

**OFFICE OF THE SUPERINTENDENT OF SCHOOLS
106 Hancock Rd.
Peterborough, New Hampshire**

CONTOOCOOK VALLEY SCHOOL DISTRICT

BUDGET & PROPERTY

Tuesday, August 28, 2018

**SAU Office
5:30 PM**

Minutes

Committee Members:

- Jim Fredrickson, Chair
- Rich Cahoon
- Richard Dunning
- Niki McGettigan
- Stephan Morrissey
- Pierce Rigrod

Present: Jim Fredrickson, Richard Dunning, Niki McGettigan, Stephan Morrissey, John Jordan, Kimberly Saunders

1. Call to Order

Jim Fredrickson called the meeting to order at 5:30 p.m.

2. Approval of Minutes – July 24, 2018

June 26 – Dick Dunning moved to approve the minutes of June 26, 2018. Stephan Morrissey second. Dick Dunning abstained. All else in favor. Motion carried.

July 24 – Rich Cahoon moved to approve the minutes of July 24, 2018. Jim Fredrickson second. Dick Dunning, Stephan Morrissey, and Niki McGettigan abstained. All else in favor. Motion carried.

3. 2019-20 Budget Guidance

Default figures for the CVEA next year are needed. The overall CVEA salary line, if there is no contract, was asked.

Kimberly Saunders reported that she anticipates that between \$700 and \$780K will be returned to the taxpayers. Is food service included in this figure? There is a difference between what the food service company and what our auditors are saying that our deficit is. We are awaiting additional information.

Fruits and Vegetables is a separate line and not part of their contract. Rich Cahoon said that it should be part of the contract because it is a guarantee. It is a direct subsidy.

What percentage of students who participate in our programs participate in breakfast?

Dick Dunning asked about the before and after school care and the commitment for there to be no cost to the district. He asked about the \$51 per hour charge for transportation if we go over and who would be paying that cost.

Kimberly Saunders said that she will want to know how the board wants the budget presented. What specific information is important to know?

Dick Dunning said that the cost of athletics is important to know. He wants to know about the number of teams that CVHS has. Are we filling the teams that we have?

Kimberly said that discussion might be warranted about continuing specific sports/teams.

Kimberly said that information about our teams, both middle and high school will be discussed.

What was deferred, if anything, to protect the unreserved fund balance?

4. High School Science Project Update

Jim Fredrickson reported that the \$1.7M estimate was original; it is currently \$200K over which does not include \$400K in reductions; resulting in an estimated \$200K savings over what was planned. The project should be complete in the third week of September. Hutter Construction has done a great job on this project. The District facilities staff has had an impact on cutting costs.

5. Antrim Gym Update

Jim Fredrickson reported that the lack of timely communication continues. Antrim made a decision to do some drainage work. Jim has been requested to attend another Select board meeting.

6. Solar Energy Discussion (see attached)

Michelle Russell reported that her hope is to install solar panels on the CVHS and SMS roofs in 2019. Current tax breaks are 30% by the end of 2019 if the project is completed.

This is still in the proposal phase. Emily Manns, Peterborough Energy Committee, said that the hope is to gain approval and complete by the end of 2019.

Michelle spoke about the RFQ process and shared a draft. The offer is "what can they do to help to make this possible in the best interest of the school district?"

Emily Manns said that she has reached out to learn more about energy rates. The RFQ would be a competitive process.

Stephan Morrissey spoke about the need to minimize expenses and be revenue neutral or revenue gain to get off the mark.

Jim said that discussion about establishing a smaller committee on this topic took place. Nothing has moved from that earlier discussion.

Discussion took place about our aging facilities and capital work that needs to take place.

Ms. Manns said that there is money out there for solar energy projects. In addition, there are educational aspects that tie in to such a project.

Jim cited two issues of resources – (cost, time and people), and (opportunity costs of the project to do this work). Kimberly said that the board would need to decide the prioritization of such a project and when/if it would be feasible.

Jim asked Michelle to call Tim Grossi to get the figures for energy from National Grid.

Dick Dunning said that we would need to get hard figures to see if this is worth it. At what point do the two roofs proposed for solar need to be replaced? This would need to be calculated into the project.

Michelle said that this is an exploration to learn what the hard numbers are.

Emily Manns said that they are committed to the result to be a cost savings for the district.

Dick Dunning spoke about decisions needed that factor in to this such as the proposed consolidation of schools. There is interest in a solar project.

Niki McGettigan said that she is hopeful that this group does not get discouraged and continues forward.

