	James Pallotta, Ludlow
X	Jonathan Elwell, Enosburg	X	Bill Humphrey, Lyndonville
X	Mike Sullivan, Hardwick	P	Craig Myotte, Morrisville
X	Carol Robertson, Hyde Park	X	Stephen Fitzhugh, Northfield
	Pamela Moore, Jacksonville	X	John Morley, Orleans
X	Meredith Birkett, Johnson	X	Reginald Beliveau, Swanton

Alternates present:

Lynn Paradis, Swanton	

Others present:

Ken Nolan, VPPSA	Crystal Currier, VPPSA	Amy Parah, VPPSA
Melissa Bailey, VPPSA	TJ Poor, VPPSA	

(numbers in bold type correspond with agenda item numbers)

- (1) The meeting was called to order at 9:36 a.m. at the office of the Authority, located at 5195 Waterbury-Stowe Road, Waterbury Ctr., Vermont.
- (2) Chairman Beliveau asked if there were requests for changes and/or modifications to the current agenda. Director Morley requested a discussion under other business related to NEPPA dues.
- (3) Chairman Beliveau asked if there were public comments and/or individuals who would like to address the Board. There was no public presence and therefore no comments were made.
- (4) Director Fitzhugh made a motion to accept the minutes of the Regular Board of Director's meeting held on December 5, 2018. The motion was seconded by Director Morley. Motion approved.
- (5) Director Morley made a motion to accept the Treasurer's report as of December 31, 2018 as presented. Director Humphrey seconded the motion.

VPPSA staff provided a brief update related to the operational budget vs. actual summary of VPPSA's operational costs. The financial results for the period ending December 31, 2018 indicate operational expenses being under-budget by approximately 5.8%.



DRAFT

This includes payroll and overheads that are under-budget by 3.7% and office supplies and expenses are under-budget by approximately 7.3%. Revenues exceeded expenses by approximately \$128K for the year (excluding capital project cost). A brief review of Project #10 and McNeil project activities was reviewed as well.

The motion was approved.

(6) Director Morley made a motion to approve Resolution 2019-01 (Ratification of Prior Actions) as presented. The motion was seconded by Director Sullivan. The motion was approved.

(7) Director Fitzhugh made a motion to approve Resolution 2019-02 (Project #10 R&C Annual True-up) as presented. The motion was seconded by Director Morley.

VPPSA staff reviewed the Resolution and corresponding Project #10 Reserve & Contingency true-up for the period ending December 31, 2018. It was noted that there were actual capital expenditures in the amount of \$41,428 (transformer upgrade), leaving excess funds in the amount of \$53,482. The bathroom project at the site was budgeted and started in 2018 (permitting) but will not be completed until 2019. Therefore, the recommendation is to transfer excess funds to the reserve to be used for future capital expenditures.

The motion was approved.

(8) Director Sullivan informed the Board that he recently contacted VPPSA to determine if VPPSA accepted credit cards as a form of payment for its various billings. After some discussion it became clear that the primary reason for the inquiry was related to the “unlimited cashback” cards that are becoming available. VPPSA has not accepted credit cards in the past and had not really considered doing so. Director Sullivan explained that this concept was something he thought could benefit HED, but he would not recommend VPPSA do so unless it was beneficial to those who wanted to participate and did not harm those who did not. The General Manager indicated that some initial research indicated that VPPSA would need to charge approximately 1.50% for using credit cards and that would leave a minor amount available to the entity receiving the cash back reward.

Director Humphrey requested that the discussion be tabled to the next Board meeting to allow time for him to discuss the topic with his staff. Director Elwell indicated that his utility does not have a credit card for purchases and Director Fitzhugh also indicated that he did not believe Northfield had credit cards. The General Manager indicated that he would leave this as an open item and staff will pursue the topic as time allows. It will be placed on the April agenda for further consideration.

(9) The General Manager noted that reports from Lemmerhirt Consulting related to the AMI readiness visits are complete and staff is reviewing the draft reports for each of the participating members.

DRAFT

The General Manager provided a general overview of the “readiness” assessment topics such as meter reading, billing, customer engagement, outage management, telecommunications, etc. Initial reviews find most member readiness to be “Fair” with only a couple of “Difficult” and a couple of “Good” results.

Next steps include – 1) finalizing the individual “readiness” reports and distributing them to each member, 2) holding a phone meeting to review the overall results and answer any member questions, 3) each member determining if they desire to move forward to the RFP phase, and 4) VPPSA issuing an RFP for AMI services. Director Sullivan asked what the potential savings are for moving forward through joint action (VPPSA) or entities like Hometown Connections. The General Manager indicated that the savings are unclear at this time, and RFP results would be needed in order to develop business cases for each option. It was noted that the AMI topic may be impacted by present legislative discussions underway – this will be further discussed below under agenda item 12.

(10) The General Manager indicated that in a recent discussion with Director Robertson, she expressed that Hyde Park saw value in working with VPPSA on regulatory and legislative issues and she felt that having VPPSA become the vehicle for a centralized public power voice could be quite powerful. Director Robertson suggested that VPPSA offer its regulatory and legislative services under a subscription-based approach rather than as part of normal member dues or hourly charges. She further noted that this structure type could attract participation from other non-members. The General Manager noted that since legislative issues have been managed a number of ways over the years, both inside and outside of VPPSA, and only recently became embedded in member dues, this suggestion warranted Board discussion and direction.

Director Fitzhugh indicated that non-members can participate in the process as it currently exists and the issue appears more about the cost rather than those participating. Director Robertson noted that the issue is about looking at the “big” picture and creating a structure that gives public power as a whole a stronger voice. There was a short discussion as to how VPPSA currently works with non-members, such as Burlington Electric Department, VEC, WEC and others. The Board expressed satisfaction with the way the structure exists and there was no interest in change. Board members reinforced that VPPSA staff can and should work with other public power utilities to develop joint positions whenever possible, but that doing so did not require a change in how VPPSA managed legislative and regulatory services for members.

Director Sullivan made a motion that the Board reject Hyde Park’s recommendation to segregate VPPSA’s Legislative and Regulatory services. Director Elwell seconded the motion. The motion was approved.

(11) The General Manager noted that the first Renewable Energy Standard compliance report for VPPSA (for 2017) has been approved by the PUC and VPPSA is now required to move forward in complying with the customer notification provision in the statute. These provisions require that two charts are developed - 1) representing the sources of power before any REC transactions and 2) VPPSA’s portfolio after REC transactions that were reported for compliance purposes. These charts must be posted to the VPPSA website and notice of where to find them must be sent to all customers.

DRAFT

It was noted that the charts are prepared in aggregate for all members participating in VPPSA's RES project and therefore, the aggregate results could look much different than each individual member's results. A good example of this is Swanton Village - as an individual member they would show 100% renewable but once included in VPPSA's aggregate, VPPSA would demonstrate a much lower overall renewable percentage. Since this disconnect could create confusion, the General Manager wanted the Board to have the opportunity to discuss the possible implications and then to determine a process for moving forward.

Director Sullivan initially suggested that the information be distributed for VPPSA in aggregate and as individual members. There was a short discussion as to how the information could be compiled so that there is no confusion as to how the final numbers are derived. Director Sullivan clarified that if the "requirement" is to file VPPSA's information in aggregate, then that is how it should be displayed. After further discussion it was decided that the information will be prepared and distributed in aggregate (as required by statute) and if a member needs an individualized report, those can be developed for that member as requested. All members will utilize the VPPSA aggregate chart related to compliance after all REC transactions, and that chart will be footnoted reflect significant individual member deviations. An aggregate VPPSA chart will be posted on the VPPSA website, but individual member pre-REC transaction charts will be provided to members upon request.

(12) The General Manager informed the Board that several legislative "reports" have recently been issued by the PUC and sent to the legislature where they are expected to be turned into Bills. Since the number of reports could potentially result in significant impacts, the General Manager felt a broader discussion was warranted. An update on the following issues was discussed:

- Section 108 Revisions – After revisions, the PUC and DPS are now supporting VPPSA's proposal. A Bill is being crafted and it is expected to be introduced in the Senate Finance committee. This is a top priority and it is expected to move quickly.
- Standard Offer Exemptions – The PUC has recommended that no further Standard Offer Exemptions be allowed and that the existing exemptions only remain in place if those utilities meet the test every year. This change could impact all three exempt utilities. It is expected that BED, VPPSA and WEC will oppose the PUC's recommendation and work to retain the exemptions.
- EV Chargers – The PUC is recommending that third-party EV charger owners be exempt from regulation but utility chargers be fully regulated. One concept is for utilities to collect a per/kwh usage tax by EV chargers. There is a lot of activity on this topic and significant testimony is expected this week.
- Rate Design – There is currently a rate design case underway that proposes to require utilities to develop more dynamic rates/pricing and potentially granting a "demand holiday" to EV chargers to make them economical. This issue could become problematic and is being monitored by VPPSA staff.
- Broadband – At a recent presentation to the House Energy & Technology committee, VPPSA was asked if the VPPSA members were considering broadband service within their communities. It was noted that the VPPSA members had little interest in "providing" broadband service.

DRAFT

The concept of providing the infrastructure for third parties to use in providing broadband service is gaining traction. Several Bills have been introduced to support expanding broadband and the Governor has made it a priority in his budget address. It was noted that there are coops and utilities in other parts of the country that have implemented broadband and it has worked, so now the question has risen as to why Vermont utilities cannot do the same. There was a brief discussion about broadband and how it is evolving.

- VW Settlement – The next round of VW grant applications is due in April. If members want to apply VPPSA would need to get that process moving.

The Board took a short recess for lunch at 12:18 p.m.

The meeting reconvened at 12:45 p.m.

(13) The Generation and Other Assets committee did not meet in January; therefore, no report was available.

(14) The Legislative and Regulatory Affairs committee did not meet in January; therefore, no report was available. The majority of legislative topics were addressed in agenda item #12.

(15) The VELCO Board meeting is Thursday, February 7th. VELCO has started their strategic planning process and it is expected that will be a large part of the discussion at the meeting this week. VELCO is changing the strategic planning process slightly so that the Board will be more involved in that process. The General Manager provided a brief update on various transmission topics. VELCO's annual meeting will be held in April.

No report of the VELCO Operating committee was available.

Director Fitzhugh reported that voting related to the public power seats on the VELCO Board of Directors was complete and that there was unanimous support for Susan Anderson and Steve Kaminski to continue for another year. Director Fitzhugh will notify VELCO of the decision.

(16) Staff Reports – The General Manager informed the Board that the building insulation project is complete. The final testing was complete this week and the test showed significant improvements. Staff is currently working with Alliance Mechanical to address some other issues with a goal of structuring a long-term capital/maintenance plan.

The General Manager indicated that he has been nominated to the APPA Board (nominated by Swanton Village). Nominations close on February 11th and the nominating committee will make a decision on February 27th.

The General Manager informed the Board that VPPSA has become a member of the Utilities Technology Council. As a member, all of the VPPSA members can automatically receive membership services. VPPSA staff will be sending out membership packets for those who are interested.

DRAFT**(17) Other Business:**

Director Morley indicated that the NEPPA dues just came out so he asked those VPPSA Directors who are currently on the NEPPA Board if they could describe what services NEPPA provides. Director Elwell provided a brief description of the organization and indicated that the dues do not cover a significant portion of NEPPA's organizational costs. Other revenues are received for specific programs/services such as legislative activities, safety training, lineworker training, etc. Other workshops include finance, customer service, and leadership. There was a short discussion regarding the dues and the benefits that the utilities receive. Director Morley requested that the VPPSA member Directors of NEPPA provide recurring updates regarding NEPPA activities. In response, the General Manager suggested that a NEPPA report be added to the Board meeting agenda as a recurring item. Director Elwell also noted that he will ask the NEPPA Executive Director, Bonnie Biocchi, to reach out to those members who had expressed concern.

The meeting was adjourned at 1:45 p.m.

Respectfully submitted,

Crystal L Currier

Crystal Currier, Secretary

Vermont Public Power Supply Authority

MINUTES OF THE SPECIAL BOARD OF DIRECTORS MEETING

March 28, 2019

Directors present (X indicates attendance in person, P indicates attendance by phone):

X	Evan Riordan, Barton	X	James Pallotta, Ludlow
X	Jonathan Elwell, Enosburg (arrived 10:00)	X	Bill Humphrey, Lyndonville
	Mike Sullivan, Hardwick	X	Craig Myotte, Morrisville
	Carol Robertson, Hyde Park	X	Stephen Fitzhugh, Northfield
X	Pamela Moore, Jacksonville	X	John Morley, Orleans
P	Meredith Birkett, Johnson (left 11:50)		Reginald Beliveau, Swanton

Alternates present:

Penny Jones, Morrisville	Lynn Paradis, Swanton

Others present:

Ken Nolan, VPPSA	Ken St. Amour, VPPSA	Kim Harris, VPPSA
Jackie Lemmerhirt Lemmerhirt Consulting	Steve Farman, VPPSA	Amanda Simard, VPPSA
David Bordenkircher Lemmerhirt Consulting		

(numbers in bold type correspond with agenda item numbers)

- (1) The meeting was called to order by Vice Chairman Myotte at 9:35 a.m. at the office of the Authority, located at 5195 Waterbury-Stowe Road, Waterbury Ctr., Vermont.
- (2) Vice-Chairman Myotte asked if there were requests for changes and/or modifications to the current agenda. There were no changes requested.
- (3) Vice-Chairman Myotte asked if there were public comments and/or individuals who would like to address the Board. There was no public presence and therefore no comments were made.
- (4) Vice-Chairman Myotte turned the meeting over Jackie Lemmerhirt of Lemmerhirt Consulting to present the findings of the surveys. Ms. Lemmerhirt reviewed the survey methodology, identified each area reviewed, and then presented detailed findings for each participating Member. She then provided an overview of the identified next steps, and areas on which the membership should focus before seeking bids from AMI vendors.

The Board recessed for lunch at 11:50am.



DRAFT

Discussion was reconvened at 12:30am. The remainder of the meeting focused on next steps and various permutations of how a VPPSA AMI system might be implemented. The Board consensus was for VPPSA staff to proceed to develop a Request For Information (RFI) identifying key variables that would need to be addressed to choose an approach to be issued broadly to potential AMI vendors. The RFI structure and content will be discussed at the June Board meeting. The project will continue to be financially supported by all members through RFI development.

(5) There was no other business.

The meeting was adjourned at 2:30 p.m.

Respectfully submitted,

Ken Nolan

Acting Secretary

Vermont **Public Power** Supply Authority



Monthly Financial Report February 28, 2019

(Unaudited)




VPPSA MONTHLY FINANCIAL REPORT TABLE OF CONTENTS

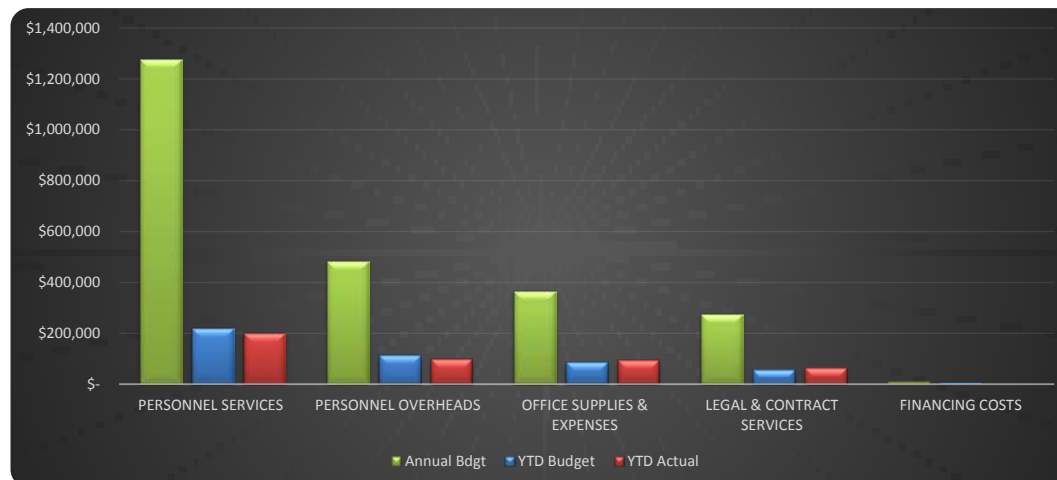
Operational Revenue & Expense Summary	FS	1
Variance Analysis	FS	2
Project Summary Balance Sheet	FS	3 - 5
Project Summary Income Statements	FS	6 - 8
VPPSA Consolidated Balance Sheet (with Prior Year Comparison)	FS	9 - 10
Non-Project Operations Income Statement (with Budget Comparison)	FS	11 - 12
McNeil Operations Income Statement (with Budget Comparison)	FS	13 - 14
Highgate Operations Income Statement (with Budget Comparison)	FS	15
Central Computer Operations Income Statement (with Budget Comparison)	FS	16
Project 10 Operations Income Statement (with Budget Comparison)	FS	17 - 19
Renewable Energy Standards Project (with Budget Comparison)	FS	20-21
Net Metering Project (with Budget Comparison)	FS	22-23

VERMONT PUBLIC POWER SUPPLY AUTHORITY
OPERATIONAL REVENUE & EXPENSE SUMMARY
2019 YTD ACTUAL VS. BUDGET

Reconciliation Month **February-2019**

		2019	2019	Variance	Variance	2019	YTD Act %
		YTD Budget	YTD Actual	Act vs. Bdgt	Act vs. Bdgt	Annual Bdgt	of Annual
				\$	%		Bdgt
REVENUES:							
	MCNEIL PROJECT #2	\$ 15,415	\$ 15,415	\$ (0)	↓ 0.0%	\$ 92,491	17%
	HIGHGATE PROJECT #3	\$ -	\$ -	\$ -	↓ 0.0%	\$ -	0%
	CENTRAL COMPUTER PRJ #4	\$ 7,708	\$ 7,708	\$ -	↓ 0.0%	\$ 46,246	17%
	SWANTON PEAKER PRJ #10	\$ 37,018	\$ 35,309	\$ (1,708)	↓ -4.6%	\$ 195,076	18%
	RES PROJECT	\$ 7,708	\$ 7,708	\$ 0	↓ 0.0%	\$ 46,246	17%
	NET METERING PROJECT	\$ 11,561	\$ 11,561	\$ (0)	↓ 0.0%	\$ 69,368	17%
	MEMBER REVENUES	\$ 289,958	\$ 289,958	\$ -	↓ 0.0%	\$ 1,739,749	17%
	NON-MEMBER REVENUES	\$ (76)	\$ (4,707)	\$ (4,631)	↑ 6095.1%	\$ 225,688	-2%
	TOTAL REVENUES	\$ 369,292	\$ 362,952	\$ (6,340)	↓ -1.7%	\$ 2,414,863	15%
BILLABLE EXPENSES:							
	PERSONNEL SERVICES	\$ 218,516	\$ 202,544	\$ (15,971)	↓ -7.3%	\$ 1,279,811	16%
	PERSONNEL OVERHEADS	\$ 114,653	\$ 100,312	\$ (14,340)	↓ -12.5%	\$ 484,100	21%
	OFFICE SUPPLIES & EXPENSES	\$ 87,310	\$ 93,625	\$ 6,315	↓ 7.2%	\$ 367,453	25%
	LEGAL & CONTRACT SERVICES	\$ 55,333	\$ 62,994	\$ 7,661	↓ 13.8%	\$ 277,000	23%
	FINANCING COSTS	\$ 6,000	\$ -	\$ (6,000)	↓ 0.0%	\$ 6,500	0%
	TOTAL BILLABLE EXPENSES	\$ 481,811	\$ 459,476	\$ (22,336)	↓ -4.6%	\$ 2,414,863	19%
	Net Income(Loss)		\$ (96,524)				

-  between 14% and 19%
 greater than 19%
 less than 14%



Monthly Financial Report-Variance Analysis
February 28, 2019

NON PROJECT OPERATIONS:

	Actual					Budget	Var (\$)	Var (%)
	Operational (*)	Power Supply	Transco Activities	Other	Total			
Member/NonMember Revenues	\$ 310,572	\$ 5,944,003	\$ -		\$ 6,254,576			
Other Revenue Sources	\$ 78,469	\$ 104,467	\$ -	\$ 7,340	\$ 190,276			
Total Revenues	\$ 389,042	\$ 6,048,470	\$ -	\$ 7,340	\$ 6,444,851	\$ 7,255,736	\$ (810,885)	-11%
Operational Expenses	\$ (459,476)	\$ (6,273,699)	\$ -	\$ (2,485)	\$ (6,735,660)			
Transco Activities	\$ (26,090)	\$ -	\$ (117,631)	\$ -	\$ (143,721)			
Other Expenses	\$ -	\$ -	\$ -	\$ (6,261)	\$ (6,261)			
Total Expenses	\$ (485,565)	\$ (6,273,699)	\$ (117,631)	\$ (8,746)	\$ (6,885,641)	\$ (7,321,038)	\$ 435,396	-6%
Net Cash Flow	\$ (96,524)	\$ (225,229)	\$ (117,631)	\$ (1,406)	\$ (440,790)			
Transco Principal (VPPSA)	\$ 21,139	\$ -	\$ -	\$ -	\$ 21,139			
Net Income (Loss)	\$ (75,385)	\$ (225,229)	\$ (117,631)	\$ (1,406)	\$ (419,652)	\$ (65,301)	\$ (375,489)	575%
Primary Drivers	PR & OH's underbudget 9.1% or (\$30K) OS & E underbudget 5.4% or (\$8K) -conf/travel, outside svcs, grounds; offset by LOC, dues,insurance Net Excess (Deficit) Collected to Cover Costs: (\$96,524) (*) - Reconciles to Operational Revenue & Expense Summary							

MCNEIL:

	Actual	Budget	Var (\$)	Var (%)
Oper Revenues	\$ 847,587	\$ 1,172,323	\$ (324,736)	-28%
Oper Expenses	\$ (931,841)	\$ (1,256,577)	\$ 324,736	-26%
Non-Oper Rev/Exp	\$ 7,518	\$ 5,000	\$ 2,518	50%
Financing	\$ -	\$ -	\$ -	0%
Net Income (Loss)	\$ (76,737)	\$ (79,254)	\$ 2,518	-3%
Primary Drivers	Expenses overall under-bdgt (\$324,736) or 26% Wood Fuel under-bdgt (\$160,386) or 28% Generation 18.5% under-budget, (2,266,433 kwh less than budget). Interest Earned over-bdgt \$2,517 or 50%			

HIGHGATE:

	Actual	Budget	Var (\$)	Var (%)
Oper Revenues	\$ -	\$ -	\$ -	0%
Oper Expenses	\$ -	\$ -	\$ -	0%
Non-Oper Rev/Exp	\$ -	\$ -	\$ -	0%
Financing	\$ -	\$ -	\$ -	0%
Net Income (Loss)	\$ -	\$ -	\$ -	0%
Primary Drivers	Sale of Asset finalized in 2017-NO activity in 2019			

CENTRAL COMPUTER:

	Actual	Budget	Var (\$)	Var (%)
Oper Revenues	\$ 20,220	\$ 20,220	\$ 0	0%
Oper Expenses	\$ (20,220)	\$ (20,220)	\$ 0	0%
Non-Oper Rev/Exp	\$ -	\$ -	\$ -	0%
Financing	\$ -	\$ -	\$ -	0%
Net Income (Loss)	\$ 0	\$ -	\$ 0	0%
Primary Drivers	On-Budget			

Renewable Energy Standards:

	Actual	Budget	Var (\$)	Var (%)
Oper Revenues	\$ 44,833	\$ 44,833	\$ (0)	0%
Oper Expenses	\$ (34,977)	\$ (44,834)	\$ 9,856	-22%
Non-Oper Rev/Exp	\$ -	\$ -	\$ -	0%
Financing	\$ -	\$ -	\$ -	0%
Net Income (Loss)	\$ 9,856	\$ (0)	\$ 9,856	-49282150%
Primary Drivers	Budgeted Expenses - Annualized REC purchase incurred in January Broker Fees on REC purchases in January			

PROJECT 10:

