Burlington Electric Department * 585 Pine St. * Burlington VT * 05401

MEMORANDUM

TO: Burlington Board of Finance

FROM: Ken Nolan, Manager of Power Resources

DATE: December 31, 2013

RE: **Purchase of Winooski One Hydro Facility**

cc. Barbara Grimes, BED General Manager

In September, 2012 the city council authorized the exercise of an option BED held to purchase the Winooski One hydroelectric facility, as well as the entering of arbitration if a purchase price could not be negotiated. The arbitration award was issued on December 11, 2013, and BED is now seeking approval to proceed with the purchase.

Background

The Winooski One hydroelectric generating facility is physically located in the Cities of Burlington and Winooski and is electrically located inside BED's service territory. The facility is rated at 7.4 MW and typically produces approximately 30,000 MWH annually (roughly 8% of BED's annual energy needs for all customer classes or the equivalent of the usage of 6,000-6,500 Burlington Residential Customers per year).

Prior to the facility's construction, Burlington had been looking to develop a similar project known as Chace Mill, and was in the process of obtaining a license from the Federal Energy Regulatory Commission ("FERC") when Winooski One filed a competing petition at FERC to develop its own project. Burlington and Winooski One engaged in litigation over the right to develop, and Burlington eventually agreed to transfer its development rights to Winooski One Partners in return for a lease payment, and the right to purchase the facility at "Fair Market Value" at the end of Winooski One's power contract with the State of Vermont (March 31, 2013). That right to purchase was embodied in the "option" that BED sought to exercise in September, 2012.

Activities to Date

From late 2011 to June 2012, BED staff attempted to negotiate a reasonable power purchase agreement with Winooski One partners that preserved Burlington's right to purchase the facility, but delayed the option until the end of any new power purchase agreement. BED was unable to reach agreement with Winooski One and ended energy purchase discussions in June 2012. Subsequently BED retained the services of LaCapra Associates to perform a preliminary evaluation of the cost of purchasing the facility to determine if proceeding with the purchase option looked viable. La Capra Associates analysis was used by BED staff to develop a preliminary business case for purchase of the facility. The conclusion reached in the business case was that exercising the purchase option was a viable (and the best option) for BED at that time.

The city council authorized exercising the option in September, 2012. BED then retained an expert to develop a formal Fair Market Value (FMV) for the facility and exchanged values with Winooski One in November, 2012. At that point BED and Winooski One agreed that they would be unable to agree on a value, so arbitration proceedings through the American Arbitration Association (AAA) were initiated.

Discovery through arbitration proceedings occurred throughout the summer of 2013 culminating in Hearings held from September 30th to October 4th in Burlington as well as November 7th and 8th in New York City. The arbitration award was issued by the panel of three arbitrators on December 11, 2013 and determined FMV for the facility to be $16,000,000.

Opportunity

The current market conditions are favorable to potential purchasers of resources similar to Winooski One, including BED. Valuation of hydro facilitates is typically based on the revenues the project can expect to receive for the resale of its energy and other related output. Wholesale market prices are near historic lows.

This purchase was evaluated in BED's Integrated Resource Plan, and was recommended in the least cost solution. It also compares favorably (based on the preliminary business case) with other renewable supply options. The final purchase price was evaluated again using the IRP methodology, and continues to show positive impacts for BED ratepayers.

Aside from the present market conditions being conducive to the acquisition, this is a unique (one-time) opportunity for BED to purchase the only hydroelectric facility within the city limits. The purchase will complete the efforts BED has undertaken over the past 10-years to move its supply portfolio to being sourced entirely from renewable generation, and will serve as a very effective hedge against future natural gas price increases.

Most importantly, the purchase will give BED a very long-lived generating resource with no fuel cost. Hydroelectric facilities are known to routinely operate for decades with many New England facilities approaching 100-years old.

The purchase would not only provide environmental and risk management benefits in the near term, but would help provide long term rate stability.