It is a worthy project, however, the thought was to aim for 2020 given other considerations currently impacting this proposal.

Emily Manns said that they are not asking to build solar panels. They are asking to put out an RFP.

Jim said that there is a lot on the plate right now; realistically it is tough to move this up in que. The question is timing. There are ballot initiatives, negotiations, and consolidation/reconfiguration considerations.

Jim offered a meeting of key district people to meet and talk about the information that is needed. Early October was proposed.

7. Old Business/Open Items

None.

8. Other

None.

Rich Cahoon moved to adjourn at 6:46 p.m. Dick Dunning second. Unanimous.

Respectfully submitted,

Brenda Marschok

ConVal Solar Energy Project 2019

Project Goals

- To maximize energy cost savings for the ConVal School District
- To install solar energy systems including rooftop panels on ConVal and SMS in 2019
- To maximize educational opportunities for students

Stakeholders

- ConVal School Board
 - Budget and Property Committee
- Teachers/Educators
 - STEM
 - Ethics/Environment/Sustainability
 - Accounting/Finance
- Students
- Taxpayers
- Parents and Community members

Development to date

1/10/17

Gregg Blake, South Pack Solar, shared information on solar energy systems. Mr. Blake explained how the systems work and what the anticipated return might be. A school district could install a system and bank the energy earned off the grid and use that credit during the other months. It would offset the cost of electricity during the winter months. There are tax advantages to installing a solar array system. There is a 30% write off; however, since school districts are non-profit, partnerships can be developed where individuals who partner with a district could take advantage of the tax break. Rebates and tax advantages are large benefits for residential consumers. Rebates are available for districts. Replacement and failure rates were touched on. Maintenance is minimal.

4/11/17

Chris Anderson, Borrego Solar, was present to share information on passive solar energy. Mr. Anderson reported that Borrego is the third largest solar commercial company in the United States. Currently, the value of energy is under determination in New Hampshire. He suggested 300KW could be placed on ConVal High School. The netting period is annual; energy can be put in and taken out throughout the year and is netted out at the end of the year. The netting period and rate are both important.

Incentives for solar include rebate money. Components of a solar power system were shared.

The Power Purchase Agreement Services Model begins with a limited liability company. The solar panels have a 25 year warranty.

Roof conditions, anticipated roof replacement needs consideration. If the district will need to replace roofs in ten years it would not want to take up the solar panels.

Educational value for the public and our students is important. Cost savings is important.

11/28/2017

Michelle Russell and Ian MacKay, two ConVal alumni, attended the Budget and Property Committee to see if the Committee could support the idea of Solar at ConVal. Many other schools in NH have already installed solar panels, and this is saving money for their school districts. ***See Attachment #1.***

3/27/2018

Dan Weeks, a ConVal alumni and current marketing director for ReVision Energy, gave a presentation to the Budget and Property Committee about the potential for installing solar at ConVal High School and South Meadow Middle School. Concerns were raised about risk of electricity prices going down, and the educational value of a project like this. Other priorities prevented this project from being further explored in Spring 2018. Highlights from this presentation are in ***Attachment #2.***

5/22/2018

Michelle Russell and Ian MacKay attended the Budget and Property Committee. The Committee suggested drafting an RFQ/RFP that they could review in September, 2018. A draft RFQ/RFP is proposed in ***Attachment #3.***

Request:

The Conval Solar Project Group asks the Budget and Property Committee to consider the merits and timeline of this project for the Conval school district, and to help determine concrete next steps. A draft RFQ/RFP is proposed in Attachment #3 for consideration.

Solar Energy Projects at NH Public Schools

This is not an exhaustive list of New Hampshire's public schools with installations, but it does represent the projects most similar to the proposed ConVal High School/South Meadow School project.

Individual New Hampshire Schools:

District	School	Installation Company	Size (kW)	Total Output in 2017 (MWh)	% of Total Energy Use	Estimated Annual Savings
SAU 59	Southwick School	ReVision Energy	128.34	139.93 ¹	75%	\$35,000.00 ²
SAU 2	Inter-Lakes High School	ReVision Energy	345.6	401.60 ³	100%	\$170,000.00 ⁴
SAU 32	Plainfield Elementary School	Norwich Technologies	134.19	167.4 ⁵	100%	\$1,400.00 ⁶
SAU 11	Dover High School (pending)	Revision Energy	912	1,053.33 ⁷	40%	\$106,000 ⁸

Rochester School District:

District	School	Installation Company ⁹	Size (kW)	Total Output in 2017 (MWh)	% of Total Energy Use	Estimated Annual Savings
SAU 54	East Rochester School	ReVision Energy	66.67	82.71	30%	\$25,000.00 ¹⁰
SAU 54	Spaulding High School	ReVision Energy	102.52	152.34		
SAU 54	Creteau Technical Center	ReVision Energy	92.92	127.54		
SAU 54	Rochester Middle School	ReVision Energy	201.51	299.89		
SAU 54	McClelland Elementary School	ReVision Energy	69.36	85.58		
District Totals:			532.98	748.06 ¹¹		

Proposed ConVal High School/SMS Project:

District	School	Installation Company	Size (kW)	Potential Output (MWh)	% of Total Energy Use	Estimated Annual Savings
SAU 1	ConVal HS/South Meadow School	ReVision Energy	1,186	1,414.8 MWh	88%	\$162,500 ¹²

¹ Southwick School Solar Logs: <http://s39082.mini.alsoenergy.com/Dashboard//2a5669735064576e4941304b772b716f3d>

² Winnisquam Regional School Board Packet, 28 March 2016, p.69. Note: Assumes a \$1.4 million savings over 40-year life span of solar array.

³ News Article from Laconia Daily Sun: "Inter-Lakes School District Saves Big with Renewable Energy"

⁴ See Footnote 2. Note: This number also reflects other energy efficiency initiatives improvements, such as a wood-pellet boiler system.

⁵ News Article from Green Energy News: "The Plainfield School Solar Project"

⁶ News Article from Valley News: "Plainfield Finalizing Plans for Solar Array at Elementary School"

⁷ This project, which will be the largest of its kind in NH, was approved in May 2018, so this number represents a projection of estimated production.

⁸ Number is based on a \$4.24 million savings over 40 years, per Revision Energy estimates.

⁹ ReVision Energy was the installer, and SunRaise Investments led the development work.

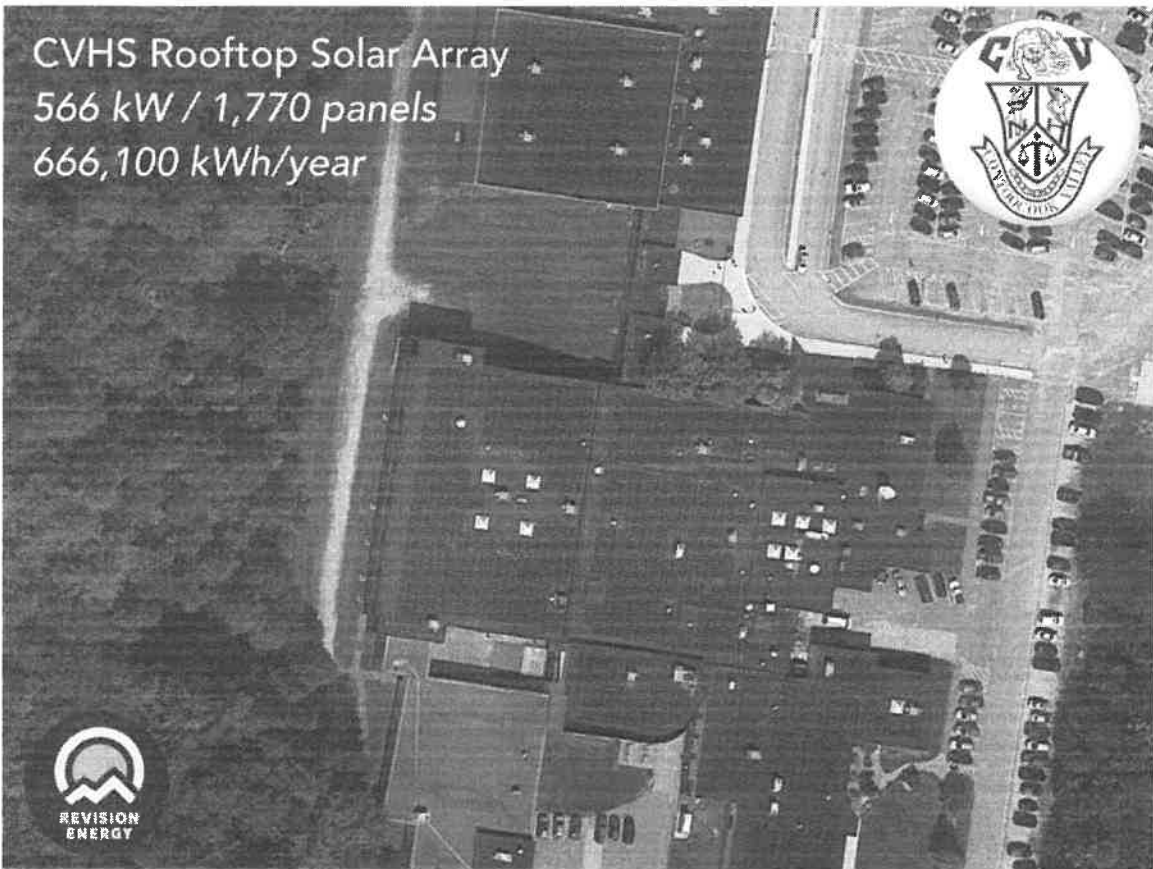
¹⁰ News Article from Fosters.com/Seacoast Online: "Portsmouth solar company powers Rochester schools"