	Actual	Budget	Var (\$)	Var (%)
Oper Revenues	\$ 529,252	\$ 529,252	\$ (0)	0%
Oper Expenses	\$ (459,187)	\$ (480,033)	\$ 20,846	-4%
Non-Oper Rev/Exp	\$ 10,535	\$ 8,000	\$ 2,535	32%
Financing	\$ (66,117)	\$ (66,117)	\$ -	0%
Net Income (Loss)	\$ 14,484	\$ (8,898)	\$ 23,381	-263%
Primary Drivers	Labor & OH -Underbdgt (\$1,708) or 8% Outside Labor - Underbdgt (\$3,338) or 95% Materials - no variance Minimal electric, grounds, legal, training or RME			

Net Metering Project:

	Actual	Budget	Var (\$)	Var (%)
Oper Revenues	\$ 11,561	\$ 11,561	\$ (0)	0%
Oper Expenses	\$ (11,733)	\$ (11,561)	\$ (172)	1%
Non-Oper Rev/Exp	\$ -	\$ -	\$ -	0%
Financing	\$ -	\$ -	\$ -	0%
Net Income (Loss)	\$ (172)	\$ 0	\$ (172)	-858500%
Primary Drivers	Mileage Expense of \$172 not budgeted			

Vermont Public Power Supply Authority
Project Summary Balance Sheet
February 28, 2019

	Internal	McNeil	Highgate	C.Computer	P10	RES	NetMtr	Total
ASSETS								
Fixed Assets								
Production Plant								
Land & Land Rights	0.00	79,273.96	0.00	0.00	0.00	0.00	0.00	79,273.96
Structures & Improvements	0.00	4,899,772.82	0.00	0.00	3,600,854.92	0.00	0.00	8,500,627.74
Equipment	0.00	17,307,617.12	0.00	0.00	18,676,931.84	0.00	0.00	35,984,548.96
Total Production Plant	0.00	22,286,663.90	0.00	0.00	22,277,786.76	0.00	0.00	44,564,450.66
Transmission Plant								
Land & Land Rights	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Structures & Improvements	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Equipment	0.00	0.00	0.00	0.00	1,457,299.54	0.00	0.00	1,457,299.54
Total Transmission Plant	0.00	0.00	0.00	0.00	1,457,299.54	0.00	0.00	1,457,299.54
Regional Transmission & Market Plant								
Computer Hardware/Software	0.00	0.00	0.00	0.00	138,367.70	0.00	0.00	138,367.70
Communication Equipment	0.00	0.00	0.00	0.00	19,074.23	0.00	0.00	19,074.23
Total Regional Transm & Mkt Plant	0.00	0.00	0.00	0.00	157,441.93	0.00	0.00	157,441.93
General Plant								
Land & Land Rights	141,098.99	0.00	0.00	0.00	0.00	0.00	0.00	141,098.99
Structures & Improvements	704,881.55	0.00	0.00	0.00	562.11	0.00	0.00	705,443.66
Meters	91,454.48	0.00	0.00	0.00	0.00	0.00	0.00	91,454.48
Equipment	462,333.19	122,767.04	0.00	0.00	5,561.44	0.00	0.00	590,661.67
Total General Plant	1,399,768.21	122,767.04	0.00	0.00	6,123.55	0.00	0.00	1,528,658.80
Total Fixed Assets	1,399,768.21	22,409,430.94	0.00	0.00	23,898,651.78	0.00	0.00	47,707,850.93
CWIP	0.00	9,715.10	0.00	0.00	2,000.00	0.00	0.00	11,715.10
Intangible Plant-Net of Amort.	0.00	977.88	0.00	0.00	0.00	0.00	0.00	977.88
Accumulated Depreciation	(1,064,323.08)	(19,868,863.42)	0.00	0.00	(9,796,054.83)	0.00	0.00	(30,729,241.33)
Net Utility Plant In Service	335,445.13	2,551,260.50	0.00	0.00	14,104,596.95	0.00	0.00	16,991,302.58

Vermont Public Power Supply Authority
Project Summary Balance Sheet
February 28, 2019

	Internal	McNeil	Highgate	C.Computer	P10	RES	NetMtr	Total
Investments:								
Bond Fund Investments	0.00	0.00	0.00	0.00	3,041,830.86	0.00	0.00	3,041,830.86
Vt. Transco Investments	41,888,780.00	0.00	0.00	0.00	0.00	0.00	0.00	41,888,780.00
Other Investments	265,000.00	0.00	0.00	0.00	0.00	0.00	0.00	265,000.00
Total Investments	42,153,780.00	0.00	0.00	0.00	3,041,830.86	0.00	0.00	45,195,610.86
Current Assets:								
Project Revenue Funds	0.00	65,523.51	0.22	0.00	201,921.40	0.00	0.00	267,445.13
Project Construction Funds	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Cash and Working Funds	1,564,304.76	0.00	0.00	(10,594.60)	0.00	137,662.41	4,519.79	1,695,892.36
Cash-Special Deposits-PEX	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Cash - VEV Proceeds	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Temporary Investments	417,333.25	2,060,712.98	0.00	0.00	3,444,776.46	0.00	0.00	5,922,822.69
Accounts Receivable	5,805,334.95	847,586.75	0.00	0.00	31,119.37	1,459.58	0.00	6,685,500.65
Amounts Due From Members	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Notes Receivable	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Interest/Distributions Receivable	0.40	0.00	0.00	0.00	0.00	0.00	0.00	0.40
Inventory	515.00	1,050,446.82	0.00	0.00	229,578.58	0.00	0.00	1,280,540.40
Prepayments	26,447.86	0.00	0.00	0.00	152,867.31	0.00	0.00	179,315.17
Total Current Assets	7,813,936.22	4,024,270.06	0.22	(10,594.60)	4,060,263.12	139,121.99	4,519.79	16,031,516.80
Other Assets:								
Deferred Debits	70,746.07	178,841.57	0.00	10,596.47	0.00	1,282.50	0.00	261,466.61
Derivative Instrument Asset	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
UnAmortized Debt Issue Expenses	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Total Other Assets	70,746.07	178,841.57	0.00	10,596.47	0.00	1,282.50	0.00	261,466.61
Total Assets	\$ 50,373,907.42	6,754,372.13	0.22	1.87	21,206,690.93	140,404.49	4,519.79	78,479,896.85

Vermont Public Power Supply Authority
Project Summary Balance Sheet
February 28, 2019

	Internal	McNeil	Highgate	C.Computer	P10	RES	NetMtr	Total
LIABILITIES AND CAPITAL								
Current Liabilities:								
Accounts Payable	2,679,130.47	391,326.54	0.00	0.00	41,359.86	22.50	0.00	3,111,839.37
Security Deposits	1,576.75	0.00	0.00	0.00	0.00	0.00	0.00	1,576.75
Amounts due Members	441,829.07	0.00	0.00	0.00	0.00	0.00	0.00	441,829.07
Short-term Bank Notes Payable	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Current Maturities on L/T Debt	10,742,006.76	0.00	0.00	0.00	1,140,000.00	0.00	0.00	11,882,006.76
Derivative Instrument Liability	45,787.72	0.00	0.00	0.00	0.00	0.00	0.00	45,787.72
Accrued Interest	0.00	0.00	0.00	0.00	115,370.78	0.00	0.00	115,370.78
Accrued Taxes Payable	2,383.34	42,009.00	0.00	0.00	0.00	0.00	0.00	44,392.34
Accrued Salaries	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Accrued Pension Contributions	12,870.38	0.00	0.00	0.00	0.00	0.00	0.00	12,870.38
Accrued Payroll Liabilities	2,962.06	0.00	0.00	0.00	0.00	0.00	0.00	2,962.06
Other Misc. Accrued Liabilities	11,350.45	0.00	0.00	0.00	0.00	0.00	0.00	11,350.45
Total Current Liabilities	13,939,897.00	433,335.54	0.00	0.00	1,296,730.64	22.50	0.00	15,669,985.68
Long-Term Debt:								
LTD-Bonds	0.00	0.00	0.00	0.00	14,450,000.00	0.00	0.00	14,450,000.00
LTD-Other-HG	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
LTD-Other-P10	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
LTD-Transco-Members	16,225,007.75	0.00	0.00	0.00	0.00	0.00	0.00	16,225,007.75
LTD-Transco-HG	1,273,160.08	0.00	0.00	0.00	0.00	0.00	0.00	1,273,160.08
LTD-Transco-VEC	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
LTD-Transco-LCSF	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
LTD-Transco-LED	2,194,000.00	0.00	0.00	0.00	0.00	0.00	0.00	2,194,000.00
Unamortized Bond Premium	0.00	0.00	0.00	0.00	432,732.50	0.00	0.00	432,732.50
Unamortized Loss of Reaq. Debt	0.00	0.00	0.00	0.00	(309,597.44)	0.00	0.00	(309,597.44)
Net Long-Term Debt	19,692,167.83	0.00	0.00	0.00	14,573,135.06	0.00	0.00	34,265,302.89
Other Liabilities								
Deferred Revenues	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Def. Revenues - Members	0.00	0.00	0.00	0.00	0.00	130,525.41	4,691.49	135,216.90
Deferred Vacation Wages	89,296.51	0.00	0.00	0.00	0.00	0.00	0.00	89,296.51
Deferred Contract Wages	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Other Deferred Credits	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Total Deferred Credits	89,296.51	0.00	0.00	0.00	0.00	130,525.41	4,691.49	224,513.41
Interfund-Project Allocations	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Capital Equity								
Unappropriated Retained Earnings	5,691,293.79	6,321,036.60	1,193,836.70	1.88	5,358,736.95	9,856.58	(171.70)	18,574,590.80
Unappropriated Earnings-Distributed	0.00	0.00	(1,193,836.48)	0.00	0.00	0.00	0.00	(1,193,836.48)
Appropriated Retained Earnings	11,007,039.99	0.00	0.00	0.00	0.00	0.00	0.00	11,007,039.99
Other Comprehensive Income	(45,787.72)	0.00	0.00	0.00	(21,911.72)	0.00	0.00	(67,699.44)
Total Retained Earnings	16,652,546.06	6,321,036.60	0.22	1.88	5,336,825.23	9,856.58	(171.70)	28,320,094.87
Total Liabilities & Capital	\$ 50,373,907.40	6,754,372.14	0.22	1.88	21,206,690.93	140,404.49	4,519.79	78,479,896.85

Vermont Public Power Supply Authority
Project Summary Income Statement
February 28, 2019

	Non-Project	McNeil	Highgate	C. Computer	Swanton Pkr	RES	NetMet	Total
REVENUES & OTHER INCOME								
Sales for ReSale	5,949,105.37	847,586.75	0.00	0.00	529,252.26	0.00	0.00	7,325,944.38
Service Revenues	0.00	0.00	0.00	20,219.62	0.00	44,833.44	11,561.38	76,614.44
CDA & Affiliate Revenues	310,572.36	0.00	0.00	0.00	0.00	0.00	0.00	310,572.36
Project Revenues	77,701.23	0.00	0.00	0.00	0.00	0.00	0.00	77,701.23
REC Revenues	104,466.68	0.00	0.00	0.00	0.00	0.00	0.00	104,466.68
VELCO Directorship	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Misc. Revenues	109.37	0.00	0.00	0.00	0.00	0.00	0.00	109.37
Total Operating Revenues	6,441,955.01	847,586.75	0.00	20,219.62	529,252.26	44,833.44	11,561.38	7,895,408.46
EXPENSES								
POWER PRODUCTION								
STEAM POWER PRODUCTION								
Operations	0.00	703,785.27	0.00	0.00	0.00	0.00	0.00	703,785.27
Maintenance	0.00	42,908.04	0.00	0.00	0.00	0.00	0.00	42,908.04
Total Steam Power Production	0.00	746,693.31	0.00	0.00	0.00	0.00	0.00	746,693.31
OTHER POWER PRODUCTION								
Operations	0.00	0.00	0.00	0.00	37,135.18	0.00	0.00	37,135.18
Maintenance	0.00	0.00	0.00	0.00	9,359.26	0.00	0.00	9,359.26
Total Other Power Production	0.00	0.00	0.00	0.00	46,494.44	0.00	0.00	46,494.44
TRANSMISSION								
Operations	2,095,491.39	635.02	0.00	0.00	0.00	0.00	0.00	2,096,126.41
Maintenance	0.00	0.00	0.00	0.00	0.30	0.00	0.00	0.30
Total Transmission Expense	2,095,491.39	635.02	0.00	0.00	0.30	0.00	0.00	2,096,126.71
OTHER POWER SUPPLY								
Purchase Power	4,181,292.24	0.00	0.00	0.00	0.00	0.00	0.00	4,181,292.24
System Control & Load Dispatch	0.00	1,378.71	0.00	0.00	1,542.29	0.00	0.00	2,921.00
REC Purchases	0.00	0.00	0.00	0.00	0.00	21,750.00	0.00	21,750.00
Total Other PS Expense	4,181,292.24	1,378.71	0.00	0.00	1,542.29	21,750.00	0.00	4,205,963.24

Vermont Public Power Supply Authority
Project Summary Income Statement
February 28, 2019

	Non-Project	McNeil	Highgate	C. Computer	Swanton Pkr	RES	NetMet	Total
REGIONAL MARKET EXPENSES								
RME-Market Monitor/Compl-Gen	0.00	0.00	0.00	0.00	25.52	0.00	0.00	25.52
RME-Market Monitor/Compl-L&O	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Total Reg. Market Expense	0.00	0.00	0.00	0.00	25.52	0.00	0.00	25.52
CUSTOMER SVS & INFORMATION ADV								
Cust Svs & Info-Cust Assist.	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Cust Svs & Info-Info Adv Exp	0.00	3,041.64	0.00	0.00	0.00	0.00	0.00	3,041.64
Cust Svs & Infor Adv	0.00	3,041.64	0.00	0.00	0.00	0.00	0.00	3,041.64
Cust Svs & Info Adv-RES	0.00	0.00	0.00	0.00	0.00	22.50	0.00	22.50
Total Cust Svs & Info Adv.	0.00	3,041.64	0.00	0.00	0.00	22.50	0.00	3,064.14
SALES EXPENSE								
Sales Expense	1,250.00	0.00	0.00	0.00	0.00	4,647.40	0.00	5,897.40
Total Sales Expense	1,250.00	0.00	0.00	0.00	0.00	4,647.40	0.00	5,897.40
ADMINISTRATIVE & GENERAL								
Operations	456,318.28	53,761.58	0.00	20,219.58	221,570.93	8,557.13	11,733.06	772,160.56
Maintenance	0.00	67.49	0.00	0.00	0.00	0.00	0.00	67.49
Total A&G Expense	456,318.28	53,829.07	0.00	20,219.58	221,570.93	8,557.13	11,733.06	772,228.05
OTHER								
Taxes- In Lieu of Property Taxes	2,383.34	42,009.00	0.00	0.00	0.00	0.00	0.00	44,392.34
Depreciation Expense	7,144.16	84,254.16	0.00	0.00	189,553.88	0.00	0.00	280,952.20
Amortization Expense	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Total Other Expense	9,527.50	126,263.16	0.00	0.00	189,553.88	0.00	0.00	325,344.54
Total Operating Expenses	6,743,879.41	931,840.91	0.00	20,219.58	459,187.36	34,977.03	11,733.06	8,201,837.35
Net OPERATING Earnings(Loss)	(\$ 301,924.40)	(\$ 84,254.16)	0.00	0.04	70,064.90	9,856.41	(171.68)	(306,428.89)

Vermont Public Power Supply Authority
Project Summary Income Statement
February 28, 2019

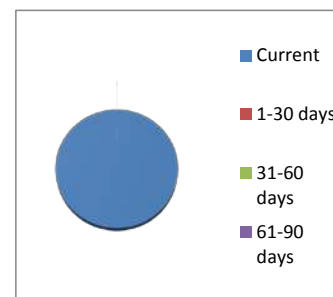
	Non-Project	McNeil	Highgate	C. Computer	Swanton Pkr	RES	NetMet	Total
NON-OPERATING (INCOME) EXPENSES								
OTHER NON-OPERATING (INCOME) EXPENSES								
Interest/Finance Chg Income	(4,855.21)	(7,517.64)	0.00	0.00	(10,535.49)	0.00	0.00	(22,908.34)
TRANSCO Distribution/Income	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Transco "Net Settlement" Expense	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Misc. Non-Operating Inc-Grants	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Misc. Non-Operating Income	(2,375.45)	0.00	0.00	0.00	0.00	0.00	0.00	(2,375.45)
Misc. Non-Operating Exp-DOE Grant	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Misc. Non-Operating Expenses	2,375.45	0.00	0.00	0.00	0.00	0.00	0.00	2,375.45
Total Other Non-Operating (Inc) Exp	(4,855.21)	(7,517.64)	0.00	0.00	(10,535.49)	0.00	0.00	(22,908.34)
FINANCING COSTS								
Interest on LTD-Bonds	0.00	0.00	0.00	0.00	115,370.82	0.00	0.00	115,370.82
Interest on LTD-Other	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Interest on Transco Debt	122,582.43	0.00	0.00	0.00	0.00	0.00	0.00	122,582.43
Interest on Short-term Debt	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Financing Costs on LTD-Swp Rel.	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Amortization of DIE-Letter of Crdt	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Amortization of Debt Issue Exp.	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Amortization of Loss on Reaq.Debt.	0.00	0.00	0.00	0.00	123,838.96	0.00	0.00	123,838.96
Amortization of Bond Premium	0.00	0.00	0.00	0.00	(173,093.02)	0.00	0.00	(173,093.02)
Net Financing Expenses	122,582.43	0.00	0.00	0.00	66,116.76	0.00	0.00	188,699.19
Total Non-Operating (Inc) Exp	117,727.22	(7,517.64)	0.00	0.00	55,581.27	0.00	0.00	165,790.85
TOTAL Net Earnings(Loss)	(\$ 419,651.62)	(\$ 76,736.52)	0.00	0.04	14,483.63	9,856.41	(171.68)	(472,219.74)

Vt. Public Power Supply Authority
Consolidated Balance Sheet
February 28, 2019

	2019	2018
ASSETS		
Electric Utility Plant	47,707,850.93	47,389,131.56
Accumulated Depreciation	(30,729,241.33)	(29,133,422.83)
Utility Plant in Service	16,978,609.60	18,255,708.73
 CWIP-McNeil	 9,715.10	 32,237.28
CWIP-Highgate	0.00	0.00
CWIP-P10	2,000.00	0.00
 Net Electric Plant	 16,990,324.70	 18,287,946.01
 Intangible Plant-Net of Amort.	 977.88	 370.49
<u>Current Assets:</u>		
Special Funds	3,309,275.99	3,580,533.89
Cash and Working Funds	315,546.65	770,869.11
Cash - REC's	0.00	0.00
Cash - Vt. Transco	1,380,345.71	1,284,269.06
Cash - VEV Proceeds	0.00	315,655.33
Special Deposits-Collateral	0.00	0.00
Temporary Investments	5,922,822.69	4,189,316.47
Investment in Associated Co.	265,000.00	0.00
Investment in Vt. Transco	41,888,780.00	40,641,060.00
Accounts Receivable	6,685,500.65	7,658,169.84
Amounts Due From Members	0.00	0.00
Notes Receivable	0.00	0.00
Interest/Distributions Receivable	0.40	0.48
McNeil Inventory	1,050,446.82	850,330.84
P10 Inventory	229,578.58	220,874.44
Meter Inventory	515.00	515.00
Other Current Assets	179,315.17	181,196.09
 Total Current Assets	 61,227,127.66	 59,692,790.55
<u>Other Assets:</u>		
Deferred Debits	261,466.61	393,788.46
Derivative Instrument Asset	0.00	0.00
Unamortized Dbt Iss Exp-LetCrd	0.00	0.00
Unamort Debt Issue Exp-McN	0.00	0.00
Unamort Debt Issue Exp-HG	0.00	0.00
Unamortiz Debt Issue Exp-P10	0.00	0.00
 Total Other Assets	 261,466.61	 393,788.46
 Total Assets	 \$ 78,479,896.85	 \$ 78,374,895.51

A/R Aging Analysis

Current	100%
1-30 days	0%
31-60 days	0%
61-90 days	0%
91-120 days	0%
>120 days	0%
Total	100%



Vt. Public Power Supply Authority
Consolidated Balance Sheet
February 28, 2019

	2019	2018
<i>LIABILITIES AND CAPITAL</i>		
Unappropriated Retained Earnings	18,574,590.80	17,576,666.16
Unappropriated Earnings-Distributed	(1,193,836.48)	(1,193,836.48)
Appropriated Retained Earnings	11,007,039.99	8,998,477.83
Other Comprehensive Income	(67,699.44)	(142,248.89)
	<hr/>	<hr/>
Total Retained Earnings	28,320,094.87	25,239,058.62
<u>Long-Term Debt:</u>		
LTD-P10 Bonds - Series A	13,655,000.00	14,730,000.00
LTD-P10 Bonds - Series B	795,000.00	860,000.00
LTD-Other - HG	0.00	0.00
LTD-Transco 2011 Consolid Refi	9,048,323.31	10,179,363.73
LTD-Transco 2012-2014 Members	3,164,870.44	3,560,479.20
LTD-Vt Transco '16 Members	1,310,290.00	1,520,290.00
LTD-Vt Transco Financing-HG	1,273,160.08	1,432,305.08
LTD-Vt Transco '17 Members	1,578,576.00	1,775,898.00
LTD-Vt Transco '18 Members	1,054,926.00	0.00
LTD-Vt Transco '18 VPPSA	68,022.00	0.00
LTD-Vt. Transco Financing-LCSF	0.00	8,746,500.00
LTD-LED SFTransco 2010-2020	2,194,000.00	2,194,000.00
Unamortized Premium-P10 Bonds	432,732.50	1,471,290.62
Unamortiz Loss-Reaqc Debt-P10	(309,597.44)	(1,052,631.20)
	<hr/>	<hr/>
Net Long-Term Debt	34,265,302.89	45,417,495.43
Def. Revenues - Members	135,216.90	0.00
Def. Credits-Accrued Vac Liab.	89,296.51	76,126.56
Def Credits-LT Salaries Payabl	0.00	0.00
	<hr/>	<hr/>
Total Deferred Revenues/Credits	224,513.41	76,126.56
<u>Current Liabilities:</u>		
Accounts Payable	3,111,839.37	2,581,777.79
Amounts due Members	441,829.07	344,263.71
Security Deposits	1,576.75	40,154.27
Short-term Bank Notes Payable	0.00	1,000,000.00
Current Maturities on L/T Debt	11,882,006.76	3,366,927.74
Derivative Instrument Liability	45,787.72	100,987.17
Accrued Interest	115,370.78	122,812.50
Accrued Taxes Payable	44,392.34	49,825.00
Accrued Salaries	0.00	0.00
Accrued Pension Contributions	12,870.38	9,840.99
Accrued Payroll Liabilities	2,962.06	4,791.48
Other Misc. Accrued Liabilities	11,350.45	20,834.25
	<hr/>	<hr/>
Total Current Liabilities	15,669,985.68	7,642,214.90
	<hr/>	<hr/>
Total Liabilities & Capital	\$ 78,479,896.85	\$ 78,374,895.51

Vermont Public Power Supply Authority
Non-Project Operations - Profit & Loss Statement
February 28, 2019