Remaining Risks

The arbitration was "binding"; however a court proceeding is required in order to put the judgment into effect. There is still a limited appeal process available to Winooski One in the form of seeking to "vacate" the arbitration award. The bar for getting such a Motion approved is extremely high, and would essentially require proving some form of fraud in the proceedings; however it could be used as a delay tactic if Winooski One chose to do so.

Under BED's contractual arrangement with Winooski One interest begins accruing on the purchase price 18-months after the notice of exercise is issued, so interest on the purchase will begin accruing prior to April 1, 2014. Therefore, there is significant incentive for BED to close on the purchase as soon as practical.

The contract also states that BED is allowed one public vote on any required bond, and that if that vote fails then the option is null and void. As result, BED is attempting to balance moving forward with the approval process as expeditiously as possible, with having sufficient clarity to facilitate the public vote.

Financial Considerations

BED has estimated the bond amount required to fund the purchase, plus issuance costs, to be $18 million. The Resolution for your consideration includes this number as a "not to exceed". However, BED is evaluating whether this bond amount can be reduced using other capital.

In particular, BED issued bonds in 2009 that were in part earmarked for "renewable energy" purchases. $4.9 million of those funds remain. They are presently anticipated to be used to purchase solar projects on city properties and to cover the arbitration costs associated with this purchase. However, $1 million to $2 million may remain available.

In addition, the debt service reserve fund related to the McNeil Generating Facility bonds issued in 1984 will become available for use in June, 2014. This is a $10 million fund that could be partially used to fund the Winooski One purchase.

Balanced against using these funds for the purchase, BED needs to consider its other cash needs as well as statements in BED's recent Moody's rating review which stated that BED's cash on hand was "weak", and a key reason for maintaining a depressed credit rating.

BED will be working to clarify the bond amount throughout the city approval process, but would note that even at the $18 million bond amount the debt service from the new issuance would be substantially less than the debt service being removed from BED's cost of service when the McNeil bonds are paid off in 2014, and could be absorbed without any rate pressures.

Next Steps

The Electric Commission approved proceeding with the purchase at their December 11th meeting, and moving the process to the city council. In order to remain on track for a Town

Meeting day bond vote, BED will be seeking Board of Finance approval to proceed on January 6th, based on the $18 million not to exceed bond amount. A city council discussion would then be anticipated on January 13th, and the following council meeting if needed.

BED staff will be attending the January 6th meeting to answer any question you may have.

Winooski One Hydro Purchase
Financial Review of Arbitration Outcome

January 6,2014

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History

- BED entered a series of agreements with the Winooski One Partnership (WOP) when the Winooski One hydroelectric facility was obtaining its FERC license between 1988 and 1991

- Simultaneously WOP entered a 20-year contract with the State of Vermont for the state purchasing agent to buy all power from the plant
    - Contract ran 4/1/1993 to 3/31/2013

- BED's agreements included an option for BED to purchase the facility for "Fair Market Value" when WOP's contract ended
    - The option had to initiated in September, 2012, which BED did with city council approval