¹¹ Rochester Solar Logs: <http://www.rochesterschools.com/solarlogs.html>

¹² This number assumes a Power Purchase Agreement with a buyout option in the sixth year. If the District chooses not to use that option, the estimated savings would decrease. This number also assumes a utility escalation/inflation of 2.5%, which is based on government data.

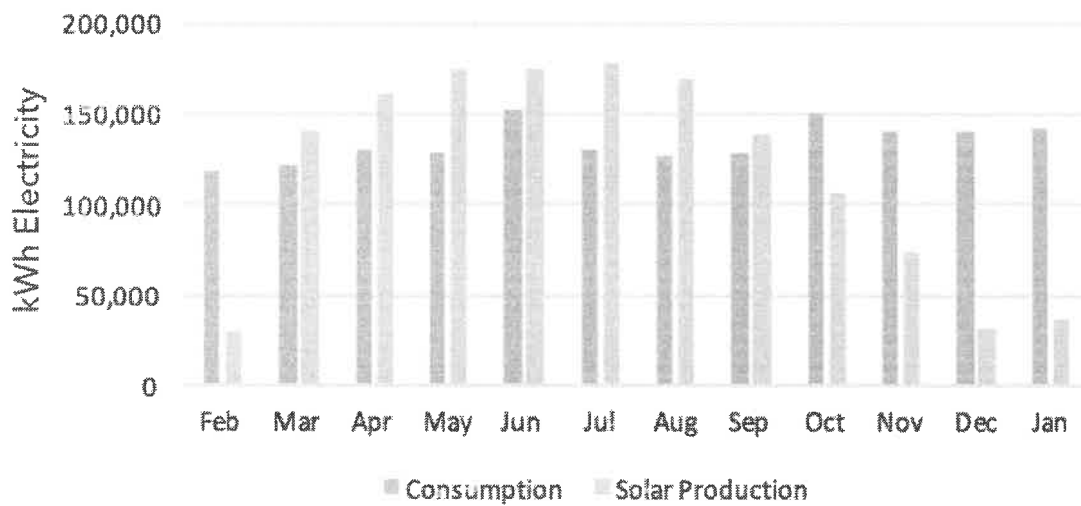
Attachment 2. Revision Energy Proposal Supporting Documents





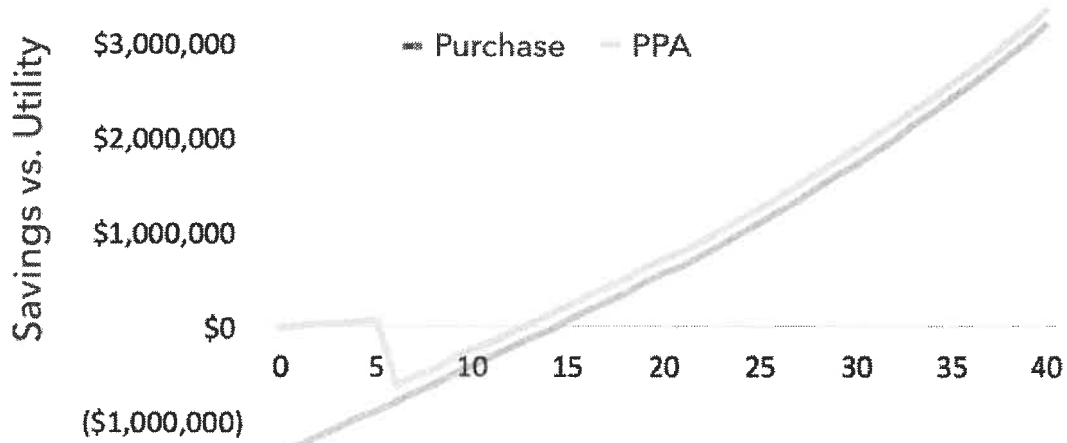
Combined Electric Load & Solar Potential