	Year to Date Actual	Year to Date Budget	Actual as % of Budget	Annual Budget
<u>Operating Revenues</u>				
Sales for Resales	5,949,105.37	6,417,777.31	93%	31,355,645.75
Serv. Fees, Members & Affiliates	310,572.36	310,208.18	100%	1,862,249.08
Admin Fees Allocated to Projects	57,806.96	57,807.00	100%	346,842.00
Project 10 Labor & OH Revenue	19,894.27	21,602.41	92%	102,584.84
VELCO Directorship	0.00	0.00	0%	18,000.00
Renewable Energy Certificates	104,466.68	443,008.00	24%	2,052,689.00
Misc. Revenues	109.37	0.00	0%	0.00
Total Operating Revenues	6,441,955.01	7,250,402.90	89%	35,738,010.67
<u>Operating Expenses</u>				
Other Power Supply Expense				
OPSE-Purchased Power	4,176,957.94	4,616,862.07	90%	21,863,408.67
OPSE-REC Purchase Exp.	0.00	0.00	0%	0.00
OPSE-Purchase Pwr-'15 SO	4,334.30	13,359.20		194,143.49
OPSE-Purchase Pwr-'17 SO	0.00	0.00	0%	0.00
Total Other Power Supply Expense	4,181,292.24	4,630,221.27	90%	22,057,552.16
Transmission Expense				
TRSM-Oper-Transm by Others	2,093,644.38	2,076,317.75	101%	11,270,566.93
TRSM-Oper-Misc Transm Exp	1,847.01	1,300.00	142%	7,800.00
Total Transmission Expense	2,095,491.39	2,077,617.75	101%	11,278,366.93
Sales Expense				
REC Sales Expenses	1,250.00	0.00	0%	0.00
Total Sales Expense	1,250.00	0.00	0%	0.00
Admin & General Expense				
Salaries	202,544.19	218,515.52	93%	1,279,811.00
Payroll Overheads	19,655.02	22,896.90	86%	99,362.07
Office Supplies & Expense	21,337.31	27,048.86	79%	188,568.00
Outside Services	62,994.00	55,333.34	114%	277,000.00
Insurances	26,814.59	21,520.34	125%	57,091.00
Employee Benefits	80,657.16	91,755.73	88%	384,737.88
Memberships/Dues	32,557.53	22,766.70	143%	25,950.00
Conference & Travel Expenses	9,353.44	12,124.18	77%	72,745.00
Rents	0.00	0.00	0%	0.00
Transportation Expenses	405.04	583.30	69%	3,500.00
A & G Transferred Credit	0.00	0.00	0%	0.00
Total A & G Expenses	456,318.28	472,544.87	97%	2,388,764.95

Vermont Public Power Supply Authority
Non-Project Operations - Profit & Loss Statement
February 28, 2019

	Year to Date Actual	Year to Date Budget	Actual as % of Budget	Annual Budget
Other Operating Expenses				
Property Taxes	2,383.34	2,383.30	100%	14,300.00
Depreciation Expense	7,144.16	7,144.16	100%	42,865.00
Amortization Expense	0.00	0.00	0%	0.00
Total Other Operating Expenses	9,527.50	9,527.46	100%	57,165.00
Total Operating Expenses	6,743,879.41	7,189,911.35	94%	35,781,849.04
Total Operating Income (Loss)	(301,924.40)	60,491.55	-499%	(43,838.37)
<u>Non-Operating (Income) Expenses</u>				
Interest/Finance Chg Income	(4,855.21)	(5,333.34)	91%	(32,000.00)
Vt. Transco Income	0.00	0.00	0%	(5,138,866.00)
Non-Operating Income-Member Purch.	(2,375.45)	0.00	0%	0.00
Non-Operating Inc-Gain on Disp of Plant	0.00	0.00	0%	0.00
Misc. Non-Operating Income	0.00	0.00	0%	0.00
Non-Operating Expenses-Member Purchases	2,375.45	0.00	0%	0.00
Misc. Non-Operating Expenses	0.00	0.00	0%	0.00
Net Other Non-Operating (Inc) Exp	(4,855.21)	(5,333.34)	91%	(5,170,866.00)
Financing Costs				
Other Interest Expense	0.00	6,000.00	0%	6,500.00
Other Interest Expense-Transco	0.00	0.00	0%	0.00
Interest on LTD-Transco	122,582.43	125,126.30	98%	1,392,266.49
Amort. of Debt Issue Exp-Transco	0.00	0.00	0%	5,000.00
Transco Net Settlement Exp.	0.00	0.00	0%	1,563,155.55
Interest on LTD	0.00	0.00	0%	0.00
Amortiz of Debt Iss. Exp-LtrCr	0.00	0.00	0%	0.00
Net Financing Costs	122,582.43	131,126.30	93%	2,966,922.04
Total Non-Operating (Inc) Exp	117,727.22	125,792.96	94%	(2,203,943.96)
Total Net Earnings (Loss)	(\$ 419,651.62)	(\$ 65,301.41)	643%	\$ 2,160,105.59

Vermont Public Power Supply Authority
McNeil Project #2 - Profit & Loss Statement
February 28, 2019

	Year to Date Actual	Year to Date Budget	Actual as % of Budget	Annual Budget
<u>OPERATING REVENUES & INCOME</u>				
Sales for ReSale	847,586.75	1,172,322.53	72%	5,398,038.38
REC Sales	0.00	0.00	0%	0.00
Total Operating Revenues & Income	847,586.75	1,172,322.53	72%	5,398,038.38
<u>OPERATING EXPENSES</u>				
STEAM PWR GENERATION-OPERATIONS				
SPG-Oper- Misc. Steam Power Expenses	17,697.11	22,257.04	80%	133,542.24
SPG-Oper-Supv&Engineering	18,926.55	14,051.00	135%	84,306.00
SPG-Oper-Steam Exp-Fuel Oil	4,335.52	859.56	504%	1,146.08
SPG-Oper-Wood Fuel Expense	578,735.02	739,121.50	78%	2,800,828.78
SPG-Oper-Cap Rel Wood Ene Cost	10,841.49	15,036.66	72%	90,219.96
SPG-Oper-Natural Gas Fuel Exp.	2,034.39	3,659.10	56%	21,969.28
SPG-Oper-Steam Expenses	50,433.53	63,099.06	80%	378,594.36
SPG-Oper-Electric Expenses	20,781.66	24,656.14	84%	147,936.84
Total SPG-Operations Expense	703,785.27	882,740.06	80%	3,658,543.54
STEAM PWR GENERATION-MAINTENANCE				
SPG-Maint-Supv. & Engineering	3,649.04	3,141.88	116%	18,851.28
SPG-Maint-Structures	1,268.12	4,404.78	29%	26,428.68
SPG-Maint-Boiler	21,952.41	62,038.26	35%	372,229.56
SPG-Maint-Electric Plt	14,726.82	108,699.26	14%	652,195.56
SPG-Maint-Steam Plant	1,311.65	2,520.44	52%	15,122.64
Total SPG Maintenance Expense	42,908.04	180,804.62	24%	1,084,827.72
TRANSMISSION-OPERATIONS				
TRSM-Oper-Station Equipment	0.00	2,517.50	0%	15,105.00
TRSM-Oper-Rent	635.02	467.40	136%	2,804.40
Total TRSM Operation Expense	635.02	2,984.90	21%	17,909.40
TRANSMISSION-MAINTENANCE				
TRSM-Maint-Station Equipment	0.00	190.00	0%	1,140.00
Total TRSM Maintenance Expense	0.00	190.00	0%	1,140.00
OTHER POWER SUPPLY				
OPSE-Syst. Crtl & Load Dispa	1,378.71	1,427.60	97%	8,565.60
OPSE-Purchased Power-McN	0.00	0.00	0%	0.00
OPSE-McN REC Purch Exp	0.00	0.00	0%	0.00
Total Other PS Expense	1,378.71	1,427.60	97%	8,565.60
CUSTOMER SVS & INFORMATION				
Cust Svs & Info-Cust Assist.	0.00	0.00	0%	0.00
Cust Svs & Info-Info Adv Exp	3,041.64	2,646.60	115%	15,879.60
Total Cust Svs & Info Expense	3,041.64	2,646.60	115%	15,879.60
SALES EXPENSES				
A&G - Sales Expense-REC's-McN	0.00	0.00	0%	2,000.00
Total Sales Expense	0.00	0.00	0%	2,000.00
ADMINISTRATIVE & GENERAL				
A&G-Salaries-McN	29,129.30	26,893.28	108%	161,359.68
A&G-Office Supplies & Exp-McN	5,289.50	6,324.20	84%	37,945.20

	Year to Date Actual	Year to Date Budget	Actual as % of Budget	Annual Budget
A&G-Outside Services-McN	6,492.46	7,774.84	84%	46,649.04
A&G-Property Insurance-McN	934.24	6,758.12	14%	40,548.72
A&G-Injuries & Damages-McN	4,309.11	6,582.96	65%	39,497.76
A&G-Safety Meetings&Equip-McN	3,678.35	0.00	0%	0.00
A&G-Environmental Compl.-McN	0.00	0.00	0%	0.00
A&G-Employee Ben Alloc-McN	3,055.90	3,055.90	100%	18,335.40
A&G-Employee Ben-Pension-McN	19,475.96	0.00	0%	0.00
A&G-Employee Ben-McN Health	22,754.92	0.00	0%	0.00
A&G-Employee Benefits-Sick-McN	0.00	0.00	0%	0.00
A&G-Employee Ben-Physical-McN	0.00	0.00	0%	0.00
A&G-Employee Ben-Life Ins-McN	116.03	0.00	0%	0.00
A&G-Employee Ben-Unempl Comp	0.00	0.00	0%	0.00
A&G-P/R Ovhd's Alloc-McN	(51,030.71)	0.00	0%	0.00
A & G - Employee Ben-McN Taxes	9,369.62	0.00	0%	0.00
A&G-Misc General Expense-McN	186.90	1,620.60	12%	9,723.60
A&G-Misc. - McN	0.00	0.00	0%	0.00
A&G-Maint of General Plant	67.49	509.84	13%	3,059.04
Total Administrative Expense	53,829.07	59,519.74	90%	357,118.44
OTHER				
Taxes- In Lieu of Property Taxes	42,009.00	42,009.00	100%	252,054.00
Depreciation Expense	84,254.16	84,254.16	100%	505,524.96
Amortization Expense	0.00	0.00	0%	0.00
Total Other Expenses	126,263.16	126,263.16	100%	757,578.96
Total Operating Expenses	931,840.91	1,256,576.68	74%	5,903,563.26
Total Operating Income (Loss)	(84,254.16)	(84,254.15)	100%	(505,524.88)
<u>NON-OPERATING (INCOME) & EXPENSES</u>				
Interest Income-McN	(7,517.64)	(5,000.00)	150%	(30,000.00)
Gain/Loss -Disp of Utility Plt	0.00	0.00	0%	0.00
Misc. Non-Oper. Income-McN	0.00	0.00	0%	0.00
Gain-Disposition of Property	0.00	0.00	0%	0.00
Misc Non-Oper Inc-Realiz Gain	0.00	0.00	0%	0.00
Misc. Non-Operating Exp-McN	0.00	0.00	0%	0.00
Misc Non Oper Exp-McN Realiz L	0.00	0.00	0%	0.00
Net Non-Operating (Inc) Exp	(7,517.64)	(5,000.00)	150%	(30,000.00)
FINANCING COSTS				
Interest on LTD-McN Bonds	0.00	0.00	0%	0.00
Interest on LTD-McN Other	0.00	0.00	0%	0.00
Amortiz. of Debt Issue Exp-McN	0.00	0.00	0%	0.00
Amortiz. of Loss on Req. Debt	0.00	0.00	0%	0.00
Amort. of Premium-McN	0.00	0.00	0%	0.00
Net Financing Expenses	0.00	0.00	0%	0.00
Total Non-Operating (Income) & Expen	(7,517.64)	(5,000.00)	150%	(30,000.00)
Total Net Income (Loss)	(\$ 76,736.52)	(\$ 79,254.15)	97%	(\$ 475,524.88)

Vermont Public Power Supply Authority
Highgate Project #3 - Profit & Loss Statement
February 28, 2019

	Year to Date Actual	Year to Date Budget	Actual as % of Budget	Annual Budget
Revenues				
Sales for Resale-HG	\$ 0.00	\$ 0.00	0%	0.00
Total Highgate Operating Revenue	0.00	0.00	0%	0.00
Expenses				
TRSM-Oper-Supv&Engineer	0.00	0.00	0%	0.00
TRSM-Oper-Load Distance	0.00	0.00	0%	0.00
TRSM-Oper-Station Expense	0.00	0.00	0%	0.00
TRSM-Oper-Overhead Line Exp	0.00	0.00	0%	0.00
TRSM-Oper-Misc Transm Exp	0.00	0.00	0%	0.00
TRSM-Oper-HG RR Lease	0.00	0.00	0%	0.00
Transmission Operating Expense	0.00	0.00	0%	0.00
TRSM-Maint-Supv. & Engineer	0.00	0.00	0%	0.00
TRSM-Maint-Structures	0.00	0.00	0%	0.00
TRSM-Maint-Station Equip.	0.00	0.00	0%	0.00
TRSM-Maint-Overhead Lines	0.00	0.00	0%	0.00
TRSM-Maint-Misc Transm Plt	0.00	0.00	0%	0.00
Transmission Maintenance Expense	0.00	0.00	0%	0.00
A&G-Salaries-HG	0.00	0.00	0%	0.00
A&G-Office Supplies & Exp-HG	0.00	0.00	0%	0.00
A&G-Office Sup&Exp-HG Adm Allo	0.00	0.00	0%	0.00
A&G-Outside Services-HG	0.00	0.00	0%	0.00
A&G-Outside Svs-HG Admin Alloc	0.00	0.00	0%	0.00
A&G-Property Insurance-HG	0.00	0.00	0%	0.00
A&G-Injuries & Damages-HG	0.00	0.00	0%	0.00
A&G-Employee Benefits Alloc-HG	0.00	0.00	0%	0.00
A&G-Miscellaneous-HG	0.00	0.00	0%	0.00
A&G-Rents-HG	0.00	0.00	0%	0.00
A&G-Maint of General Plt-HG	0.00	0.00	0%	0.00
Administrative & General Expense	0.00	0.00	0%	0.00
Property Taxes-HG	0.00	0.00	0%	0.00
Depreciation Expense-HG	0.00	0.00	0%	0.00
Other Operating Expenses	0.00	0.00	0%	0.00
Total Operating Expenses	0.00	0.00	0%	0.00
Total Operating Income (Loss)	0.00	0.00	0%	0.00
Interest Income-HG	0.00	0.00	0%	0.00
Gain/Loss on Disp of Plt-HG	0.00	0.00	0%	0.00
Net Non-Operating (Inc) Exp	0.00	0.00	0%	0.00
Other Interest Expense-HG	0.00	0.00	0%	0.00
Interest on LTD-HG Other	0.00	0.00	0%	0.00
Misc Financing Costs-Swp Rel	0.00	0.00	0%	0.00
Total Financing Costs	0.00	0.00	0%	0.00
Total Net Earnings (Loss)	\$ 0.00	\$ 0.00	0%	\$ 0.00

Vermont Public Power Supply Authority
Central Computer Project #4 - Profit & Loss Statement
February 28, 2019

	Year to Date Actual	Year to Date Budget	Actual as % of Bdgt	Annual Budget
Revenues				
Total Project 4 Revenue	20,219.62	20,219.60	100%	121,317.60
Operating Expenses				
A&G-C.Comp-Non Budgeted Exp.	0.00	0.00	0%	0.00
A&G-Computer/Printer Sup.-CC	200.00	200.00	100%	1,200.00
A&G-Comp Hard/Soft Maint.-CC	12,010.48	12,010.50	100%	72,063.00
A&G-Online Charges-CComp	301.50	301.50	100%	1,809.00
Computer Software/Hardware Pur	0.00	0.00	0%	0.00
A&G-Direct Charges Bdgt-C.Comp	0.00	0.00	0%	0.00
A&G-C.Computer Admin Expense	7,707.60	7,707.60	100%	46,245.60
Depreciation Expense-CC	0.00	0.00	0%	0.00
Total Operating Expenses	20,219.58	20,219.60	100%	121,317.60
Financing Costs				
Amortiz. of Debt Issue Exp.-CC	0.00	0.00	0.00	0.00
Other Interest Expense-CComp	0.00	0.00	0.00	0.00
Total Financing Costs	0.00	0.00	0%	0.00
Total Project 4 Expense	20,219.58	20,219.60	100%	121,317.60
Net Earnings (Loss)	\$ 0.04	\$ 0.00	0%	\$ 0.00

Vermont Public Power Supply Authority
Swanton Peaker Project #10 - Profit & Loss Statement
February 28, 2019

	Year to Date Actual	Year to Date Budget	Actual as % of Budget	Annual Budget
REVENUES & OTHER OPERATING INCOME				
Sales for ReSale	529,252.26	529,252.27	100%	3,293,894.13
Other Revenues	0.00	0.00	0%	0.00
<hr/>				
Total Revenues & Operating Income	529,252.26	529,252.27	100%	3,293,894.13

OPERATING EXPENSES**OTHER PWR GENERATION-OPERATIONS**

OPG-Oper-Superv & Engineer Exp	0.00	0.00	0%	0.00
OPG-Oper-Fuel Oil Exp.	0.00	0.00	0%	262,556.61
OPG-Oper-Fuel Biodiesel Exp.	0.00	0.00	0%	0.00
OPG-Oper-Fuel-Dem Wtr-P10	0.00	0.00	0%	0.00
OPG-Fuel-Starting Diesel	0.00	100.00	0%	600.00
OPG-Oper-Generation Exp-Direct Lbr	7,735.73	8,869.62	87%	46,122.00
OPG-Oper-Generation Exp-Lbr	162.00	500.00	32%	3,000.00
OPG-Oper-Generation Exp-EngLbr	0.00	2,000.00	0%	12,000.00
OPG-Oper-Generation Exp-Materi	750.00	100.00	750%	600.00
OPG-Oper-Generation Exp-OH	3,247.39	4,091.83	79%	15,428.86
OPG-Oper-Misc & Other Gen	0.00	0.00	0%	0.00
OPG-Oper-Misc & Oth Gen-Materi	105.52	200.00	53%	1,200.00
OPG-Oper-Misc & Oth Gen-Tools	59.59	200.00	30%	1,200.00
OPG-Oper-Misc Gen-Comp. Har/So	71.99	450.00	16%	6,996.00
OPG-Oper-Misc Gen-Permits	674.00	375.00	180%	1,375.00
OPG-Oper-Misc Gen-Electric	17,455.89	19,500.00	90%	93,800.00
OPG-Oper-Misc Gen-Ben/Incident	0.00	100.00	0%	600.00
OPG-Oper-Misc Gen-Tel/Internet	944.64	960.00	98%	5,760.00
OPG-Oper-Misc Gen-Groundskeep	700.00	1,300.00	54%	4,200.00
OPG-Oper-Misc Gen-Transp Exp	0.00	100.00	0%	600.00
OPG-Oper-Misc Gen-Trash Rem	141.26	150.00	94%	900.00
OPG-Oper-Misc Gen-Water	375.63	380.00	99%	2,280.00
OPG-Oper-Misc Gen-Waste Tax	0.00	0.00	0%	0.00
OPG-Oper-Misc Gen-Waste Rem	0.00	400.00	0%	2,400.00
OPG-Oper-Misc Gen-CO2 System	3,457.24	4,100.00	84%	9,000.00
OPG-Oper-Misc & Oth Gen-Train	0.00	2,500.00	0%	15,000.00
OPG-Oper-Misc Gen-Security Sys	690.12	1,000.00	69%	3,600.00
OPG-Oper-Misc Gen-Mileage	131.66	200.00	66%	1,200.00
OPG-Oper-Misc Gen-Admin Supplies	0.00	100.00	0%	600.00
OPG-Rents-P10	180.00	300.00	60%	1,800.00
OPG-Rents-Land Lease-P10	252.52	252.52	100%	1,515.12
<hr/>				
Total OPG-Operations Expense	37,135.18	48,228.97	77%	494,333.59

OTHER PWR GENERATION-MAINTENANCE

OPG-Maint-Superv & Eng Exp.	0.00	0.00	0%	0.00
OPG-Maint-Structures	0.00	300.00	0%	1,800.00
OPG-Maint-Gen&Elec Eq-Dir Lbr	6,116.92	5,913.08	103%	30,748.00
OPG-Maint-Gen & Elec Eq-Labor	0.00	1,000.00	0%	8,200.00
OPG-Maint-Gen & Elec Eq-Materi	448.11	1,000.00	45%	6,000.00
OPG-Maint-Gen & Elec Eq-OH	2,794.23	2,727.88	102%	10,285.93
OPG-Maint-Misc. Oth Pwr Gen Pl	0.00	100.00	0%	600.00
<hr/>				
Total OPG Maintenance Expense	9,359.26	11,040.96	85%	57,633.93

Vermont Public Power Supply Authority
Swanton Peaker Project #10 - Profit & Loss Statement
February 28, 2019

	Year to Date Actual	Year to Date Budget	Actual as % of Budget	Annual Budget
TRANSMISSION-OPERATIONS				
Transm-Oper-Superv. & Eng.	0.00	0.00	0%	0.00
Transm-Oper-Station Exp.	0.00	100.00	0%	600.00
Transm-Oper-Ovhd Lines Exp	0.00	50.00	0%	300.00
Transm-Oper-Transm. by Others	0.00	40.00	0%	240.00
Transm-Oper-Misc Transm Exp	0.00	0.00	0%	0.00
Total TRSM Operation Expense	0.00	190.00	0%	1,140.00
TRANSMISSION-MAINTENANCE				
Transm-Maint-Structures	0.00	100.00	0%	600.00
Transm-Maint-Station Equip.	0.30	100.00	0%	28,600.00
Transm-Maint-Overhead Lines	0.00	100.00	0%	600.00
Transm-Maint-Undergrd Lines	0.00	0.00	0%	0.00
Transm-Maint-Misc. Transm.	0.00	0.00	0%	0.00
Total TRSM Maintenance Expense	0.30	300.00	0%	29,800.00
OTHER POWER SUPPLY				
OPSE-Power Supply - P10	0.00	0.00	0%	0.00
OPSE-Sys Cntrl & Ld Disp - P10	1,542.29	1,480.00	104%	8,880.00
Total Other PS Expense	1,542.29	1,480.00	104%	8,880.00
REGIONAL MARKET EXPENSES				
RME-Market Monitor/Compl-Gen	25.52	4,166.66	1%	25,000.00
RME-Market Monitor/Compl-L&O	0.00	0.00	0%	0.00
Total Reg. Market Expense	25.52	4,166.66	1%	25,000.00
ADMINISTRATIVE & GENERAL				
A & G - Salaries - P10	8,019.60	8,019.60	100%	48,117.60
A & G - Bank Fees - P10	0.00	0.00	0%	0.00
A & G-General Office Supp- P10	0.00	0.00	0%	0.00
A&G-Local Mileage Exp-P10	0.00	100.00	0%	600.00
A&G-Local Meals Exp-P10	0.00	50.00	0%	300.00
A & G-Utilities- P10	0.00	0.00	0%	0.00
A & G-Telephone- P10	0.00	20.00	0%	120.00
A&G-Groundskpg/Snow Rem-P10	0.00	0.00	0%	0.00
A&G-Online Charges-P10	0.00	0.00	0%	0.00
A&G-Comp Soft/Hardware-P10	(70.01)	0.00	0%	0.00
A&G-Office Supp&Exp - P10 Alloc	2,493.02	2,493.02	100%	14,958.12
A&G-Outside Svs Legal-P10	741.00	1,000.00	74%	6,000.00
A&G-Outside Svs Other-P10	7,050.00	5,200.00	136%	47,300.00
A&G-Outside Svs-P10 Admin	1,846.66	1,846.66	100%	11,079.96
A&G-Property Insurance-P10	157,179.60	156,792.96	100%	136,765.56
A&G-Prop Insurance-P10 Admin	0.00	0.00	0%	0.00
A&G-Pollution Insurance-P10	0.00	7,892.23	0%	7,892.23
A&G-General Liability Ins-P10	21,368.50	22,348.74	96%	19,992.58
A&G-Injuries & Damages-P10	15,111.37	15,142.62	100%	13,546.32
A&G-P10 W/C Insurance	4,775.29	710.91	672%	2,538.03
A&G-P10 Safety Mtg & WC Related	0.00	400.00	0%	2,400.00
A&G-Employee Benefits-P10	3,055.90	3,055.90	100%	18,335.40
A&G-Misc Gen Exp-P10	0.00	0.00	0%	0.00
A&G - Conferences/Training-P10	0.00	0.00	0%	0.00
A&G Misc - P10	0.00	0.00	0%	0.00
Total Administrative Expense	221,570.93	225,072.64	98%	329,945.80