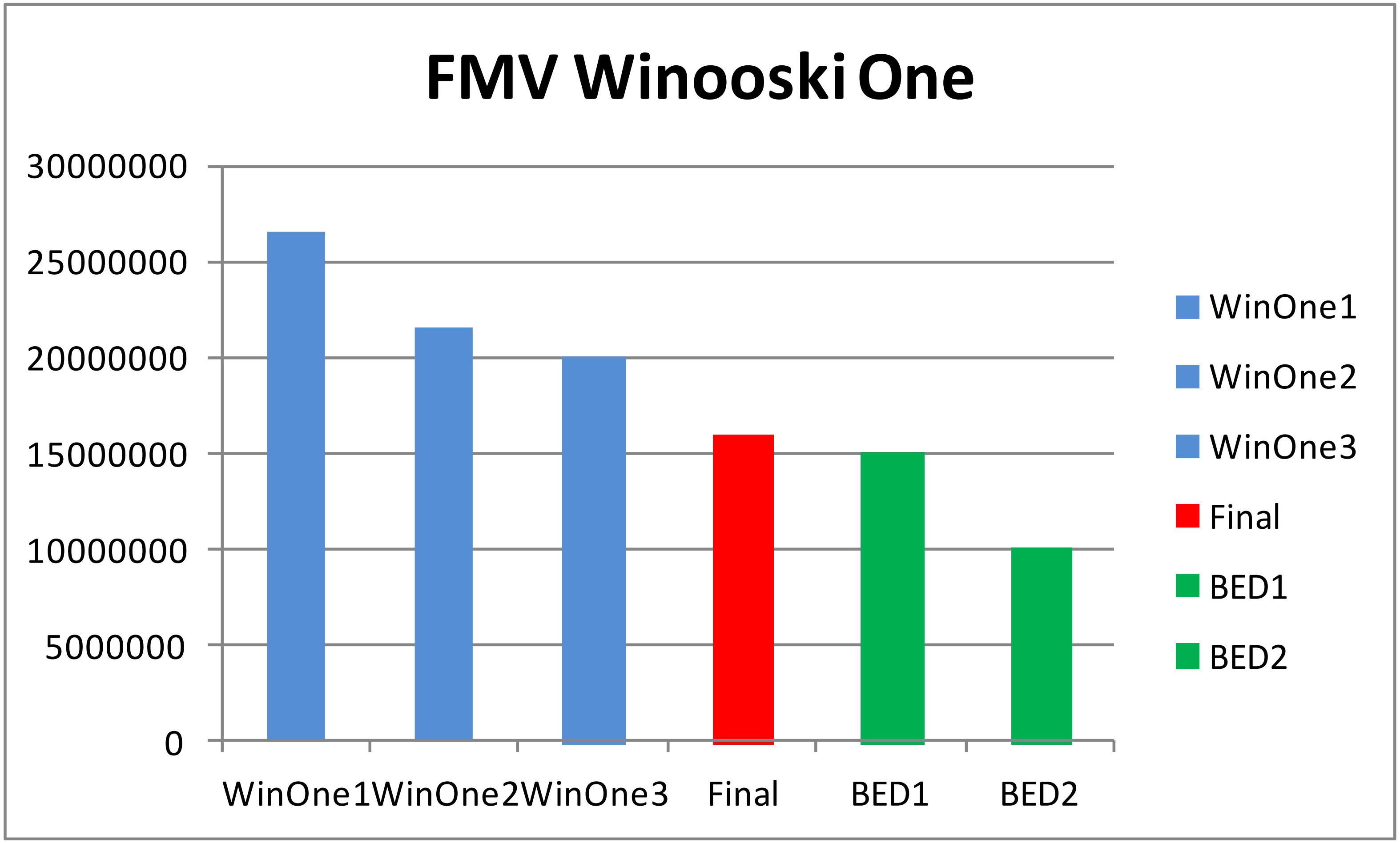
The Option

- Stated the purchase price was “Fair Market Value” (FMV)
- If the parties could not agree on the FMV then it would be decided through binding arbitration
  - If arbitration rules could not be agreed upon then the American Arbitration Association (AAA) was to be used
- BED had to post a $100,000 deposit upon executing the option, which would be credited to the purchase if completed
- BED has 18-months from notifying WOP to complete the purchase or interest will begin accruing
  - The exact date and interest rate need to be confirmed but anticipate interest to start around April, 2014

The Arbitration

- BED and WOP could not agree on a price
- Arbitration was held through the AAA
  - Hearings in October (in Burlington) and November (in NYC)
- A panel of three arbitrators heard the case over seven (7) days of Hearings
- The Panel issued its Order on 12/11/13
  - Fair Market Value was determined to be **$16,000,000**

FMV Estimates and Arbitration Award



Results vs. Initial Estimates

- BED presented initial estimates to the city council in 2012 as part of gaining approvals to send WOP the option notice
  - Indicated that a $25 million bond may be needed if BED lost the arbitration
  - Based on preliminary work by La Capra Associates (and BED adjustments) which indicated the value of the plant should be between $11 million and $23 million
- With the $16 million award in hand BED estimates the needed bond to complete the purchase would be $18 million
  - $16 million cost, plus $1.6 million reserve fund, plus $500,000 issuance charges, minus $100,000 deposit
- The result is within BED’s anticipated range