Monthly Consumption vs. Solar Production



SMS 620 kW Rooftop Solar Array

Savings Projection, PPA or Purchase



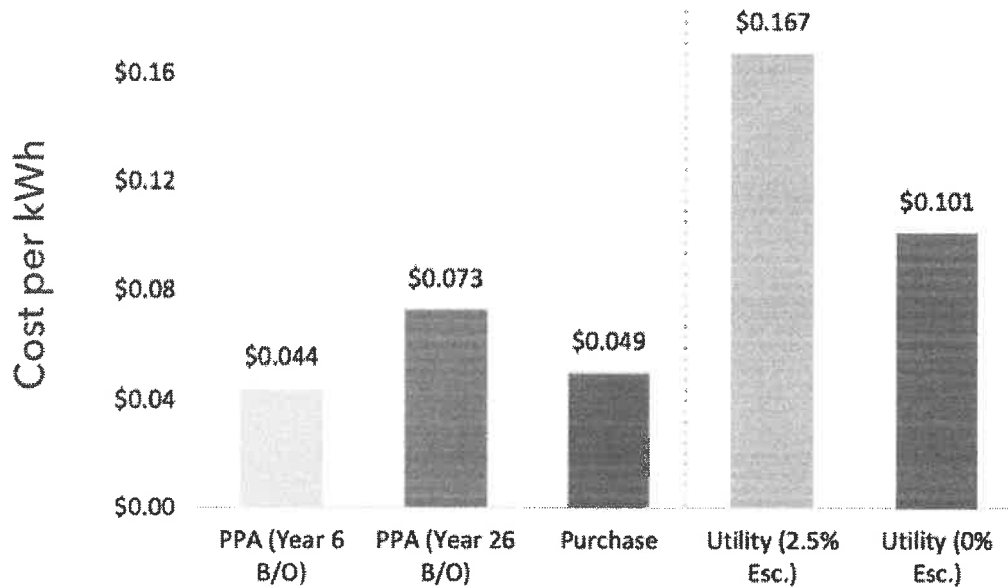
CVHS 566 kW Rooftop Solar Array

Savings Projection, PPA or Purchase



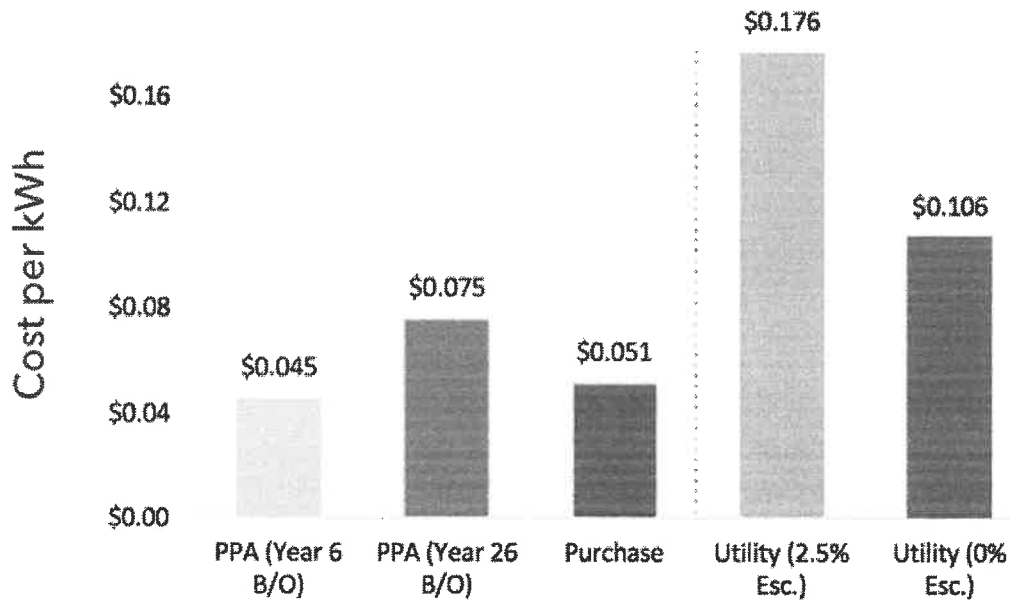
SMS 620 kW Rooftop Solar Array

Average Cost of Electricity vs. Utility (40 yrs.)