Vermont Public Power Supply Authority
Swanton Peaker Project #10 - Profit & Loss Statement
February 28, 2019

	Year to Date Actual	Year to Date Budget	Actual as % of Budget	Annual Budget
OTHER OPERATING EXPENSES				
Property Taxes	0.00	0.00	0%	21,000.00
Depreciation Expense	189,553.88	189,553.88	100%	1,137,323.28
Amortization Expense	0.00	0.00	0%	0.00
Total Other Operating Expenses	189,553.88	189,553.88	100%	1,158,323.28
Total Operating Expenses	459,187.36	480,033.11	96%	2,105,056.60
Net Operating Income (Loss)	70,064.90	49,219.16	142%	1,188,837.53
NON-OPERATING INCOME/EXPENSES				
OTHER NON-OPERATING (INCOME) EXPENSE				
Insurance Settlement (net)	0.00	0.00	0%	0.00
Net Realized (Gain)Loss on Investments	0.00	0.00	0%	0.00
Interest Income-P10	(10,535.49)	(8,000.00)	132%	(48,000.00)
Net Other Non-Operating (Inc) Exp	(10,535.49)	(8,000.00)	132%	(48,000.00)
FINANCING COSTS				
Interest on LTD-P10 Bonds	115,370.82	115,370.82	100%	674,840.58
Interest on LTD-P10 Other	0.00	0.00	0%	0.00
Other Interest Expense-P10	0.00	0.00	0%	0.00
Amortiz of Debt Issue Exp	0.00	0.00	0%	0.00
Amortiz of Loss on Req Debt	123,838.96	123,838.96	100%	743,033.76
Amortiz. of Premium-P10	(173,093.02)	(173,093.02)	100%	(1,038,558.12)
Net Financing Expenses	66,116.76	66,116.76	100%	379,316.22
Total Non-Operating (Inc) Exp	55,581.27	58,116.76	96%	331,316.22
TOTAL P10 INCOME (LOSS)	\$ 14,483.63	(\$ 8,897.60)	-163%	\$ 857,521.31

Vermont Public Power Supply Authority
Renewable Energy Standards Project - Profit & Loss Statement
February 28, 2019

	Year to Date Actual	Year to Date Budget	Actual as % of Budget	Annual Budget
Revenues				
Service Revenue-RES Tier 1	\$ 20,176.48	\$ 20,176.50	100%	121,059.00
Service Revenue-RES Tier 2	1,180.42	1,180.44	100%	7,082.64
Service Revenue-RES Tier 3	23,476.54	23,476.54	100%	140,859.24
Total RES Operating Revenue	44,833.44	44,833.48	100%	269,000.88
Operating Expenses				
OTHER POWER SUPPLY EXPENSE				
OPSE-REC Purchase Exp-Tier 1	0.00	16,707.84	0%	100,247.04
OPSE-REC Purchase Exp-Tier 2	21,750.00	977.50	2225%	5,865.00
OPSE-REC Purchase Exp-Tier 3	0.00	0.00	0%	0.00
Total Other Power Supply Expense	21,750.00	17,685.34	123%	106,112.04
TRANSMISSION EXPENSE				
Total Transmission Expense	0.00	0.00	0%	0.00
CUSTOMER SVS & INFORMATION				
Cust Svs & Info-RES I&A-T1	0.00	0.00	0%	0.00
Cust Svs & Info-RES I&A-T2	0.00	0.00	0%	0.00
Cust Svs & Info-RES I&A-T3	22.50	1,250.00	2%	7,500.00
Total Cust Svs & Info Expense	22.50	1,250.00	2%	7,500.00
SALES EXPENSES				
Sales-Misc Sales Exp-RES T1	2,847.40	0.00	0%	0.00
Sales-Misc Sales Exp-RES T2	0.00	0.00	0%	0.00
Sales-Misc Sales Exp-RES T3	1,800.00	17,773.84	10%	106,643.04
Total Sales Expense	4,647.40	17,773.84	26%	106,643.04
ADMINISTRATIVE & GENERAL				
A&G-Salaries-AdminAlloc-RES T1	1,804.54	1,804.54	100%	10,827.24
A&G-Salaries-AdminAlloc-RES T2	105.58	105.58	100%	633.48
A&G-Salaries-AdminAlloc-RES T3	2,099.68	2,099.68	100%	12,598.08
A&G-O S&E-AdminAlloc-RES T1	560.96	560.96	100%	3,365.76
A&G-O S&E-AdminAlloc-RES T2	32.82	32.82	100%	196.92
A&G-O S&E-AdminAlloc-RES T3	652.72	652.72	100%	3,916.32
A&G-Outside Svs-Legal RES-T1	0.00	0.00	0%	0.00
A&G-Outside Svs-Legal RES-T2	0.00	0.00	0%	0.00
A&G-Outside Svs-Legal RES-T3	849.51	416.66	204%	2,499.96
A&G-Outside Svs-RES T1 Admin	415.54	415.58	100%	2,493.28
A&G-Outside Svs-RES T2 Admin	24.32	24.32	100%	145.92

Vermont Public Power Supply Authority
Renewable Energy Standards Project - Profit & Loss Statement
February 28, 2019

A&G-Outside Svs-RES T3 Admin	483.50	483.50	100%	2,901.00
A&G-Employee Ben Alloc-RES T1	687.62	687.62	100%	4,125.72
A&G-Employee Ben Alloc-RES T2	40.24	40.24	100%	241.44
A&G-Employee Ben Alloc-RES T3	800.10	800.10	100%	4,800.60

Total Administrative Expense	8,557.13	8,124.32	105%	48,745.72
-------------------------------------	-----------------	-----------------	-------------	------------------

OTHER

Taxes- In Lieu of Property Taxes	0.00	0.00	0%	0.00
Depreciation Expense	0.00	0.00	0%	0.00
Amortization Expense	0.00	0.00	0%	0.00

Total Other Expenses	0.00	0.00	0%	0.00
-----------------------------	-------------	-------------	-----------	-------------

Total Operating Expenses	34,977.03	44,833.50	78%	269,000.80
---------------------------------	------------------	------------------	------------	-------------------

Total Operating Income (Loss)	9,856.41	(0.02)	-49282050%	0.08
--------------------------------------	-----------------	---------------	-------------------	-------------

NON-OPERATING (INCOME) & EXPENSES

Interest Income	0.00	0.00	0%	0.00
Misc Non-Operating Income	0.00	0.00	0%	0.00
Misc Non-Operating Expense	0.00	0.00	0%	0.00

Net Non-Operating (Inc) Exp	0.00	0.00	0%	0.00
------------------------------------	-------------	-------------	-----------	-------------

FINANCING COSTS

Interest on LTD	0.00	0.00	0%	0.00
Other Interest Expense	0.00	0.00	0%	0.00
Amortization Debt Issue Exp	0.00	0.00	0%	0.00
Amortization Debt Premium	0.00	0.00	0%	0.00

Net Financing Expenses	0.00	0.00	0%	0.00
-------------------------------	-------------	-------------	-----------	-------------

Total Non-Operating (Income) & Expen	0.00	0.00	0%	0.00
---	-------------	-------------	-----------	-------------

Total Net Income (Loss)	\$ 9,856.41	(\$ 0.02)	-49282050%	\$ 0.08
--------------------------------	--------------------	------------------	-------------------	----------------

Vermont Public Power Supply Authority
Net Metering Project - Profit & Loss Statement
February 28, 2019

	Year to Date Actual	Year to Date Budget	Actual as % of Budget	Annual Budget
Revenues				
Service Revenue-Net Metering	\$ 11,561.38	\$ 11,561.40	100%	69,368.40
Total Net Metering Operating Revenue	11,561.38	11,561.40	100%	69,368.40
Operating Expenses				
OTHER POWER SUPPLY EXPENSE	0.00	0.00	0%	0.00
Total Other Power Supply Expense	0.00	0.00	0%	0.00
TRANSMISSION EXPENSE	0.00	0.00	0%	0.00
Total Transmission Expense	0.00	0.00	0%	0.00
CUSTOMER SVS & INFORMATION	0.00	0.00	0%	0.00
Total Cust Svs & Info Expense	0.00	0.00	0%	0.00
SALES EXPENES	0.00	0.00	0%	0.00
Total Sales Expense	0.00	0.00	0%	0.00
ADMINISTRATIVE & GENERAL				
A&G-Salaries-Admin Alloc-NM	6,014.70	6,014.70	100%	36,088.20
A&G-OS&E-Amin Alloc-NM	1,869.76	1,869.76	100%	11,218.56
A&G-Outside Services-Legal-NM	0.00	0.00	0%	0.00
A&G-Outside Svs-Other-NM	0.00	0.00	0%	0.00
A&G-Outside Svs-NM Admin	1,385.00	1,385.00	100%	8,310.00
A&G-Employee Benefits Alloc-NM	2,291.92	2,291.92	100%	13,751.52
A&G-Misc - NM	171.68	0.00	0%	0.00
Total Administrative Expense	11,733.06	11,561.38	101%	69,368.28
OTHER				
Taxes- In Lieu of Property Taxes	0.00	0.00	0%	0.00
Depreciation Expense	0.00	0.00	0%	0.00
Amortization Expense	0.00	0.00	0%	0.00
Total Other Expenses	0.00	0.00	0%	0.00
Total Operating Expenses	11,733.06	11,561.38	101%	69,368.28
Total Operating Income (Loss)	(171.68)	0.02	-858400%	0.12

Vermont Public Power Supply Authority
Net Metering Project - Profit & Loss Statement
February 28, 2019

NON-OPERATING (INCOME) & EXPENSES

Interest Income	0.00	0.00	0%	0.00
Misc Non-Operating Income	0.00	0.00	0%	0.00
Misc Non-Operating Expense	0.00	0.00	0%	0.00

Net Non-Operating (Inc) Exp	0.00	0.00	0%	0.00
------------------------------------	-------------	-------------	-----------	-------------

FINANCING COSTS

Interest on LTD	0.00	0.00	0%	0.00
Other Interest Expense	0.00	0.00	0%	0.00
Amortization Debt Issue Exp	0.00	0.00	0%	0.00
Amortization Debt Premium	0.00	0.00	0%	0.00

Net Financing Expenses	0.00	0.00	0%	0.00
-------------------------------	-------------	-------------	-----------	-------------

Total Non-Operating (Income) & Expen	0.00	0.00	0%	0.00
---	-------------	-------------	-----------	-------------

Total Net Income (Loss)	(\$ 171.68)	\$ 0.02	-858400%	\$ 0.12
--------------------------------	--------------------	----------------	-----------------	----------------

Vermont Public Power Supply Authority

BOARD RESOLUTION 2019-04

Acceptance of the 2018 Report to the Board of Directors and 2018 Audited Financial Statements

WHEREAS, Vermont Public Power Supply Authority (the "Authority") entered into an engagement with Graham & Graham P.C. for the 2018 audit of the Authority; and

WHEREAS, Graham & Graham has subsequently conducted audit services for the Authority and has provided to the Authority's Board of Directors a written report, that includes Graham & Graham, P.C.'s unqualified opinion for the 2018 financial statements;

NOW THEREFORE, be it Resolved that the Board of Directors of the Authority, having duly considered the above documents, hereby accepts both the Report to the Board of Directors and the 2018 audited financial statements as audited by Graham & Graham, P.C.

Adopted by the Board of Directors
This 3rd day of April, 2019

ATTESTED: *Crystal L Currier*

Crystal Currier
Secretary

Memorandum

To: Board of Directors
From: Ken Nolan, General Manager
Date: March 29, 2019
Subject: **Agenda #8** – Northview Weather LLC Proposal

Vermont Electric Cooperative and VELCO have both been working with Northview Weather LLC to develop and implement weather forecasts for use in storm conditions. In particular, Northview is working on improving storm and severe weather outage predictions by focusing on high wind, wet snow, and icing events.

At the March VELCO Operating Committee VEC brought forward a proposal to have all of the Vermont distribution utilities participate in a contract with Northview Weather that would be managed by VELCO. Structurally this would be similar to the efforts previously undertaken with IBM to develop the Utopus product.

Director Fitzhugh was in attendance at the Operating Committee and cautioned the group that he could not provide feedback until the VPPSA utilities had discussed the proposal as a group. He forwarded VPPSA the presentation provided to the Operating Committee, which is attached.

Separately VELCO's General Counsel, Colin Owyang, developed an estimated cost for each utility if all proceeded under a transmission cost share arrangement. He also indicated that these costs would be increased proportionately if individual utilities chose not to participate. Colin's Memorandum describing the costs is also attached.

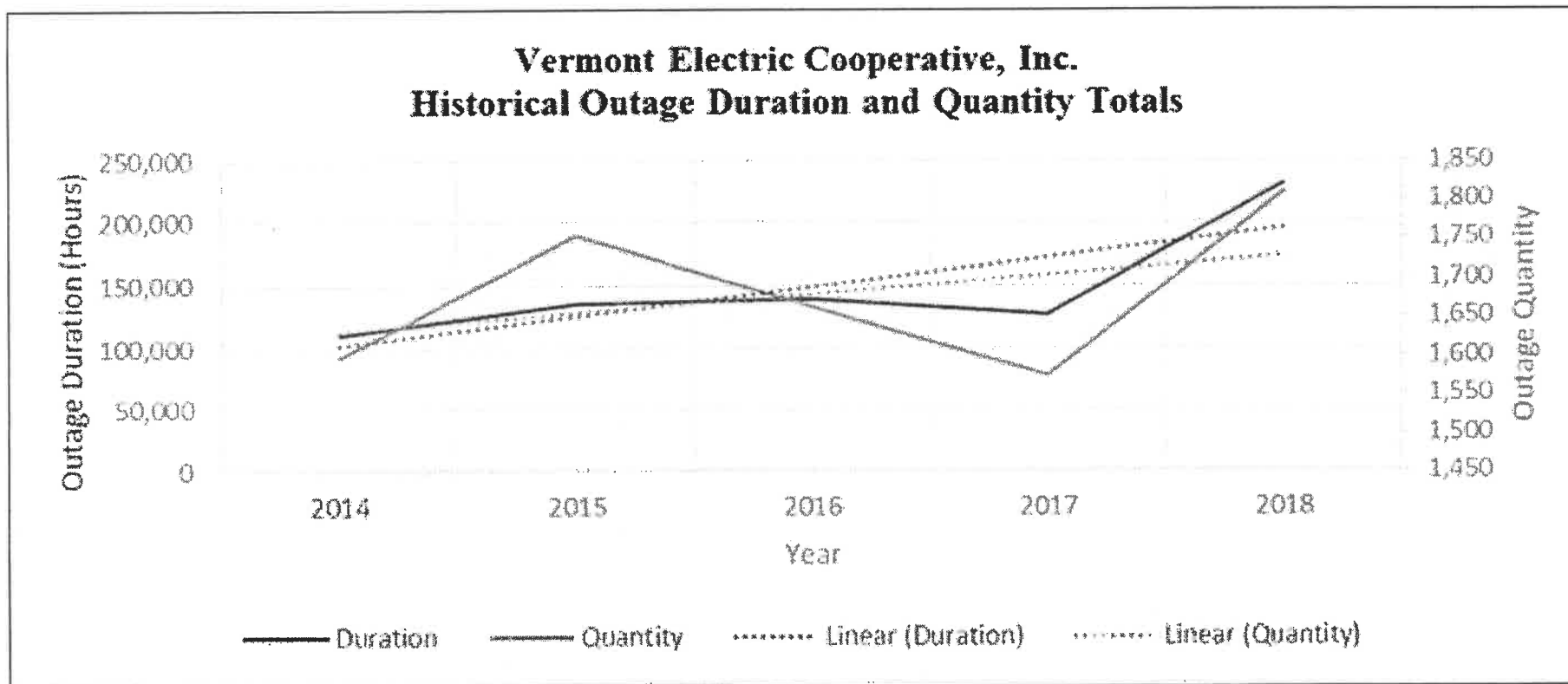
Director Fitzhugh requested that this discussion be placed on the April Board agenda so that he can provide a response to VELCO and the other Operating Committee members.

Weather hazards and Vermont's power grid: Present and future risks

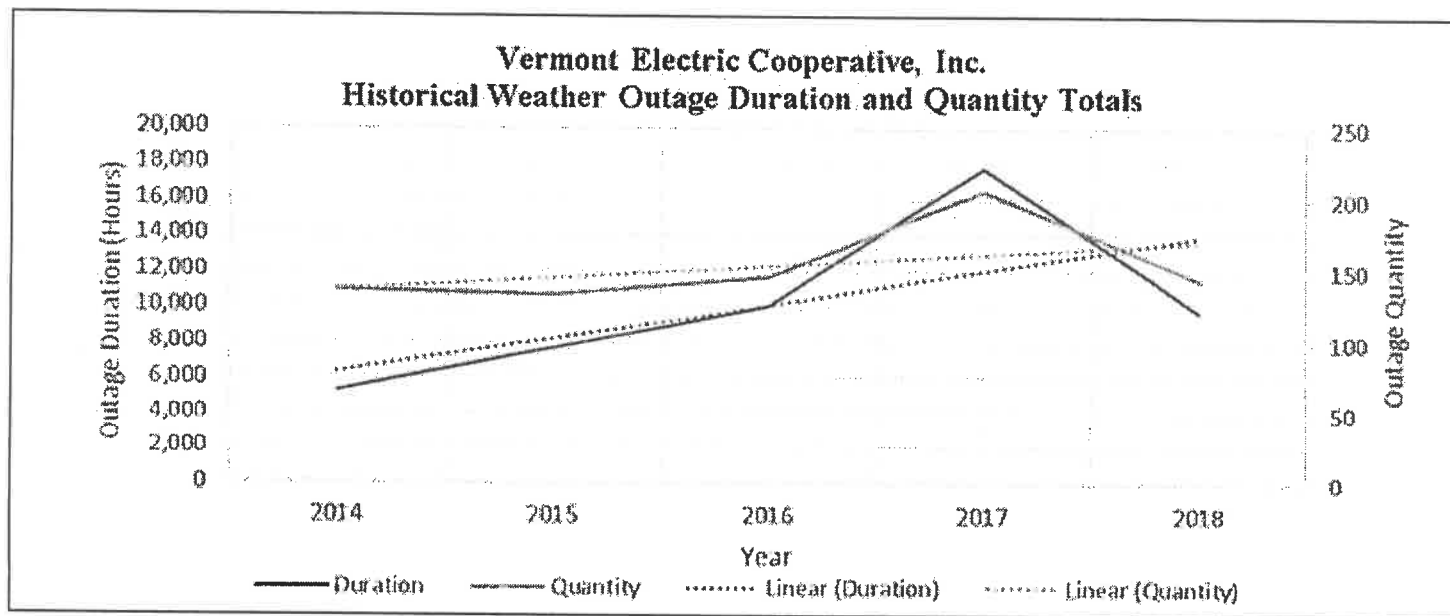
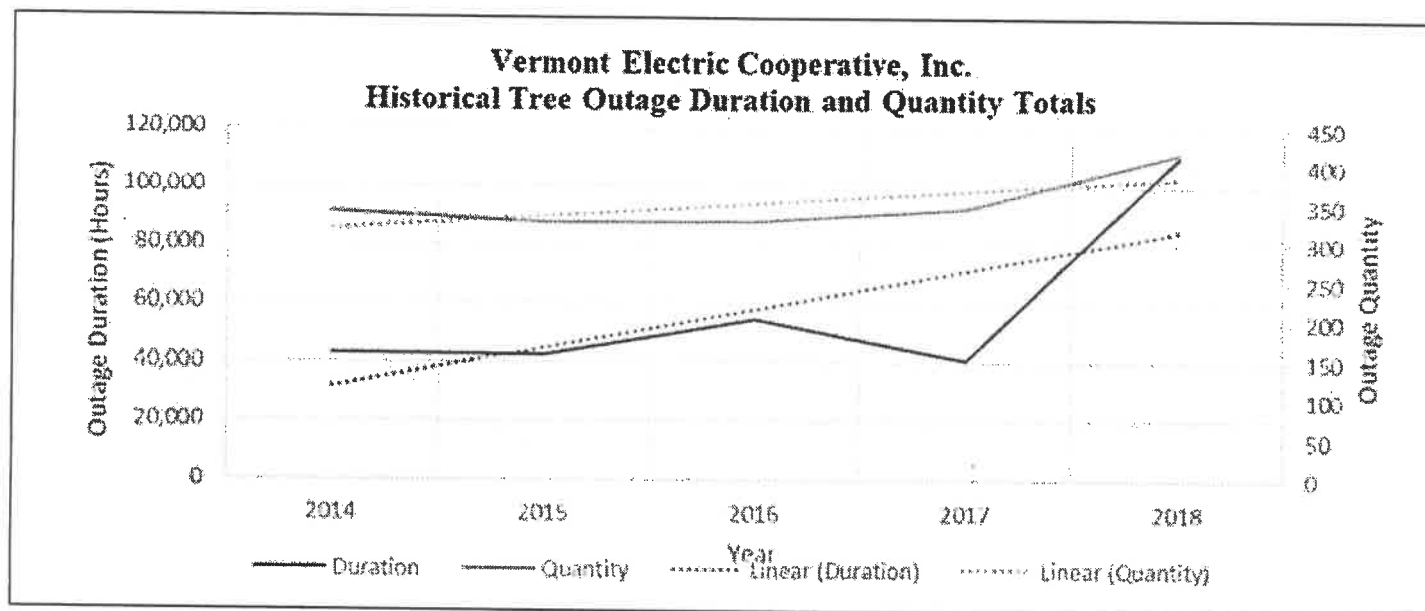
A proposal to the VELCO Operating Committee
Dr. Jason Shafer - jason.shafer@northviewweather.com
March 21, 2019



VEC's Outages are Increasing

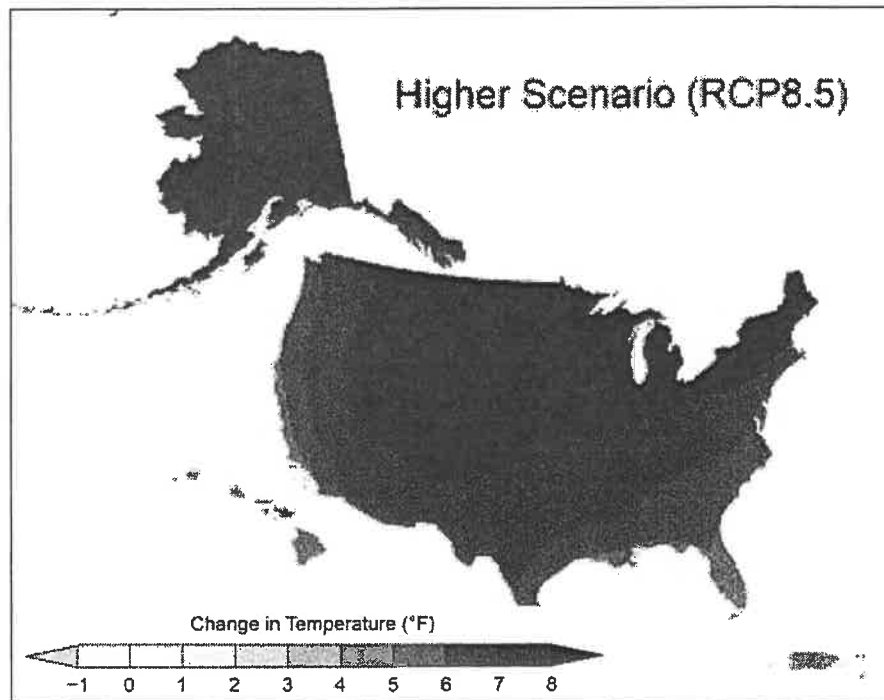


Primarily as a result of Weather and Trees

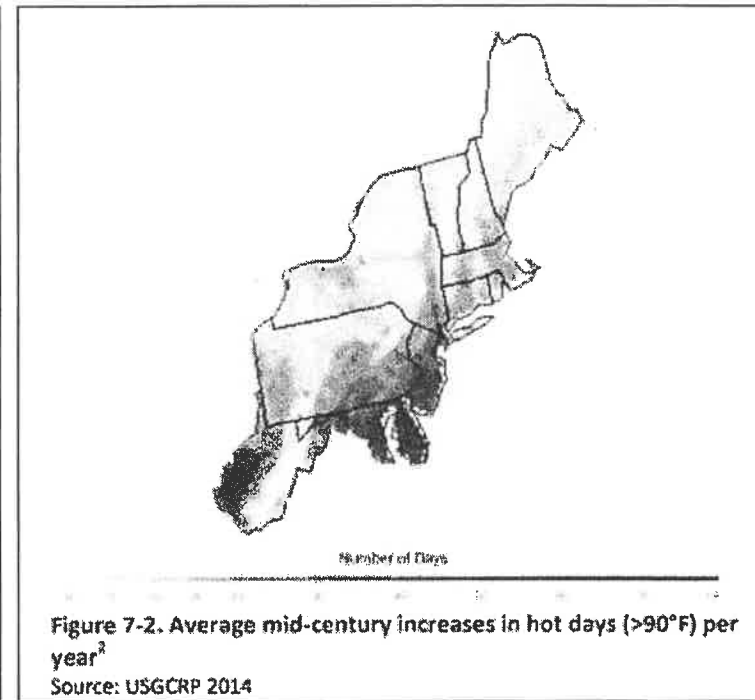


Motivation - Connecting Global to Local

- No regional literature specific to power grid impacts - only broad regional and national generalizations
- Difficult to know how concerned we should be for different applications



<https://nca2018.globalchange.gov/chapter/2/>



<https://nca2018.globalchange.gov/chapter/4/>

What can we do?