Bond Considerations

- The actual bond amount is a moving target at the moment
- BED’s McNeil bond Reserve Fund becomes available in June, 2014
  - $10 million
- BED anticipates having part of a 2009 bond targeted for “Renewable purchases” available
  - $1 million to $2 million remaining from $4.9 million initial value
  - Remainder will fund solar projects and pay the arbitration costs
- Using these funds needs to be considered in light of Moody’s recent rating review which listed BED’s present cash position as “weak”
- In short, the worst case would be an $18 million bond
  - BED is evaluating whether that amount could be reduced by available cash
  - To be discussed with the BEC again on 1/8/14

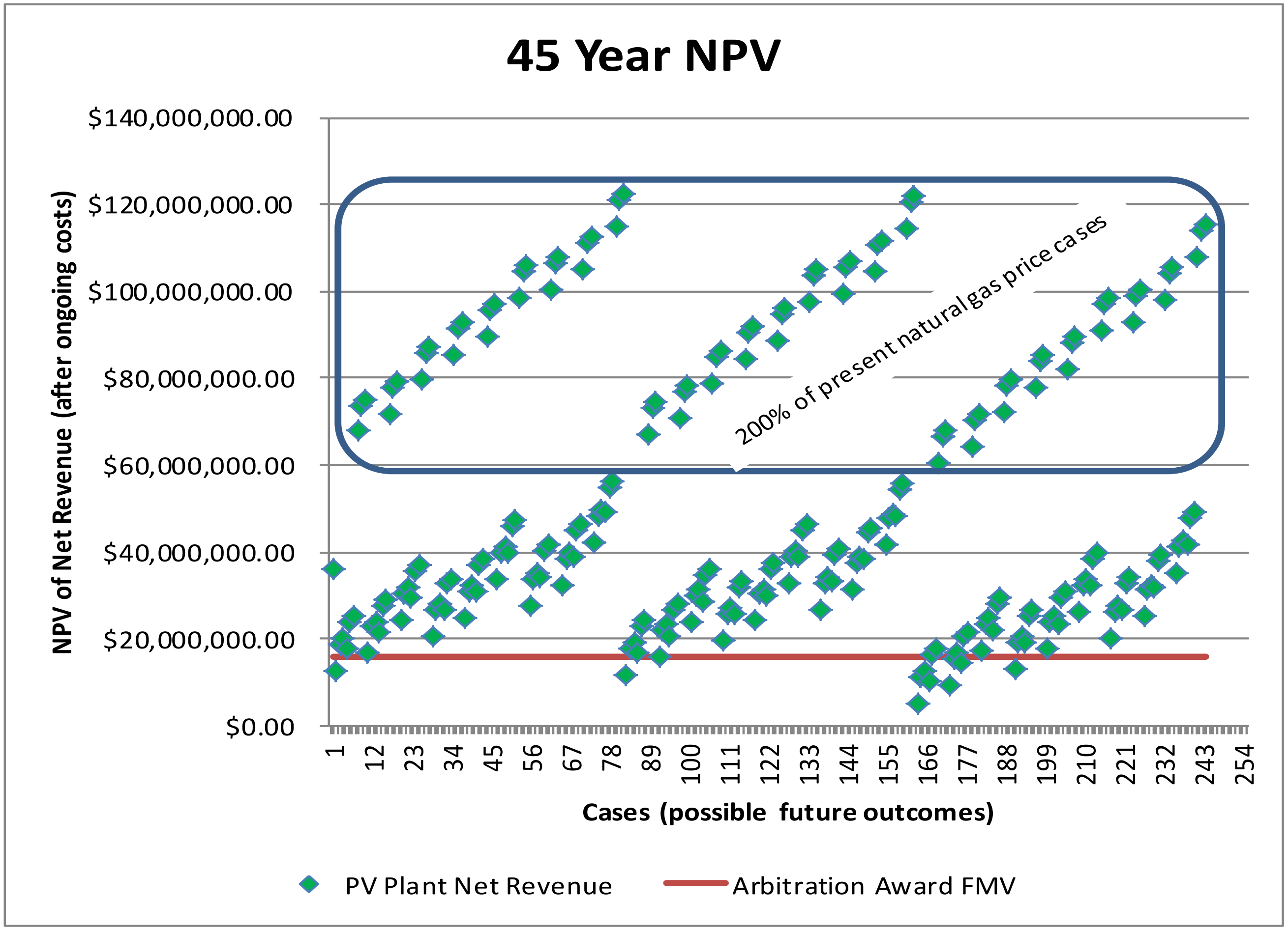
Risk Analysis - Variables Evaluated

WINOOSKI ONE TORNADO ANALYSIS					
	Type	**Low**	**Base**	**High**	**Notes**
Discount Rate	Rate	2.0%	4.0%	6.0%	
Inflation Rate	Rate	2.0%	2.5%	3.0%	Applied to O&M net property taxes
Borrowing Rate	Rate	5.0%	5.5%	6.0%	*Used for future capital costs*