CVHS 566 kW Rooftop Solar Array

Average Cost of Electricity vs. Utility (40 yrs.)



Attachment 3: Draft Request for Quotes:

**August 28, 2018 Draft
Request for Quotes
Contoocook Valley School District
For Solar System Design and Development**

**106 Hancock Rd
Peterborough, NH 03458
Rfp-rfq@conval.edu**

Summary

The Contoocook Valley School District requests qualification-based proposals for solar systems to be installed on the roofs of ConVal High School and South Meadow Middle School. Complete proposals will include assessment and design, installation, maintenance plan and competitive financing through a power purchase agreement model.

The Contoocook Valley School seeks to maximize the energy produced on available roof space and provide educational experiences and opportunities for students.

RFQ Due Date, Submission Requirements and Date

Quotes are due by DATE TO BE DETERMINED at 3:00pm Eastern Time

Quotes can be presented on paper, in person, via USPS, UPS, FedEx, etc to the district central office or electronically in PDF format by email to rfe-rfq@conval.edu. If a contractor wishes to offer several solutions, they may do so either by submitting separate proposals or by including a line item cost table for each manufacturer in one proposal. Please mark the envelope (or subject line if email), "ConVal-Solar RFQ" and amend with a number (1,2,3, etc.) if more than one is submitted.

Proposals delivered in person or via common carrier should be sent to:

ConVal Solar RFQ 2019
Attn: District Systems Administrator
106 Hancock Road
Peterborough, NH 03458

Vendor Profile

Provide a brief corporate profile including the types of business in which the company is currently engaged.

References

Provide at least two references (educational institutions) for whom you have installed similar photovoltaic systems. Please include a name, contact information, and the name of the corresponding educational institution.

Selection Criteria

It is the intent of the District to award the contract to a single vendor for all work and materials. The Contoocook Valley Regional School District School Board reserves the right to reject or accept any or all proposals in part or in whole.

RFQ Outline:

1. Executive Summary
2. Organizational Profile: Background and experience
3. Previous project summaries that are similar in scope to the project described (including references)
4. Vendors will provide assessment, design and consultation at no cost to the School District. Any consultation cost during the RFQ process must be included in the summary.

RFQ Proposals must include the following:

1. Analysis and design to maximize the amount of solar energy produced on the available roof-space, with demonstrated understanding of local code regulations and safety.
2. The ability to provide education professionals in the school district with the means to engage with the proposed photovoltaic system in a way that enhances student learning and engagement.
3. The ability to operate within the regional electrical grid, and possible future micro-grid.
4. The ability to understand and utilize federal, state and regional incentives, to provide maximum long-term cost savings for the school district.
5. The ability to complete construction on the project during 2019, so as to take advantage of the 30% Federal Tax Credit.
6. The ability to provide a financing structure that is competitive with utility rates, and lower than current utility rates.
7. The ability to hold liability insurance for the system, as long as it is the legal owner of the photovoltaic system. Please indicate what this liability insurance would cover. This section should also include a brief description of how liability would change if the legal ownership of the system changes.
8. The ability to maintain the photovoltaic system, as long as the vendor is the legal owner of the photovoltaic system. This section should also include a brief description of how maintenance plans would change if ownership of the photovoltaic system changes.

Project Timeline:

September/October 2018	Review and issue RFQ/RFP
December 2018	RFQ/RFP proposals are due
January 2019	Preliminary review to select qualified vendors for interviews
February 2019	Interviews with qualified vendors to determine which vendor best meets the needs of the ConVal School District
March 2019	Decide on the best vendor for this project
Summer 2019	Installation begins. Project to be completed by the end of 2019 so as to potentially take advantage of the 30% Federal Tax Credit through the PPA owner, should proposals include a power purchase agreement arrangement.

Next Steps

In September

- Draft RFQ/RFP, prepare to publish
- Continue to engage ConVal Community for input and support

To maximize energy cost savings

1. Strive to complete project in 2019 to be eligible for the max 30% federal tax credit. (This goes down to 26% in 2020)
2. Investigate incentives for energy efficiency. If an energy audit hasn't been done, schedule one for fall 2018
3. Could any roof work be included in the ConVal Solar Project and therefore be eligible for the 30% federal tax credit?

Documents needed for RFQ/RFP

Copies of 2017/2018 monthly energy bills