Research Objectives:

- Develop information to help understand system baseline performance around extreme weather and outages (Part 1)
- Develop predictions of future weather risks resulting from climate change (Part 2)

Potential Actions:

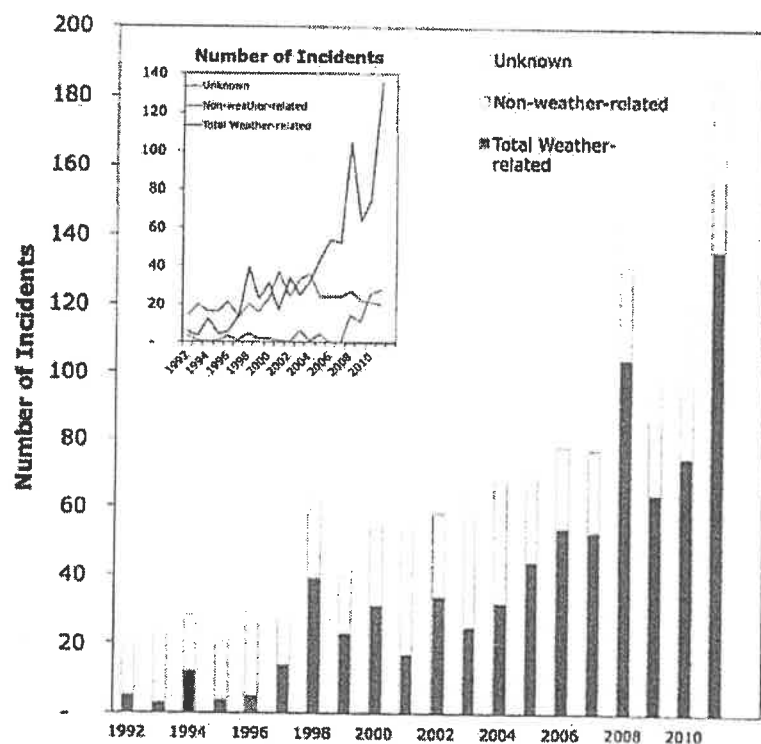
- Improve resilience, inform decisions -
asset hardening, vegetation management,
etc.

Project Scope: Part 1

What has happened:

- Examine changes in weather-driven outages with participating DUs.
- Work with participating DUs to better understand non-weather factors influencing outage variability.

Nationally, weather-caused outages are increasing



Source: Electric Grid Disruptions and Extreme Weather. See <http://evanmills.lbl.gov/presentations/Mills-Grid-Disruptions-NCDC-3May2012.pdf>.

Notes: Historical "Grid Disturbance" data from the U.S. Department of Energy, Energy Information Administration, Form OE-417, "Electric Emergency Incident and Disturbance Report" (and before 1978 from the National Electric Reliability Council, Disturbance Analysis Working Group).

<https://www.energy.gov/sites/prod/files/2013/07/12/20130716-Energy%20Sector%20Vulnerabilities%20Report.pdf>

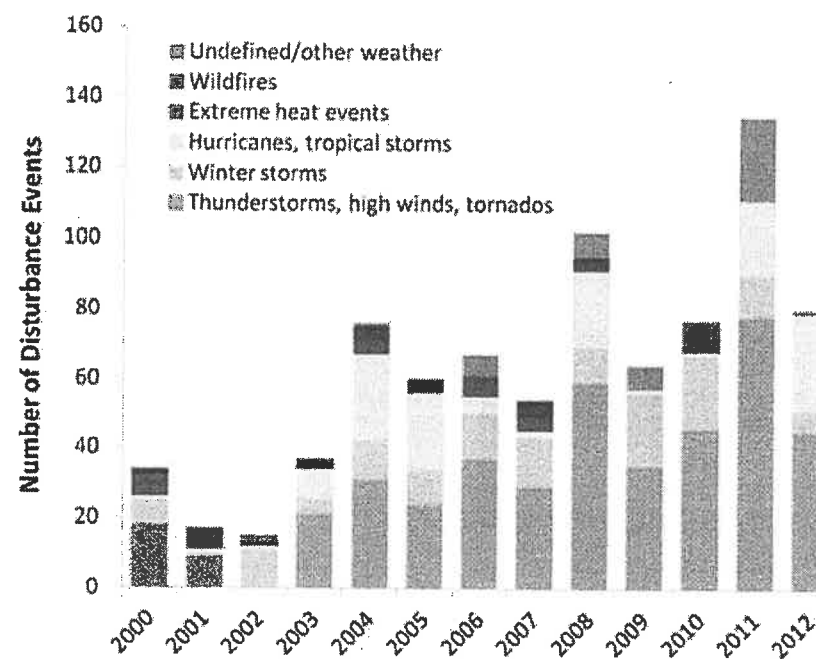


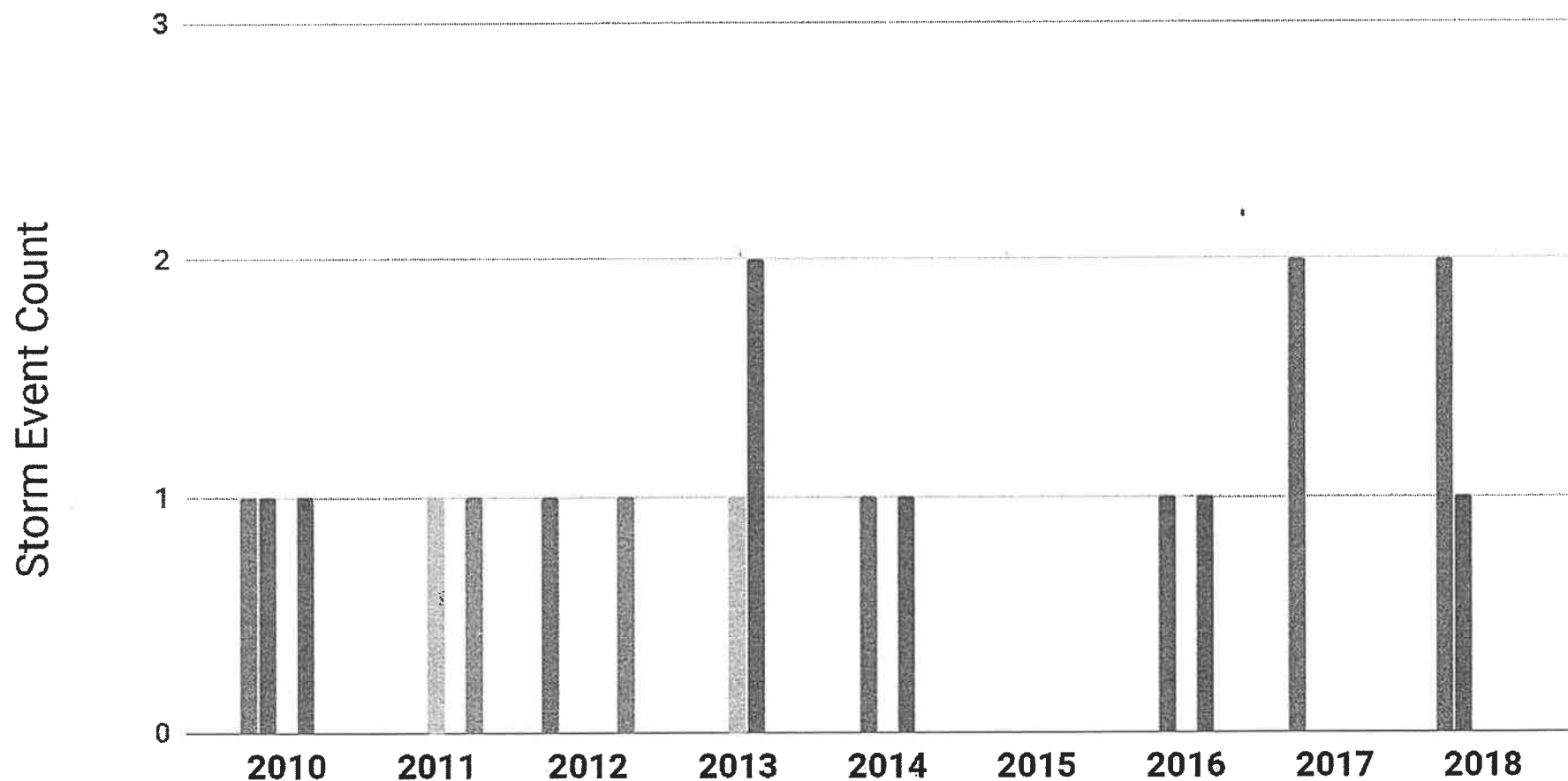
Figure 28. Weather-related grid disruptions, 2000–2012

Data source: DOE 2013b

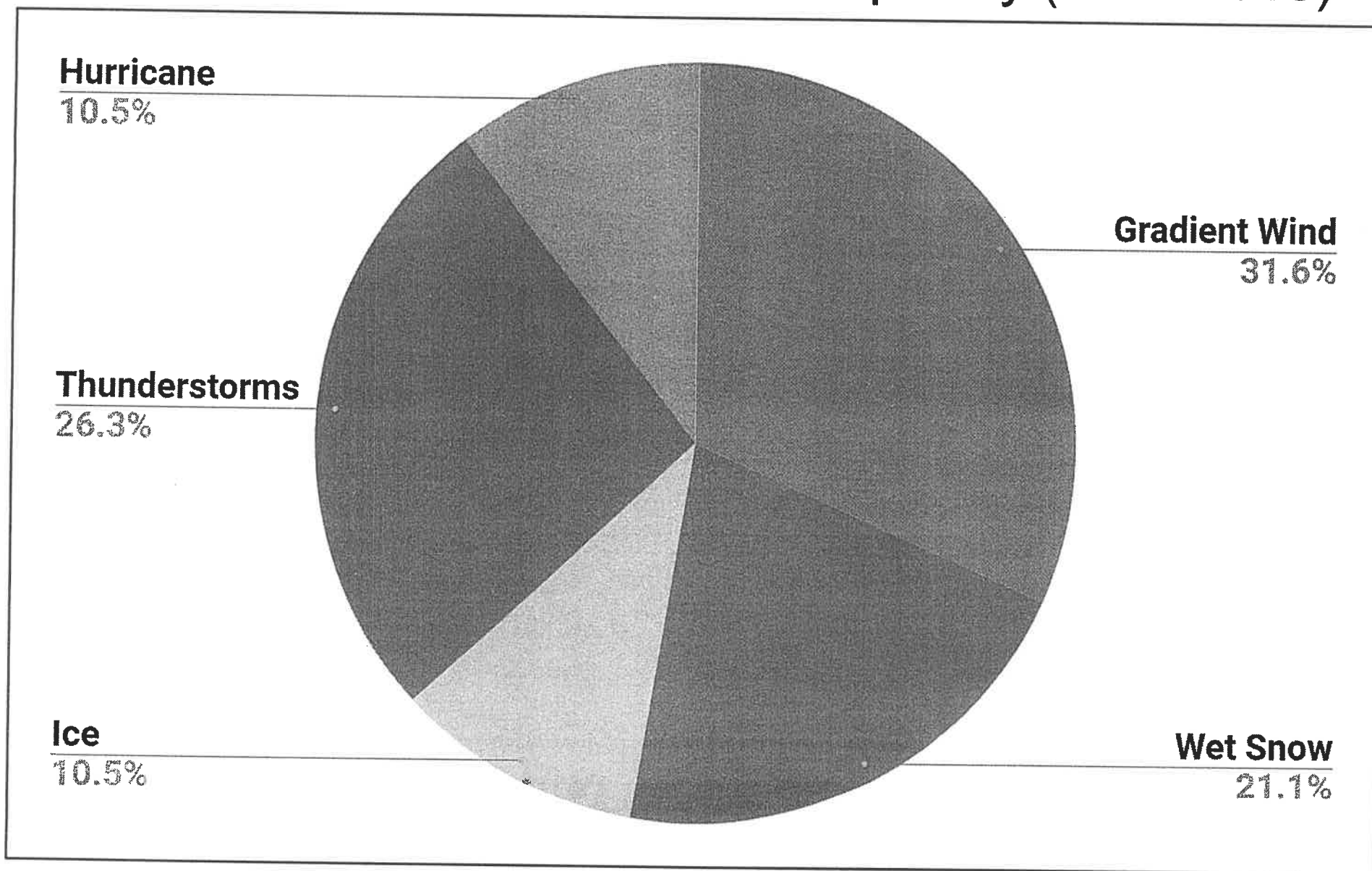
<https://fas.org/sgp/crs/misc/R42696.pdf>

Vermont Major Outage Storm Classes (2010-2018)

■ Gradient Wind ■ Wet Snow ■ Ice ■ Thunderstorms ■ Hurricane / Tropical Storm



Vermont - Major Storm Class Frequency (2010-2018)



Data and Methods: Part 1

Data:

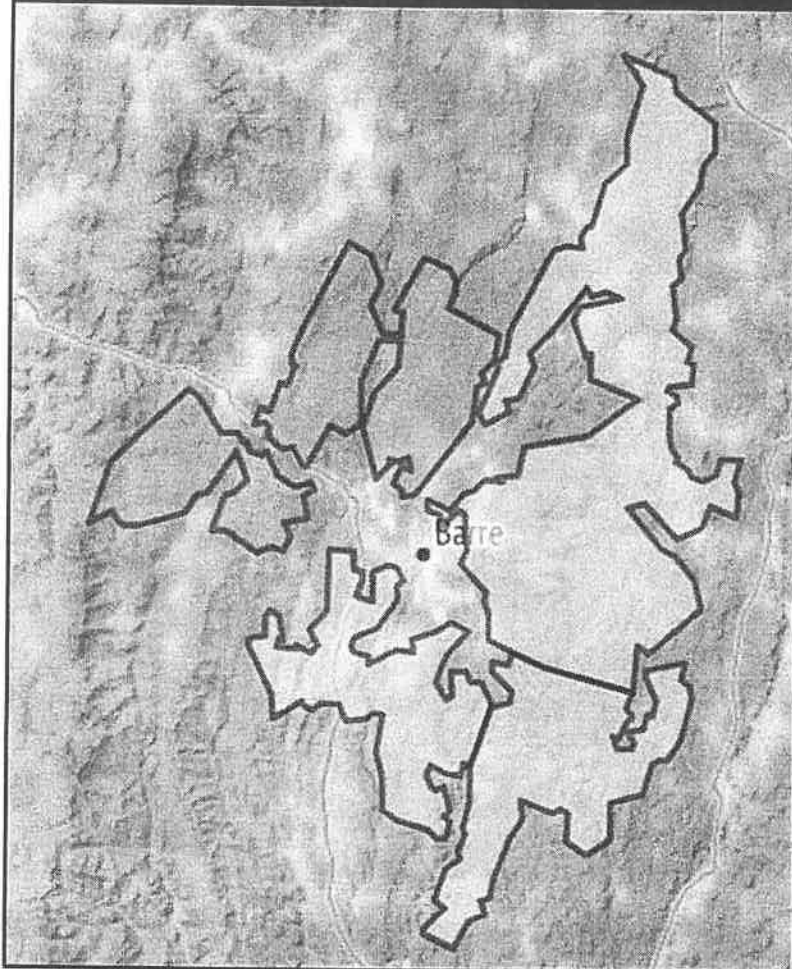
- OMS data with higher fidelity lat/lon locations that include root causation
- Period of performance: 5-10 years, preferably closer to 10 years
- Weather data: observed gridded and point datasets that can be consistently applied using Northview analytics
- VWAC weather stations
- Gridded observation datasets to use as a uniform baseline reference

Methods:

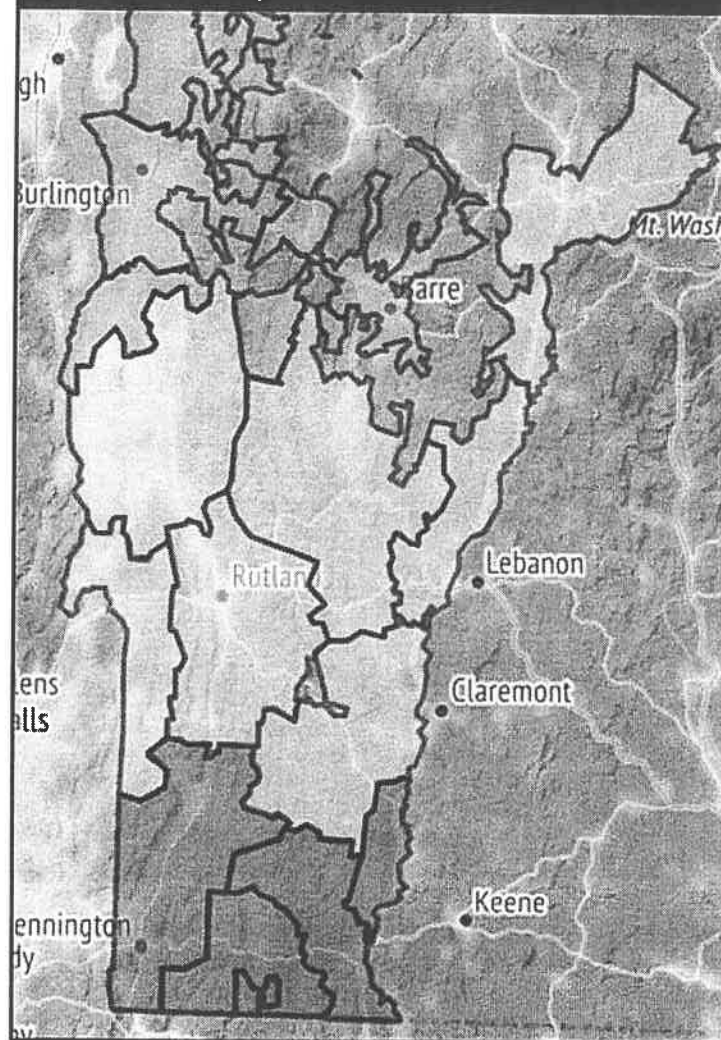
- Quality control OMS data for type of weather causation
- Focus on major storm events to relate observed weather analytics to outages
- Develop storm performance baseline techniques to understand how assets performed to weather variables
- Analyze trends in weather and non-weather outages across analysis period
- Develop visualization techniques that readily relate historic outage and weather data

Sample Results - District Aggregation

Frequency of wet snow events
(2010-2018)

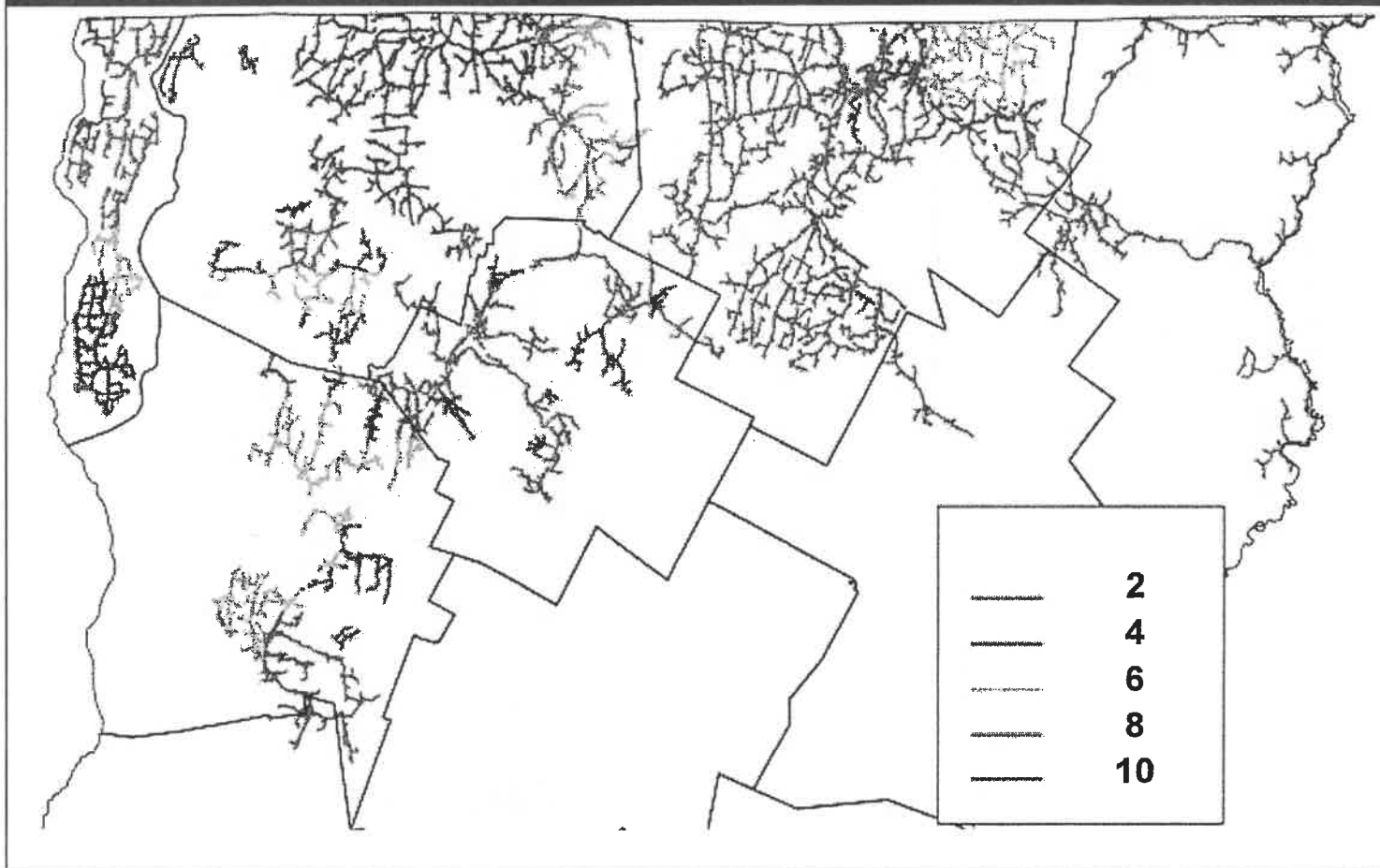


Percentage change in wind events
(2010-2018)



Sample Results - Hotspot Mapping

Frequency of wind outage events per year (2010-2018)



Sample Results - Data Tables

Extreme Weather Outage Risk Trends - Summary Change for: DU Name				
Baseline Period: 2000-2018				
Outage Root Cause	Frequency Change	Magnitude Change	Overall Outage Risk Change	Confidence
Gradient Winds	0%	30%	25%	High
Wet Snow	30%	20%	30%	High
Ice	-20%	20%	0%	Moderate
Thunderstorms	20%	0%	20%	Moderate

Expectations and Limitations of Work - Part 1

- Results will provide an in-depth analysis of weather attributed outages (short-term climatology)
- Results may show areas of overhead lines at greater weather risks based on what has happened
- Results depend highly on ability to get required outage data and contribution of DUs toward understanding results
- Results may not show clear signals - the answer may be that there are no recent trends
- Teasing out weather and non-weather events during storms is difficult based on reported causation
- Incorporation of vegetation management, wire type/class, and other information is needed at some level to determine relative weather performance and baselines - the 2-year project scope may be prohibitive to getting to that level

Project Scope: Part 2

What will happen (Part II):

- Examine the frequency and magnitude of weather hazards changing in different climate change scenarios.
- Examine future weather risks as they translate to grid assets to highlight the greatest areas and types of future outage risk.