Property Tax Escalation	Rate	2.0%	2.5%	5.0%	
Production	Volume	29,234	29,297	33,000	*VHB Low, VHB Base, Sansoucy*
Market Capacity Value (MW)	Volume	2,250	4,500	4,500	*Low = 50% of existing value*
REC Value	Mkt Price	$2.50	$10.00	$25.00	MA Class II
Capacity Prices	Mkt Price	IRP Low	IRP Base	IRP High	
Energy Prices	Mkt Price	IRP Low	IRP Base	IPR High	
O&M Adjustment	Cost	80%	100%	110%	
Re-licensing	Cost	50%	100%	150%	
Future CapEx	Cost	50%	100%	150%	
Lease Payments	Cost	$0	$153,000	$153,000	*Increasing by inflation*
Managemernt Fee	Cost	$0	$0	$51,500	*Increasing by inflation*

Key Variables Identified (used in case development)

	Low	**Base**	**High**	**Weighted**
Energy Prices	IRP Low	IRP Base	IRP High	114.12% Base
Production	29,234	29,297	33,000	30,262 *
REC Value	$2.50	$10.00	$25.00	$11.88
Capacity Prices	IRP Low	IRP Base	IRP High	
O&M Adjustment	80.0%	100.0%	110.0%	96.0%
Cases	243			
**** Year 1 - Low case did not have level production in all years***				