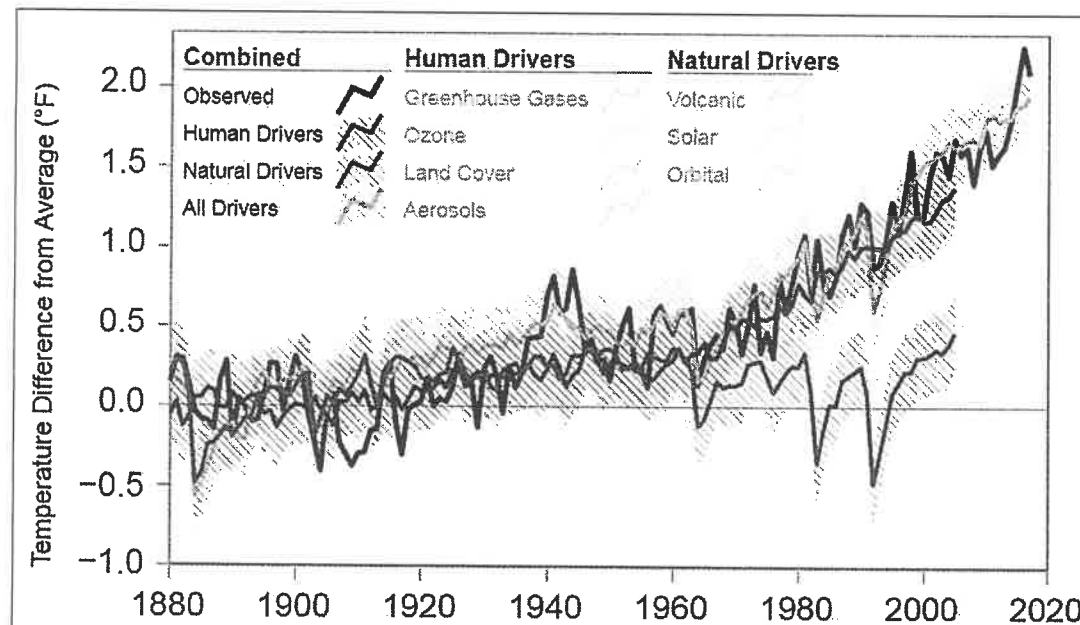


Figure 2.1: <https://nca2018.globalchange.gov/chapter/2/>

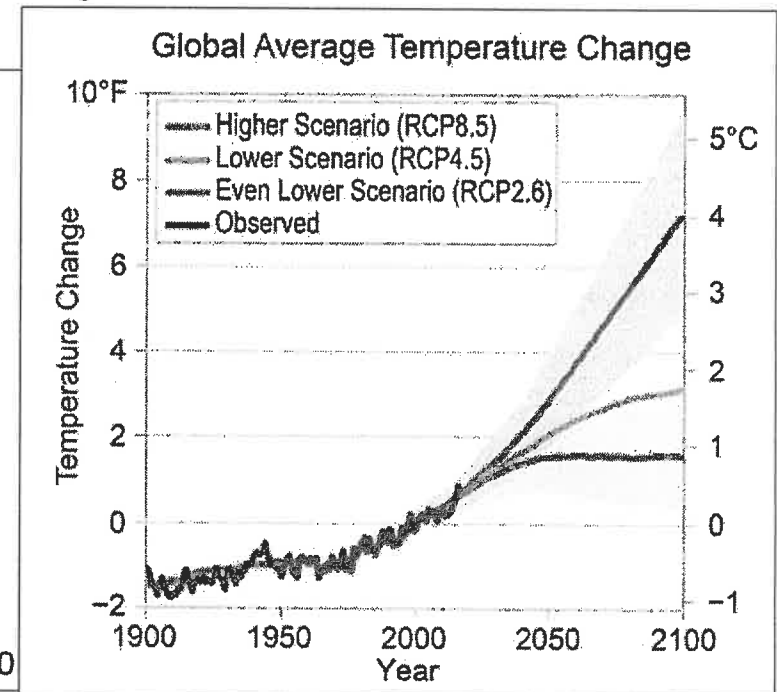
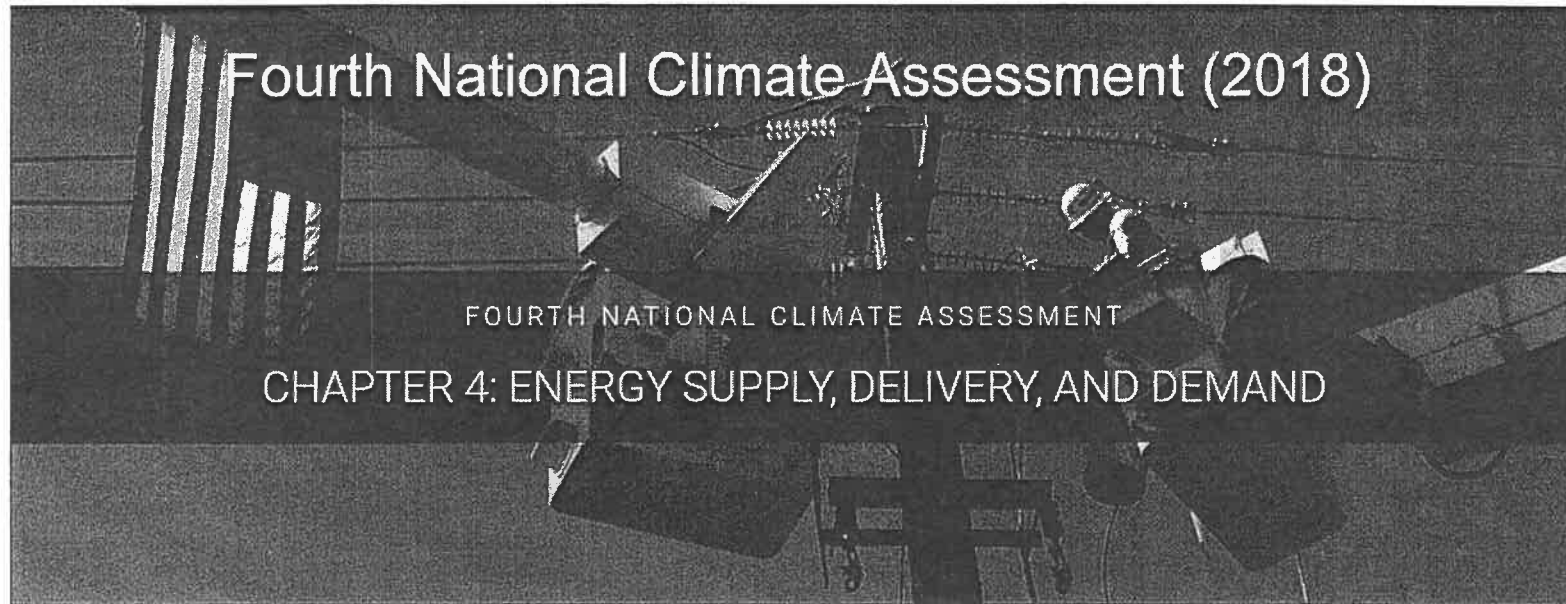


Figure 2.2: <https://nca2018.globalchange.gov/chapter/2/>

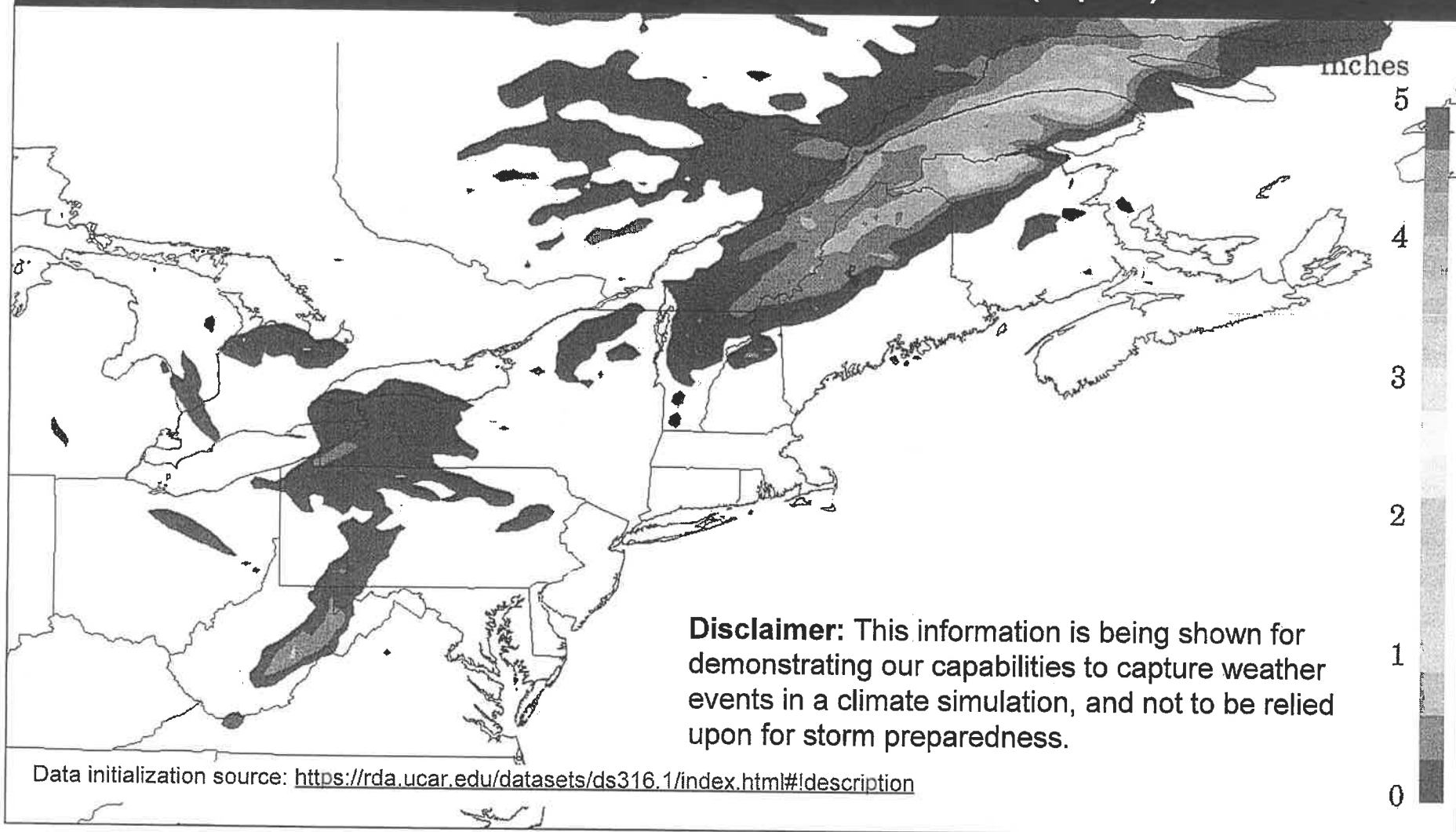


“The Nation’s energy system is already affected by extreme weather events, and due to climate change, it is project to be increasingly threatened by more frequent and longer-lasting power outages... .”

“The components of the energy system ... were not engineered to serve under the extreme weather conditions projected for this century.”

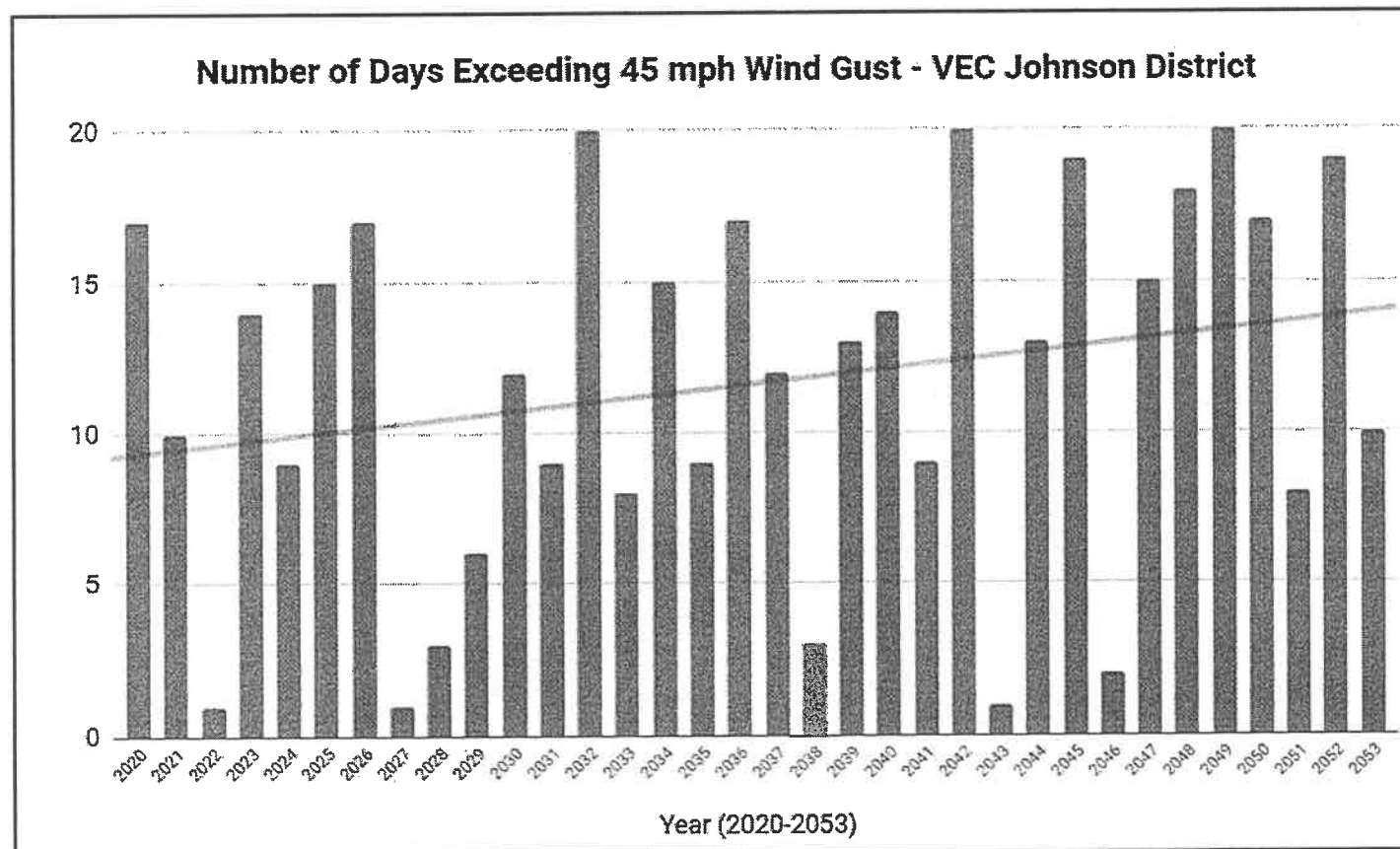
“Accurate load forecasting and generation planning now require considering both extreme weather and climate change.”

March 21, 2050 Snowfall Forecast (liquid)

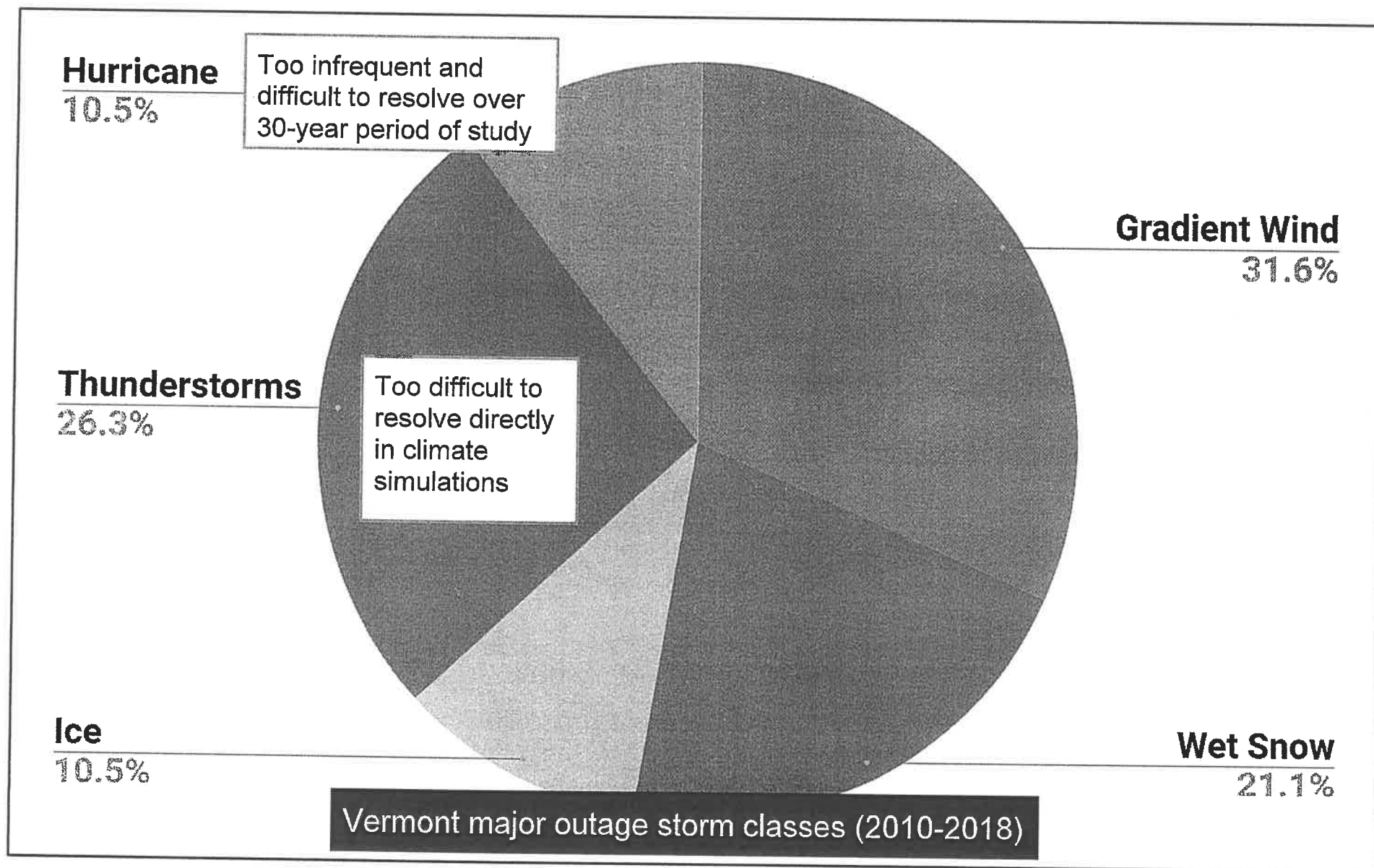


Connecting Weather and Climate

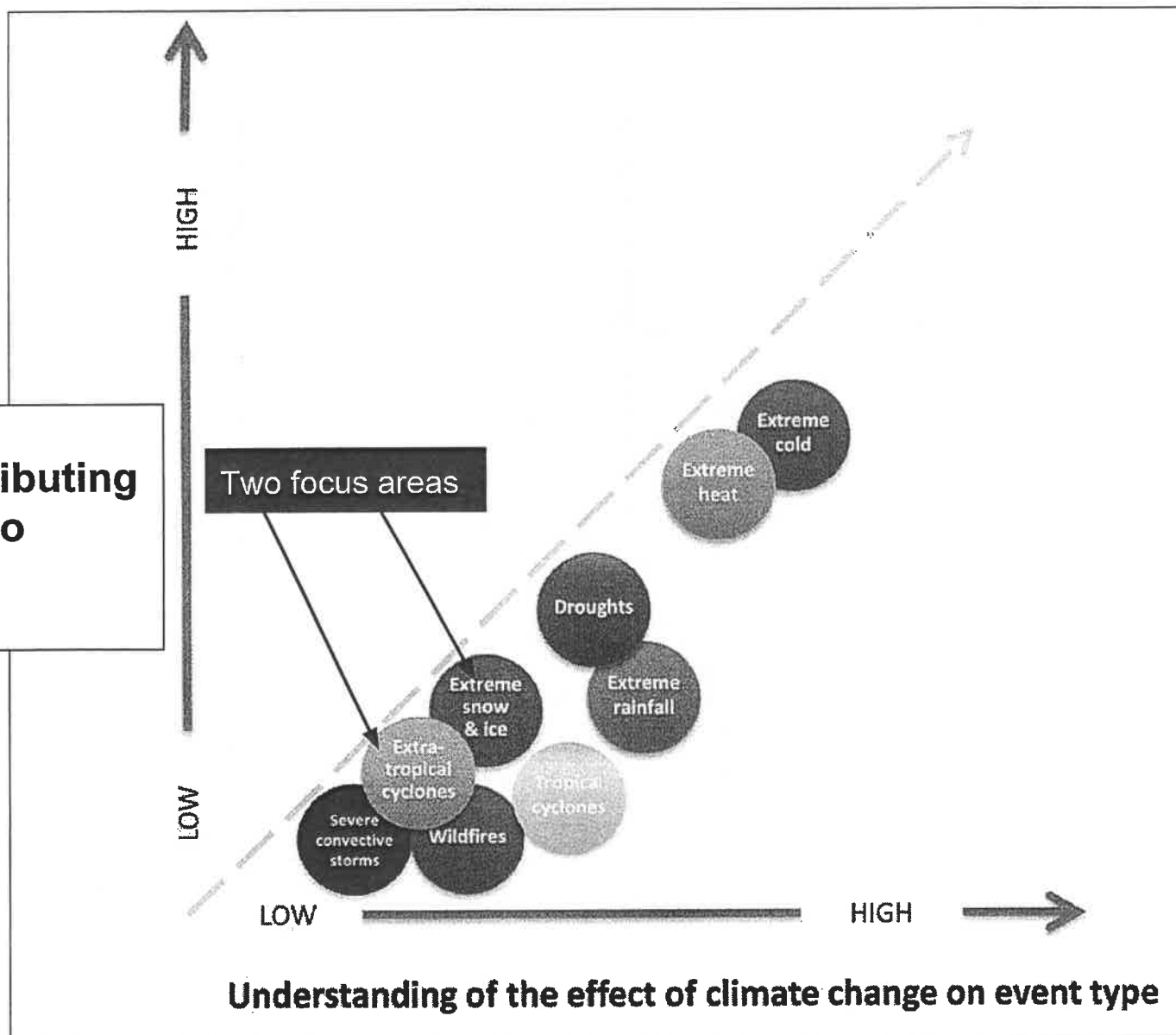
- We can apply known damaging storm signatures to identify these storms in future climate simulations
- This information can be used to identify the magnitude and frequency of damaging storm signatures