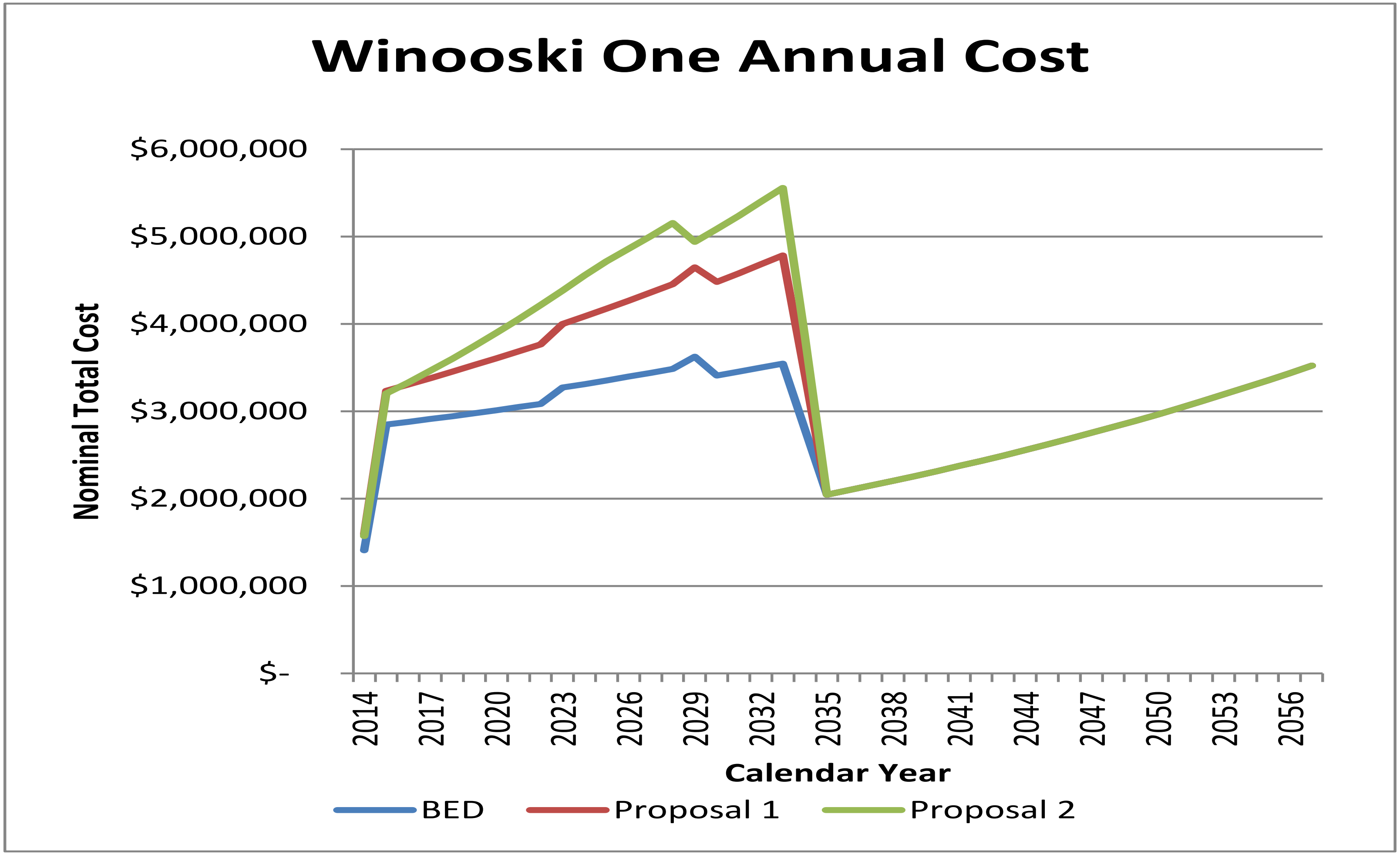
Case Results (projected FMV after paying ongoing costs)



Alternatives to bonding considered

- Several parties approached BED about funding the purchase
  - They would provide capital, then lease facility from BED, and sell output to back BED
- This would avoid the need to raise capital and for public vote on bond
  - The option agreement contains language limiting any bond vote to one try - if the vote fails the purchase is void
- BED evaluated the proposals from an economic and risk avoidance perspective
- Determined that the premium for all options was too high

BED vs. Third Party Ownership



Rate Impacts of Purchase

- Winooski One will provide roughly 8% of the city’s energy needs
  - Rate pressures will be similar to existing wind contracts
- BED evaluated three future scenarios
  - Worst probable case (no REC value) - 2.6% impact and declining
  - Long term expected (discounted REC value) - 1.6% impact and declining
  - Today’s market values - 0.2% impact and increasing slightly
- This purchase alone will not cause BED to need a rate increase
  - Any significant rate pressure would result from future declines in REC prices
  - If natural gas markets rebound it will help keep rates down
  - After the bonds are paid off it will provide substantial rate support

Conclusions

- The FMV of $16 million is lower than BED anticipated the arbitration would produce, and in fact close to BED appraisals
  - The bond would be (worst case) $7 million less than the worst case BED told the city council it might be in September, 2012
- The risk analysis continues to indicate the purchase will provide long term value to BED ratepayers
  - particularly in years after the debt service is retired
  - hydro assets tend to be very long-lived
- Rate pressure in today's markets is negligible
  - If REC prices drop some rate pressure would need to be managed
  - Long term (or if natural gas markets rebound short term) rate support would be provided

Next Steps

- BED has asked Chittenden Superior Court to certify the award
  - Once received, city approval will be needed to set a closing date
- Interest charges will start to accrue shortly after Town Meeting, so moving expeditiously to close would be advised
- The city council needs to approve the purchase and put a bond warning on the Town Meeting Day ballot
  - The BEC approved moving forward at their 12/11/13 meeting
  - Seeking BOF on 1/6/14
  - Followed by city council discussion (possible vote) on 1/13/14
  - Warning ready for the 1/27/14 council vote
  - Bond vote at Town Meeting 2014

Key Points

- This is our only opportunity to own a hydro facility in Burlington
  - Conditions will never be more favorable
- It is the last piece needed to make 100% of BED’s supply purchases renewable
  - Before accounting for REC sales
  - Positions the city well for dealing with GHG regulations
- It will provide a good long term hedge to help keep rates stable
- This is a long term decision
  - Costs are equivalent to other options near term, but lower long term
  - Hydro facilities can last 100+ years
- We have an opportunity to use funds set aside in building McNeil to reinvest in another renewable resource

AUTHORIZATION FOR BURLINGTON ELECTRIC DEPARTMENT TO PURCHASE THE WINOOSKI ONE HYDROELECTRIC GENERATING FACILITY AND TO PLACE REFERENDUM FOR ISSUANCE OF REVENUE BONDS ON THE BALLOT OF THE 2014 ANNUAL MEETING

In the year Two Thousand Fourteen……………………………………………………………..
Resolved by the City Council of the City of Burlington, as follows:

That WHEREAS, in September 2012, the City Council passed a Resolution by which it authorized Burlington Electric Department ("BED") to issue written notice to Winooski One Partnership ("WOP") of its intent to exercise its option to purchase the hydroelectric generating facility spanning the Winooski River between the Cities of Winooski and Burlington ("Facility") at "fair market value" pursuant to the terms of an Amended and Restated Agreement between the parties dated December 12, 1991 ("Agreement"), and to make a deposit of one hundred thousand dollars ($100,000) pursuant to the terms of the Agreement; and

WHEREAS, pursuant to the City Council Resolution, BED timely sent WOP written notice of its intent to exercise its option to purchase the Facility, and deposited one hundred thousand dollars ($100,000) in an interest-bearing account; and

WHEREAS, when the parties were unable to agree on the Facility's fair market value, WOP and BED submitted the question to a panel of three arbitrators for determination pursuant to the Agreement; and

WHEREAS, on December 10, 2013, the Final Award of Arbitrators was issued establishing a fair market value for the Facility of Sixteen Million Dollars ($16,000,000); and

WHEREAS, BED staff has determined that purchase of the Facility for $16,000,000, plus the cost of bond issuance and the establishment of a debt service reserve fund, estimated at Two Million Dollars ($2,000,000), would be beneficial to City of Burlington ratepayers; and

WHEREAS, at its regular meeting on December 11, 2013, the Board of Electric Commissioners voted to approve BED's purchase of the Facility for $16,000,000, and to proceed before the Board of Finance and the City Council for approval of the purchase;

NOW THEREFORE, BE IT RESOLVED by the City Council of the City of Burlington that BED is hereby authorized to take all actions necessary to purchase the Facility pursuant to the terms of the Agreement; and

BE IT FURTHER RESOLVED by the City Council that the following referendum question be placed upon the ballot of the Annual City Meeting to be held March 4, 2014:

REFERENDUM – ISSUANCE OF REVENUE BONDS FOR THE PURCHASE OF THE WINOOSKI ONE HYDROELECTRIC FACILITY

> "Shall the City Council be authorized to issue revenue bonds or notes in one or more series pursuant to the City Charter on behalf of the Electric Light Department in an amount not to exceed $18,000,000, payable from the revenues derived from the electric system, for the acquisition of the Winooski One Hydroelectric Facility, including the cost of bond issuance and the establishment of any debt service reserve fund?"