Hazard Focus Areas: Gradient Winds, Snow & Ice

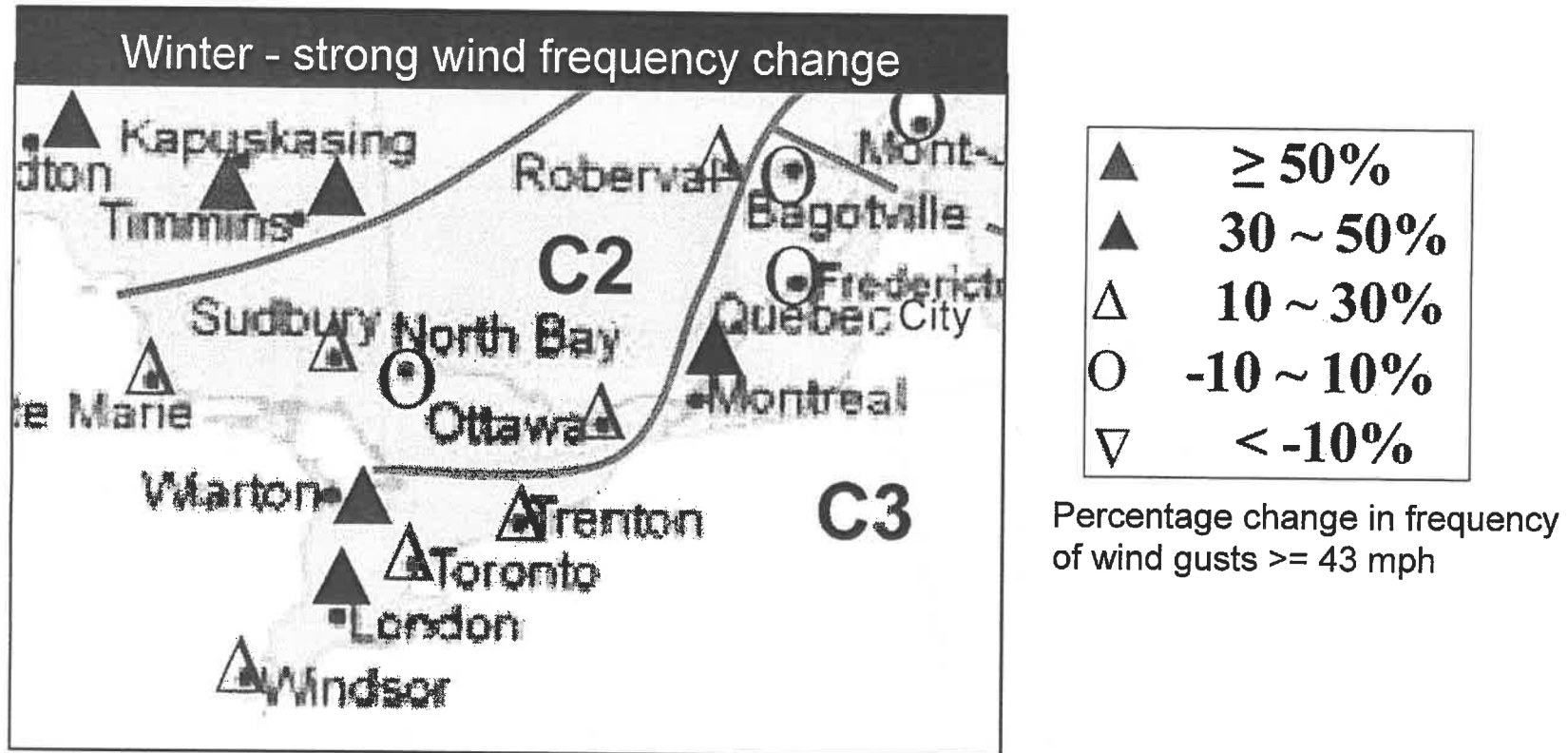


**Confidence in attributing
extreme weather to
climate change**



Attribution of Extreme Weather Events in the Context of Climate Change:
<https://www.nap.edu/download/21852>

Gradient Winds

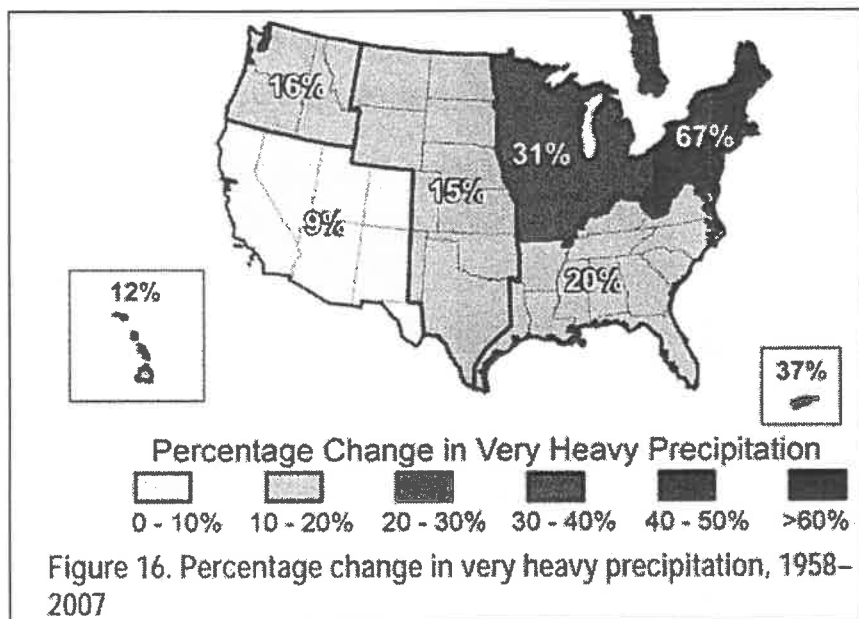


Projected percentage changes in winter-mean frequency of future daily wind gust events ≥ 43 mph during 2081–2100.

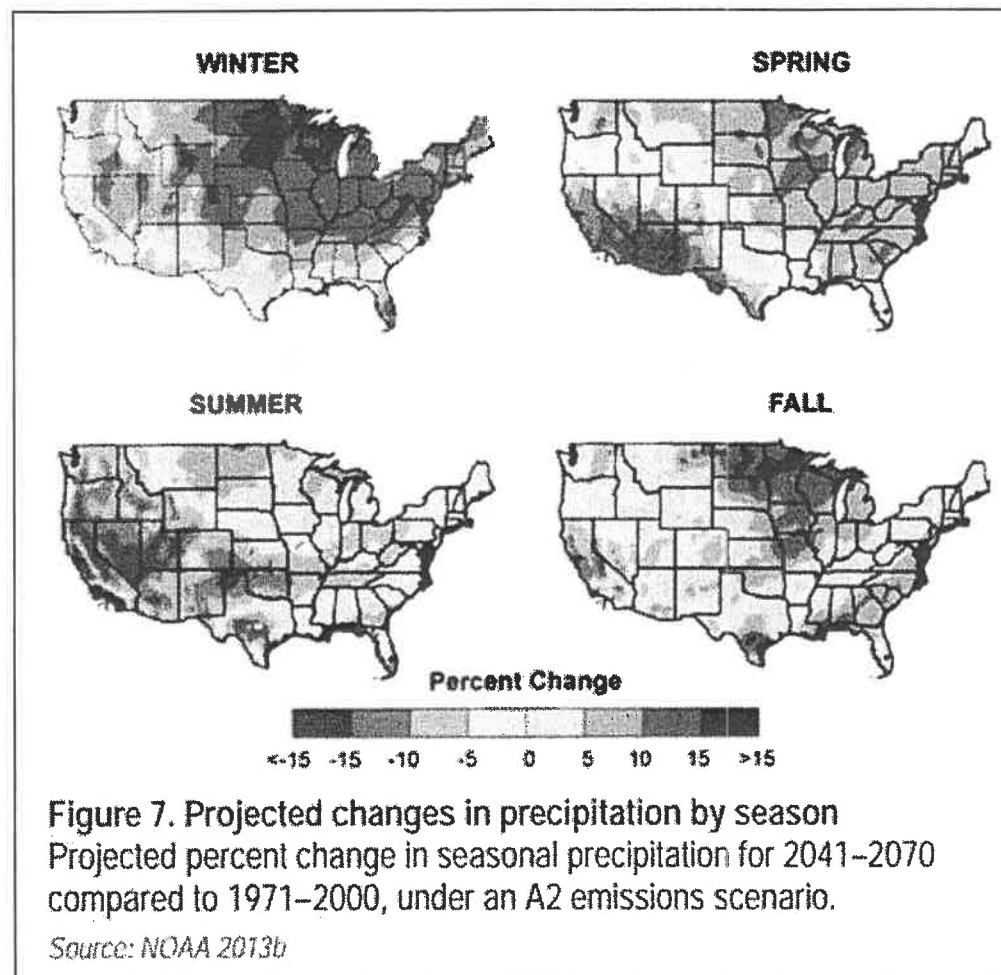
Future hourly wind gust events ≥ 43 mph are projected to be 20–30% greater. Increases of wind gust events ≥ 56 mph are projected to be more than double for most regions.

<https://journals.ametsoc.org/doi/10.1175/JCLI-D-13-00020.1>

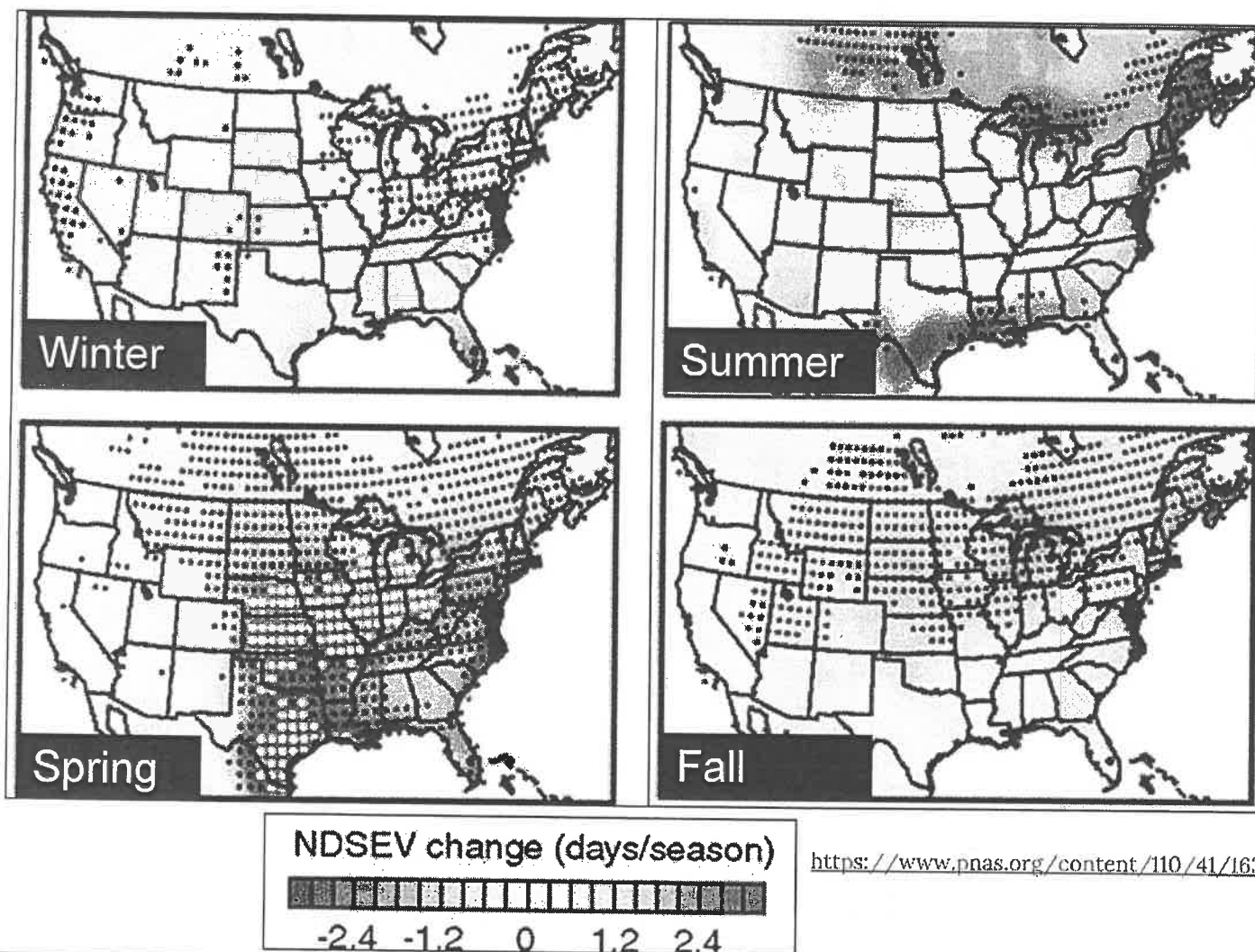
Precipitation Changes



We know extreme precipitation events are increasing and winter precipitation is increasing, but what type of risk does this translate to wet snow or ice storms in VT?

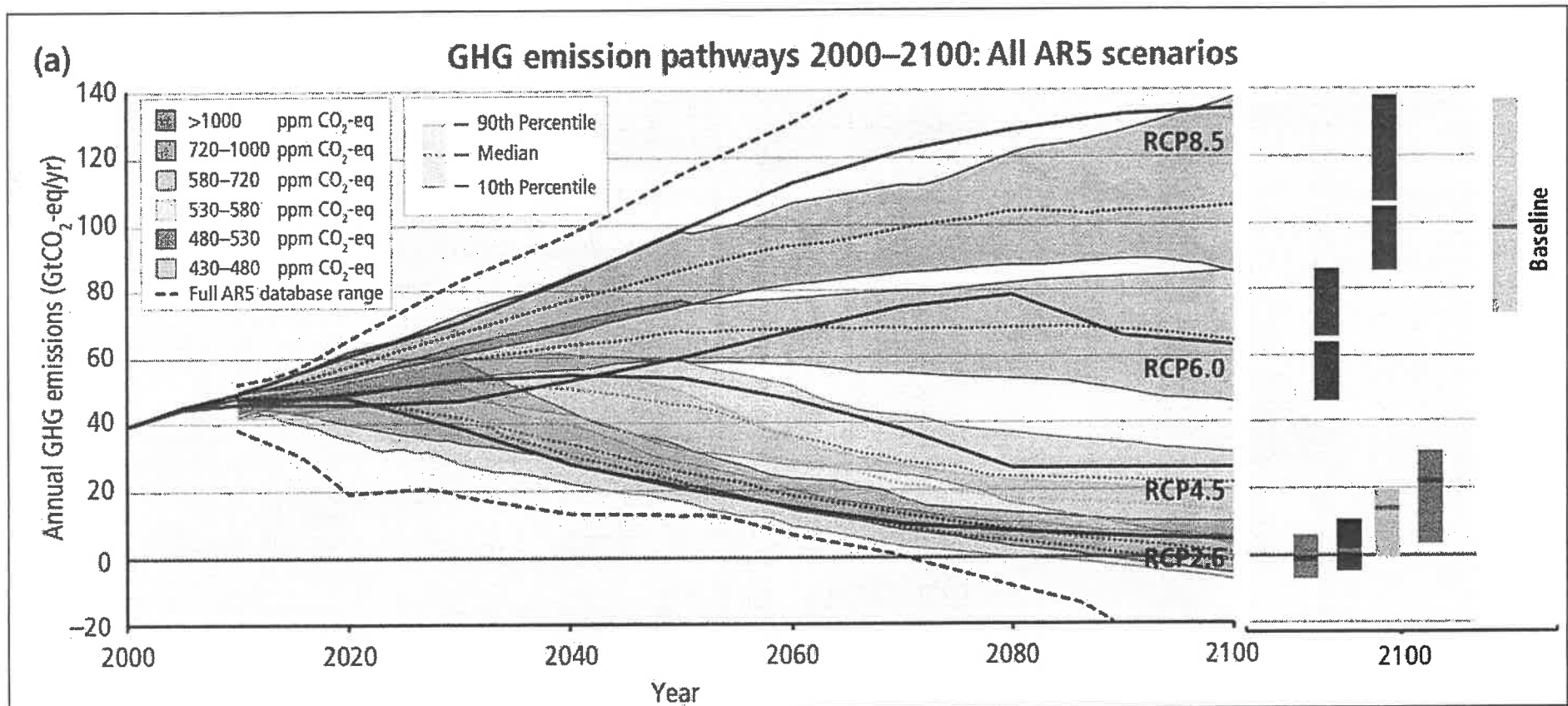


Thunderstorm Risks



While not a focus of this proposed work, existing literature suggests a widening of the convective season in VT with a greater number of days with favorable conditions for severe thunderstorms by the end of the century in the high emissions scenario example shown above.

Climate Scenario Simulations



We propose to downscale global climate models using two emissions scenarios. We suggest one being the RCP8.5 (business as usual) and the other RCP4.5. Having two scenarios provides a level of uncertainty in the system, increasing the confidence in any results.

Data and Methods: Part 2

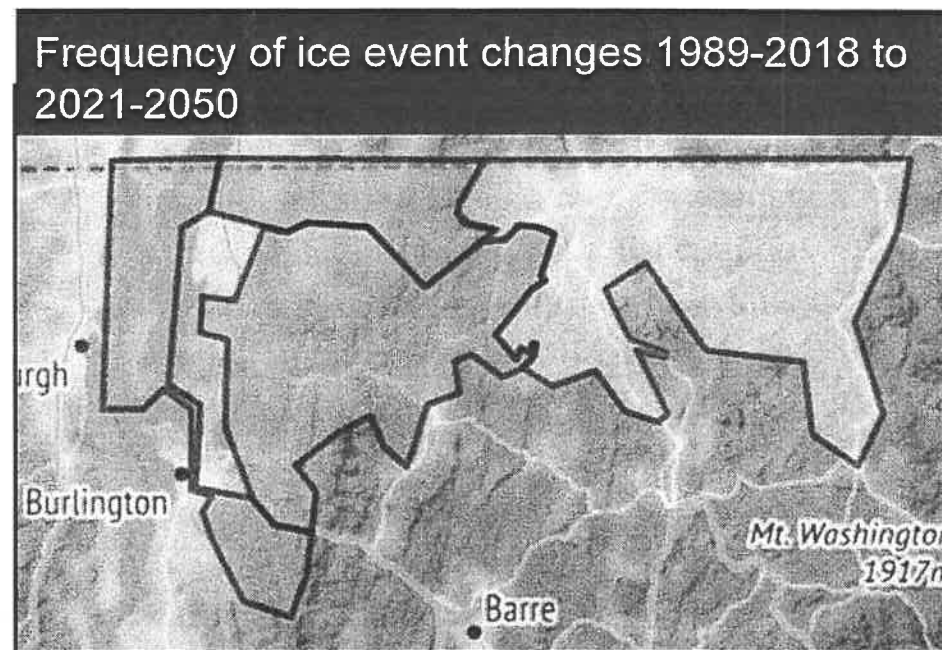
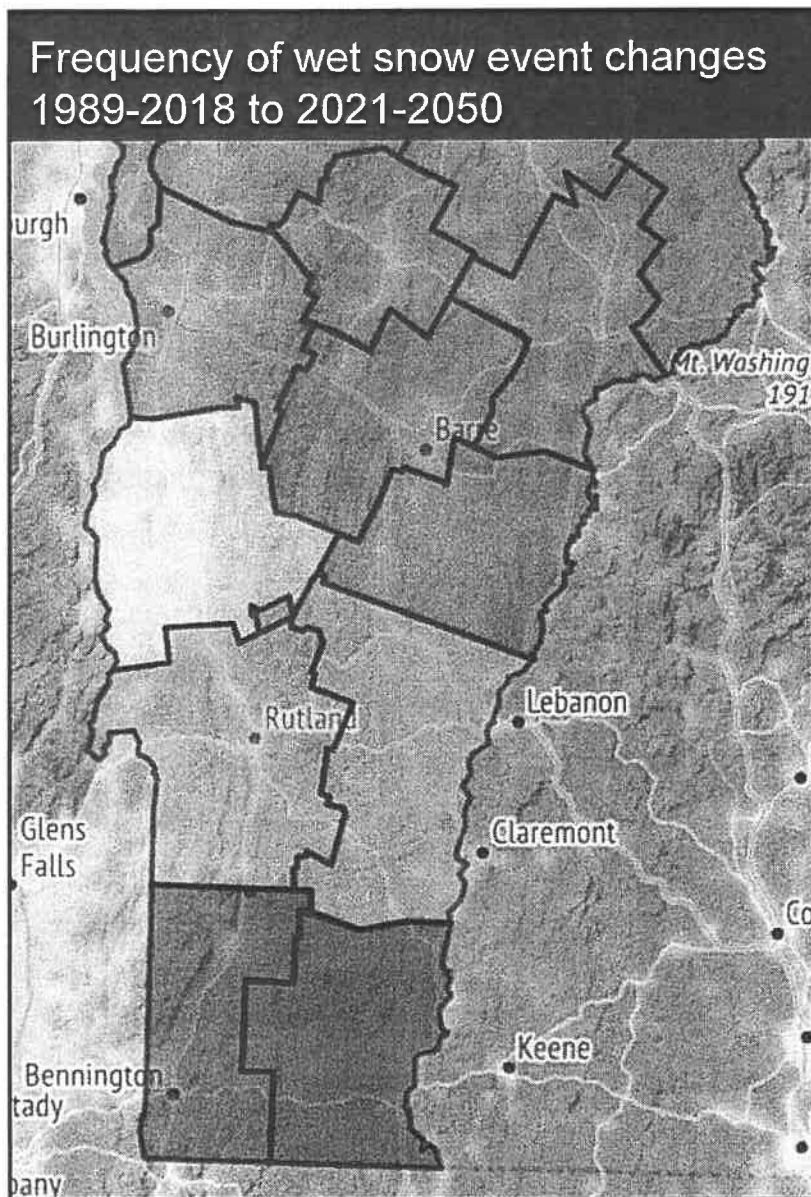
Data:

- CESM 1.0 NCAR global climate model - two 30-year base periods, one past and one in the future
<https://rda.ucar.edu/datasets/ds316.1/index.html#!description>
- Asset information - DU territory polygons to accumulate risk
- Generate high-resolution climate simulations to represent weather using WRF model

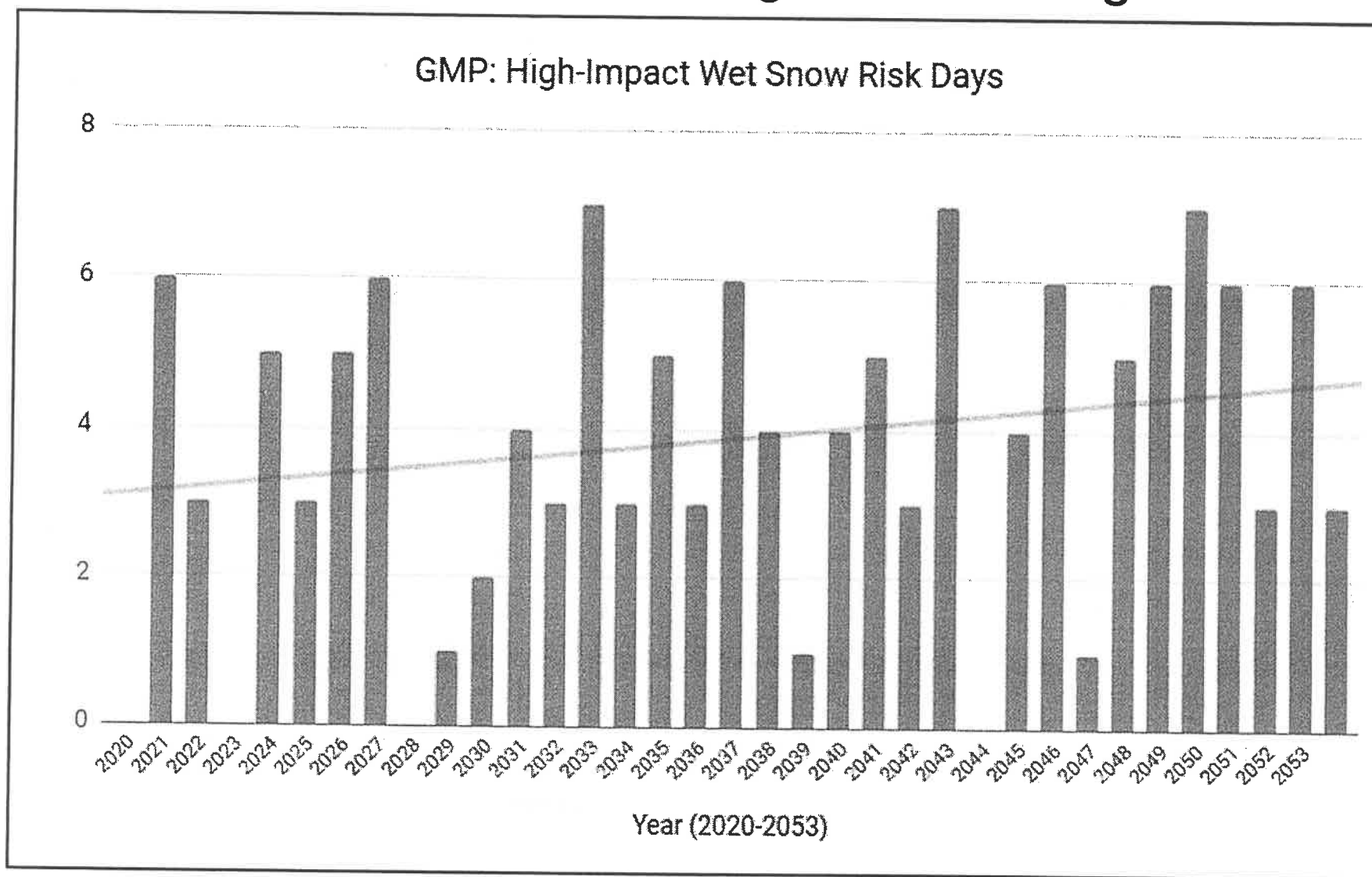
Methods:

- Downscale WRF model to 5-km to represent weather signals with climate model simulations
- Compare two 30-year periods to understand climate base and extreme state changes
- Identify key signals of damaging weather phenomena within downscaling
- Derive appropriate statistics to examine how weather-outage risks will change under different climate change scenarios

Example Results - Frequency Change



Sample Results - Magnitude Changes



Expectations and Limitations of Work - Part 2

- Results will describe how wet snow and gradient wind storms will change in frequency and magnitude
- Results may be difficult to capture ice storm changes (too low frequency) - some proxy methodology may be needed
- Examining tropical systems and thunderstorms in detail are beyond the scope of this proposal - a proxy methodology can be used to determine thunderstorm risks if desired
- Results may not show clear signals - the answer may be that recent weather variability is the new climate “normal”
- It is computationally impossible to sample weather risks directly on each line segment, the spatial level of skill will likely be on the order of 5-10 km

Deliverables

- Comprehensive public-release report discussing current and future weather risks to the grid in Vermont
- Comprehensive documents detailing utility-specific risks
- Scientific presentations - conferences, peer-reviewed literature
- Educational benefit to NVU-Lyndon students

Extreme Weather Climate Outage Risks - Summary Change for: DU Name				
Baseline Comparison Period: 1986-2015 vs 2021-2050				
Hazard	Frequency Change	Magnitude Change	Overall Annual Outage Risk Change	Confidence
Gradient Winds	0%	30%	25%	High
Wet Snow	30%	20%	30%	Moderate
Ice	-20%	20%	0%	Moderate
Thunderstorms	20%	0%	20%	Low
Hurricanes	0%	25%	25%	Low

Project Management

- We propose a private-public partnership
- Northview technology is needed for value-added research
- NVU students are employed on research
- Both managed scenarios have Dr. Jason Shafer managing the project with no salary compensation received through this funding
- Climate simulation data and key results would be publicly available



Proposed Budget

- Managed through NVU will require 1 FTE plus benefits
- Both scenarios do not compensate the project manager, Jason Shafer, with any salary
- Both scenarios employ 4 student summer positions through NVU (2 each summer)
- Both scenarios include purchase of a workstation and additional local data storage for climate simulations
- Northview-managed requires additional software licensing (higher equipment costs)
- Computing is all done using Google Cloud Platform = same costs, 60 years of climate simulations, CPU hours and data egress

	NVU-Lyndon	Northview
Personnel	\$165,200	\$114,000
Computing	\$36,000	\$36,000
Overhead	\$40,800	\$27,000
Hardware and Software	\$8,000	\$15,000
2-Year Total	\$250,000	\$192,000

Budget Breakdown

Personnel Costs		
	NVU-Lyndon	Northview
Salary/Staffing	\$85,000	\$90,000
Benefits	\$56,200	\$0
Student Researchers	\$24,000	\$24,000
Total	\$165,200	\$114,000

Computing		
	NVU-Lyndon	Northview
CPU Hours	\$34,000	\$34,000
Data Egress	\$2,000	\$2,000
Total	\$36,000	\$36,000

	NVU-Lyndon	Northview
Personnel	\$165,200	\$114,000
Computing	\$36,000	\$36,000
Overhead	\$40,800	\$27,000
Hardware and Software	\$8,000	\$15,000
2-Year Total	\$250,000	\$192,000

Hardware and Software		
	NVU-Lyndon	Northview
Workstation	\$2,000	\$2,000
Local Storage	\$6,000	\$8,000
Software License (ESRI)	\$0	\$5,000
Total	\$8,000	\$15,000

References

- Campbell, R. J., 2012: Weather-Related Power Outages and Electric System Resiliency. Congressional Research Services, 18 pp.
<https://fas.org/sqp/crs/misc/R42696.pdf>
- Cheng, C. S., et al., 2014: Possible Impacts of Climate Change on Wind Gusts under Downscaled Future Climate Conditions: Updated for Canada. *Journal of Climate*, 27, 1255-1270. <https://journals.ametsoc.org/doi/pdf/10.1175/JCLI-D-13-00020.1>
- Diffenbaugh, N. S., et al., 2013: Robust Increases in Severe Thunderstorm Environments in Response to Greenhouse Forcing. *PNAS*, 41, 16361-16366.
<https://www.pnas.org/content/110/41/16361>
- DOE, 2013: U.S. Energy Sector Vulnerabilities to Climate Change and Extreme Weather. DOE/PI-0013. U.S. Department of Energy (DOE), Washington, DC, 73 pp.
<https://www.energy.gov/sites/prod/files/2013/07/f2/20130716-Energy%20Sector%20Vulnerabilities%20Report.pdf>
- DOE, 2015: Climate Change and the U.S. Energy Sector: Regional Vulnerabilities and Resilience Solutions . DOE/EP-SA-0005. U.S. Department of Energy (DOE), Washington, DC, 189 pp. <https://www.energy.gov/sites/prod/files/2013/07/f2/20130716-Energy%20Sector%20Vulnerabilities%20Report.pdf>
- EEl, 2014: Before and After the Storm - Update. Edison Electric Institute, Washington, DC, 133 pp.
<http://www.eei.org/issuesandpolicy/electricreliability/mutualassistance/Documents/BeforeandAftertheStorm.pdf>
- IPCC, 2014: Climate Change 2014: Synthesis Report. Contribution of Working Groups I, II, and III to the Fifth Assessment Report of the Intergovernmental Panel on Climate Change [Core Writing Team, R. K. Pachauri and L.A. Meyer (eds.)]. IPCC, Geneva, Switzerland, 151 pp.
https://www.ipcc.ch/site/assets/uploads/2018/02/SYR_AR5_FINAL_full.pdf
- National Academies of Sciences, Engineering, and Medicine, 2016: Attribution of Extreme Weather Events in the Context of Climate Change. Washington, DC: The National Academies Press. Doi: 10.17226/21852: https://www.nap.edu/login.php?record_id=21852
- USGCRP, 2018: *Impacts, Risks, and Adaptation in the United States: Fourth National Climate Assessment, Volume II* [Reidmiller, D.R., C.W. Avery, D.R. Easterling, K.E. Kunkel, K.L.M. Lewis, T.K. Maycock, and B.C. Stewart (eds.)]. U.S. Global Change Research Program, Washington, DC, USA, 1515 pp. doi: 10.7930/NCA4.2018. <https://nca2018.globalchange.gov/>

DRAFT

Proposed Term Sheet for VELCO/DU Agreement with Northview

1. Parties	<p>Northview Weather and VTransco</p> <p>VTransco would execute through VELCO as manager. Beneficiaries/licensees would be participating owners with costs allocated on transmission cost share. BED and some VPPSA members likely to opt out. Their transmission cost share would be reallocated to participating DUs.</p> <p>Decision Point</p> <p>VEIC has expressed possible interest in certain products. Their pricing TBD.</p>
2. Products [copied what is in VEC's contract. Highlighted is what VELCO just contracted for Tx icing only]	<p>SkyRisk Products:</p> <ul style="list-style-type: none"> • Tier #1: (Geopolitical locations) <ul style="list-style-type: none"> ○ Forecast maps – daily and hourly map images of snow, ice, and wind risks over VT & NH ○ Area precip risk: Area-based precipitation analytics over VT counties ○ Area wind risk: Area-based wind analytics over VT counties ○ Time series graphs at major cities and towns • Tier #2: (Service area based analytics) <ul style="list-style-type: none"> ○ Area precip risk: Area-based precipitation analytics over VEC service areas ○ Area wind risk: Area-based wind analytics over VEC service areas ○ Time series graphs at customized point locations • Tier #3: (Distribution line based analytics) <ul style="list-style-type: none"> ○ Asset precip risk: Asset-based precipitation risks over VEC distribution lines ○ Asset wind risk: Asset-based wind risks over VEC distribution lines <p>All OutageRisk products include access to the full SkyRisk product line.</p> <p>OutageRisk Products:</p> <ul style="list-style-type: none"> • Tier #1: Customized user alerting capabilities - users can specify risk thresholds for alerting email messages that embed essential information • Tier #2: Outage “event” forecasts for wet snow and ice using damage model version 1.0 <ul style="list-style-type: none"> ○ Event forecasts for VEC service areas and the entire VEC territory <ul style="list-style-type: none"> ▪ Magnitude: presented via user interface data tables ▪ Timing: presented via time series graphs ▪ Location: presented via the user interface mapping <p>Tier #3: (Experimental wind outage model for gradient wind events – available if and when the first version is developed)</p> <p>Decision Point: Do we want single umbrella deal which replaces VEC and VELCO deals? VELCO will want continued focus on Tx icing if that works. Any other products we want?</p>
3. Price	\$400,000 over 3 years?

DRAFT

	VEC paid \$325,000 on its own. VELCO's contract is for \$30,000. \$400k below is plug but we should have more negotiating latitude now with Northview as whole DU group.			
		Transmission Cost Share	At \$400,000	Per year for 3 years
	Village of Barton	0.256%	\$1,022.68	\$340.89
	Village of Morrisville	0.702%	\$2,806.88	\$935.63
	Village of Orleans	0.213%	\$852.00	\$284.00
	Swanton Village	0.937%	\$3,749.84	\$1,249.95
	Vermont Electric Cooperative*	6.957%	\$27,827.08	\$9,275.69
	Washington Electric Cooperative	1.497%	\$5,988.84	\$1,996.28
	Village of Stowe	1.657%	\$6,626.12	\$2,208.71
	Village of Northfield	0.500%	\$1,999.52	\$666.51
	Green Mountain Power	77.802%	\$311,206.16	\$103,735.39
	Burlington Electric Dept	5.707%	\$22,827.24	\$7,609.08
	Village of Enosburg	0.465%	\$1,861.12	\$620.37
	Town of Hardwick	0.647%	\$2,589.80	\$863.27
	Village of Hyde Park	0.254%	\$1,017.08	\$339.03
	Village of Jacksonville	0.095%	\$379.12	\$126.37
	Village of Johnson	0.231%	\$924.24	\$308.08
	Village of Ludlow	0.982%	\$3,926.76	\$1,308.92
	Village of Lyndonville	1.099%	\$4,395.52	\$1,465.17
	Total	100.000%	\$400,000.00	\$133,333.33
	Decision Point: These allocations change, of course, based on who opts out and their share gets reallocated to others.			
4. Royalty	VELCO contract has perpetual royalty of 10% of all revenues Northview generates from ideas VELCO contributes pursuant to co-development agreements. We would want comparable mechanism re-scaled for contract price.			
5. MFN	VELCO raised the concept at the Feb. 2018 OC but we did not add one in our \$30k agreement. We would want one here so that we would each be entitled to the benefit of any term or offering which Northview provided to any customer or counterparty in any future agreement if we so desired.			
6. SaaS vs license	Decision Point: UI was license. Current VEC and VELCO agreements are both SaaS. Northview open. Perpetual, irrevocable license should be capitalizable.			
7. Change of control	VELCO/VTransco further executes <ul style="list-style-type: none"> JDA under which products developed for utilities's use Perpetual, irrevocable license to all those products Non-transferrable unless on change of control of Northview, then 			

DRAFT

	<ul style="list-style-type: none">○ VELCO/VTransco has exclusive option to continue JDA on same terms○ VELCO/VTransco gets 1-year window (?) post change of control to cash out its license ownership based on value assigned in deal <p>Intention of arrangement is to preserve VELCO's control and optionality – stay with the new owner and continue to develop the products if it seems like it'll work or otherwise cash out and move on based on the value of the deal.</p>
--	--

M e m o r a n d u m

To: Board of Directors
From: Ken Nolan, General Manager
Date: March 29, 2019
Subject: **Agenda #9** – VPPSA Board Meeting in southern Vermont

I've been meeting with each member over the past several weeks to discuss your relationship with VPPSA and whether there were any ways we could change VPPSA's operations to provide more member value. In my discussions with Ludlow and Jacksonville I also asked what we could do to better facilitate their participation in Board meetings given their distance from both VPPSA's offices and other members. Pam Moore in particular indicated that while she would like to physically attend more meetings the small staff and 3-hour drive made it difficult.

Based on this feedback I would like to raise for Board discussion a proposal to hold at least one meeting per year (possibly the October meeting) at a more southerly location. Staff has not researched actual options, but initially I am thinking that a location along I-91 south of White River would be the most viable.

No decision is necessary, but before staff expends the effort to research options I would like to understand if the Board is open to this approach.

DRAFT

Vermont **Public Power** Supply Authority

GENERATION AND OTHER ASSETS BOARD COMMITTEE

MEETING MINUTES

March 13, 2019

Committee Directors present (X indicates present, P by phone):

X	Evan Riordan, Barton	P	Mike Sullivan, Hardwick
P	Craig Myotte, Morrisville	P	Reginald Beliveau, Swanton

Other Directors present:

John Morley, Orleans	

Alternates present:

Others present:

Ken Nolan, VPPSA	TJ Poor, VPPSA	
Dave Gagne, VPPSA (phone)	James Gibbons, VPPSA	

(numbers below correspond with agenda item numbers)

1. Call to Order

The meeting was called to order by Director Morley at 2:04 PM.

2. Consideration of changes/modifications to agenda

There were no changes to the agenda.

3. Public comment

No members of the public were present.

4. Review of 11/14/18 Meeting Minutes Draft

Motion was made by Director Myotte, second by Director Sullivan, to approve the minutes of November 14, 2018. Motion was approved unanimously.

5. Project 10

a. P10 Capital Plan Updates

DRAFT

The General Manager reported that VPPSA continues to consider how to handle the two major upgrades: 1) the hot gas bypass inspection, and 2) control system upgrades. Even though PAL in its 2018 report indicated that no changes to asset condition have been discovered, they recommended replacing the first stage buckets (a change from previous recommendations). The AIG insurance report was completed in 2018 and after AIG reviewed the PAL borescope report they echoed the recommendation to replace the first stage. VPPSA is seeking an independent engineer (not associated with the insurance company or likely bidders) to review the available information and develop a proposed plan of approach.

The General Manager also reported that significant progress has been made the bathroom installation. Delays occurred due to the project requiring additional permits. Construction will commence in the spring.

b. P10 Market Revenues update

Mr. Poor reported that in calendar year 2018, Project 10 received market revenues greater than budgeted (non-IGAP) revenues by about \$250,000. Positive (good) variances through the first three quarters of the year were offset slightly by lower than expected capacity revenues from October through December, largely from lower capacity prices than budgeted related to the monthly reconfiguration auctions.

Mr. Poor also reported that January 2019 revenues were equal to budgeted. For 2019, Mr. Poor highlighted a budgeted decrease in revenue from the capacity market as clearing prices start a known 4-year decline. Mr. Gibbons explained that while P10 revenues will decrease, so will capacity charges to load – Project 10 acts as a hedge to capacity market volatility.

c. General Update

Mr. Gagne reported that “Claimed Capability Audits” – tests required as part of Forward Capacity Market participation – were completed successfully. Mr. Poor indicated that with these tests, the both unit’s performance factors for the Forward Reserve Market were sufficient to now meet the full Reserve obligation; restored after October failed starts.

6. Load Reducing Resources

Mr. Poor described the 2018 benefits from load reducing resources. 2018 benefits were relatively high due to 1) significant generation output during the 2017 ISO-NE peak (June 2017), 2) higher capacity prices, 3) load reducing resources continuing to receive benefits from the capacity market associated with securing original obligations at a high price and shedding those obligations at a lower

DRAFT

price. In 2019, these values are expected to be lower due to 1) low (or zero in some instances) production during the 8/29/18 annual ISO peak, 2) ISO-NE market benefits expiring, and 3) lower ISO-NE capacity prices. These lower benefits have been included in power supply budgets.

7. Project Updates

a. VPPSA Solar RFP.

VPPSA has continued to pursue several solar PV projects resulting from its 2017 Request for Proposals, with Encore Renewable Energy acting as Project Developer. Mr. Poor updated the Committee on their status:

A Certificate of Public Good application is expected to be filed for the “Lawrence Brook Project in the Village of Morrisville Water & Light’s service territory off Route 100. This project is one of the most competitively priced projects offered by Encore. VPPSA intends to enter into a PPA with the Developer, with MWL the expected primary off-taker via a Power Sales Agreement between MWL and VPPSA. This project is expected to be on the April Board meeting agenda for approval.

Also in Morrisville, the “Hess Auto” site, a potential 2.2 MW project on a brownfield, continues to be considered for a 2019 standard offer program bid. This project has been bid into the standard offer program by Encore previously but lost to a lower priced bid in the Developer Block; it has been vetted numerous times. A System Impact Study will be underway to determine grid impacts (and interconnection costs) prior to submitting a bid to the Standard Offer solicitation.

Hardwick Electric Department (HED) continues review of Encore’s proposed site lease option; wetlands delineations have been completed by HED prior to ground freezing. Once the site lease is executed, PPA negotiations can continue. It is expected that the Developer will contract directly with HED.

Northfield Electric Department has determined it will not move forward with the Cheney Farm project, following vocal objection from some town residents. Encore has offered an alternative site within Northfield for consideration, VPPSA is evaluating the PPA rate offered.

Sites in the Village of Johnson Water & Light Department will not move forward at this time. Encore continues to evaluate potential sites in other Member territories on VPPSA’s behalf.

b. Standard Offer Projects.

2015 Standard Offer Contracts. The Lyndonville Standard Offer projects completed construction and testing and began operating on May 17, 2018. Through the end of 2018 the projects netted nearly \$29,000 to VPPSA to reduce Member costs.

DRAFT

2017 Standard Offer Contracts. Encore has purchased the LLC that owns the Certificate of Public Good for the Trombley Hill Project. VPPSA and Encore have finalized a PPA; construction has begun but was delayed somewhat due to significant snowfall and some machinery failures. Commercial Operation is now expected in May.

The Blackberry Lane project in Green Mountain Power's territory was withdrawn by VPPSA. GMP increased their estimate of interconnection costs to over \$400,000 – roughly 4 times their initial estimate.

2018 Standard Offer Bid. VPPSA submitted a successful bid for a 1 MW facility on Randolph Road in Morrisville. However, the Agency of Natural Resources has disagreed with the wetlands delineation completed by Encore's consultant, VHB, indicating that much of the field (currently used for grazing) is in a wetland. Encore continues to make appeals to ANR, however there is a significant chance that this project is withdrawn from the standard offer program. A determination of whether to request an extension of filing milestones, or to withdraw the project should be made by the end of June.

8. Power Supply Staff Transition

The General Manager described to the Committee VPPSA's plans given that TJ Poor has recently tendered his resignation to become the Director of Energy Services & Efficiency at the Department of Public Service. VPPSA began advertising for the position and has begun receiving applications. In the near term, TJ updated a matrix of all of his tasks, and staff has met to discuss and allocate critical tasks to other staff members. Recent power supply staff transitions have provided some experience for other staff to quickly take on these responsibilities once again.

9. Other Business

J. Gibbons reported that VPPSA has been monitoring market prices, and the price of power has dropped significantly over the last 5-6 months, which is also pulling down annual energy purchase costs. As a result, VPPSA is expecting to proceed with a 5-year contract purchase in the coming weeks.

The meeting was adjourned at 3:04 p.m by motion of Director Riordan and Second of Director Sullivan.

Respectfully submitted,

TJ Poor

TJ Poor, Sr. Power Supply Analyst

Vermont Public Power Supply Authority

LEGISLATIVE & REGULATORY BOARD COMMITTEE

MEETING MINUTES

March 13, 2019

Committee Directors present (X indicates present):

Reginald Beliveau, Swanton	X	Meredith Birkett, Johnson
Jonathan Elwell, Enosburg		

Other Directors present:

John Morley III, Orleans	

Alternates present:

Others present:

Melissa Bailey, VPPSA	James Gibbons, BED	Ken Nolan, VPPSA	Jon Wolff, Primmer (by phone)
-----------------------	--------------------	------------------	----------------------------------

(numbers in bold type correspond with agenda item numbers)

- (1) The meeting was called to order at 11:48 at the office of the Authority, located at 5195 Waterbury-Stowe Road, Waterbury Ctr., Vermont.
- (2) Melissa Bailey asked if there were requests for changes and/or modifications to the current agenda. There were not.
- (3) There was no public presence and therefore no comments were made.
- (4) Director Morley moved to approve the minutes from the November committee meeting and Director Birkett seconded the motion. The minutes were approved without objection.
- (5) Ms. Bailey provided an update on the regulatory proceedings underway at the PUC. A workshop on electric vehicles (EVs) and charging stations was scheduled for March 15th and the committee discussed VPPSA's position on separately metering, and potentially taxing, kWh usage for EVs.

Now that the PUC has approved the VPPSA/Efficiency Vermont (EVT) MOU in Docket 8316, the VPPSA members may need to provide several additional data fields to EVT in the monthly data transfer. Ms. Bailey will follow up individually with the VPPSA members to identify which fields will need to be provided going forward.

DRAFT

The PUC recently issued an order in Docket 7307 dealing with Privacy Protocols for customer data. Directors Birkett and Morley wondered whether the Order applied to utilities that don't have AMI and what the implications of the PUC Order were for the VPPSA members. Going forward, each Vermont utility will be required to have a Privacy Policy. VPPSA staff will work with members on this requirement. Mr. Gibbons offered to share the Burlington Electric Privacy Policy for use as a template.

- (6) Mr. Wolff provided the committee with an update on the 2019 Legislative session. Friday, March 15th was the crossover deadline in the Vermont legislature. Most of the energy-related legislation currently under consideration deals with electric vehicles and electric vehicle charging stations (EVSE). Provisions around PUC jurisdiction, electric vehicle rates, and taxes or fees on EVs will likely ultimately be incorporated into the Transportation Bill.

The amendments dealing with Section 108 financing proposed by VPPSA have passed the Vermont Senate and will now go to the House for consideration.

- (7) Ms. Bailey provided the committee with an update on VPPSA's 2019 Tier 3 offerings. The electric vehicle rebate program from 2018 is continuing, and staff are working to promote the heat pump and heat pump water heater rebates that are now available and being offered jointly with EVT. Committee members reviewed the draft rebate forms for the Heat Pump Program.

Mr. Morley inquired about how the VPPSA members were doing in relation to the 2019 Tier 3 savings requirements. Ms. Bailey and Mr. Nolan explained that VPPSA has planned to meet roughly one-third of the members' Tier 3 obligation through program offerings and custom projects and meet the remaining obligation through the purchase of Tier 2 RECs, which are currently a low-cost compliance alternative. The committee expressed support for this strategy.

- (8) There was no Other Business

The meeting was adjourned at 1:45 p.m.

Respectfully submitted,

Melissa Bailey, Acting Secretary
Legislative & Regulatory Committee