

WINDHAM ENERGY COMMISSION

MINUTES Monday March 9, 2015

Call to Order: the meeting was called to order at 6:03 pm. Commission members in attendance were: Jean de Smet- Chair, Grace Adams, Alex Girshick, Liz Ostwald, and Corey Krohn (arrived 6:13PM). Also present: James Finger –staff

Citizens and Delegations: Tom Markland - interested citizen

Minutes - James Finger advised the Commission that the January 12th minutes were just a draft and needed to be corrected, so action was postponed.

TOPICS

- *Benchmarking update - waiting to discuss with Lyn Stoddard of ECSU Energy Sustainability*
- *Status report on expenditures for Community Innovations Grant*
- *Opportunity to purchase street lights: Conference Call with Joe Bollinger from Tanko Lighting - Possible recommendation to TC/TM for action*
- *Website with Pat Bresnahan*
- *FY 15-16 budget, clarification of other requests to TC/TM from EC*
- *Micro-grid report*

Clean Energy Community Municipal Action Plan

The Chair asked about the status of benchmarking and working with ECSU's office of Energy Sustainability and James Finger explained that he received a message from the man working on the project who made suggestions, and James urged him to proceed on the items for the Town. But he said he also told him to contact the School Facility Manager on their data. The Chair reiterated the need to ask the Town Council to make this a priority, and put money aside to hire a consultant to do the benchmarking.

Some discussion arose on how the Town identifies priorities for improvements. James answered that for the most part, the Town Engineer is working on the recommendations in the original energy audits, or complaints from various departments on the need for energy improvements because of equipment failure.

Status report on expenditures for Community Innovations Grant Program - James updated the Commission on the expenditures to date, and that he's still waiting for Love & Pop to submit their financial information so that he can pay her. The Chair asked about the purchase of the Kill-A-Watt meters that the Commission wanted to put in the Libraries, and James showed them to the Commission - offering to lend them to Commission members to try out -

<http://www.p3international.com/products/p4400.html>

The Energy Meters will be distributed to the three Libraries in Town: the Willimantic Public Library, the Windham Center Library, and the Guilford Smith Library in South Windham. **The Chair said we need to put this information up on our web site.** Alex Girshick volunteered to test one of the meters to become familiar with the device.

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James added that the other bill yet to be paid is for Pat Bresnahan, at which point Pat presented a bill for half of her project cost.

Opportunity to purchase street lights and possible recommendation to Town Council & Town Manager for action

The Chair reported that we do have the Town's attention on this, as the Town Manager requested the information from CL&P, and they gave us the data on our street lights. She said that Tanko Lighting is interested in talking with us, but we're not going to make any specific recommendations on using them, but we could ask them some questions, and they may give us some ideas of what we need to consider. She then explained that CCM (CT Conference of Municipalities) has pre-approved three contractors to do lighting for CCM members; and Tanko Lighting is one of them. She added that West Hartford tried to do this a few years ago, but decided not to proceed because the price of the light fixtures was too high; they may have dropped in price since. Also, supposedly the State legislated that CL&P had to offer communities the option to purchase the lights in phases - so it would be affordable to purchase in increments. Alex asked if there was a time limit to purchase; but we don't have this information yet.

The Chair informed the Commission that she's been getting alerts from a group called 'the municipal street lighting consortium, and they've provided information and updates on their web site, and there is a report: <http://lighting.com/dae-guidelines-for-led-streetlights/> - or <http://www.neep.org/led-street-lighting-assessment-and-strategies-northeast-and-mid-atlantic>

The main point is that the technology on LED lights has improved to the point that they are more reliable now, and the prices are coming down - so it could be more affordable. So the problem that the Town Engineer reported with the LED lights that the Town purchased - shouldn't be the case anymore; plus the prices are like \$99 per fixture instead of \$300 plus.

In the mean time, either Neal or the Controller contacted Elaine Lind - Titan Energy that sells us our energy as an Energy Aggregator. Titan has been working with the Town for six or seven years. The Chair explained that she had gotten a call from Elaine in February inviting her to lunch to discuss energy services that they could offer - and hopefully work together . Jean said she didn't respond at the time - but given this recent information, decided to do so. The latest message from Elaine said - the Town is a customer of hers, and that she's been working with Tom Pesce Town Controller and Chris Johnson - Windham Finance Director.

Whoever is chosen to do the work - it will have to be budgeted and probably bonded; so this is why the Controller needs to be involved. The Commission wouldn't be making the decision, but just making a recommendation that the Town should look into this. It's a good idea, and could save the Town a lot of money. So Tanko will tell us the cost to acquire the street lighting, the cost of conversion, and they have a maintenance program - so we wouldn't have to actually maintain them if they fail.

(This was a conference call with Joe Bollinger from Tanko Lighting)

Mr. Bollinger explained that Tanko Lighting responded to an RFP from CCM and they were chosen along with two other companies to be the preferred street light retrofit vendor for CCM member. He

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then gave an overview of his company, saying that they have worked with several communities across the country re-lamping 170,000 fixtures. He added that Tanko is not tied to any particular lighting manufacturer, so they focus on getting the best product for what you need.

Initially, they map the entire Town through GIS software, and they gather twenty pieces of information per street light - such as: how high, how tall, how far from the curb, proximity of trees, as well as any other information from the community or the power company to document and inventory what exists (this also helps when the Town needs maintenance or repair service to its equipment - and to know when your responsibilities are complete). Tanko's estimate of savings is initially drawn up based on the existing lighting system in place.

Since the Town doesn't own its street light system, its paying for them under Rate Tariff 116. If the Town purchases its streetlights, then you would be under Rate Tariff 117 - which is cheaper. He gave an example of costs: a 150 watt High pressure sodium street light that is on for one month is \$7.10; but after you own it - its only 81 cents. When you switch to an LED - it drops to 56 cents. This is just that distribution charge. The Kilowatt charge is between ten and fifteen cents (so there would be more savings with the LED).

He then went over projected maintenance costs through Tanko Lighting, and asserted that maintaining an LED system would be drastically cheaper than a High Pressure Sodium light system. Generally, HPS lights fail on average of 17-20% of the time within three to five years. Whereas, he said that their experience with LED lights is about 1% failure rate in ten years. Every light that they recommend comes with a ten year warranty. So if it blinks or goes out - you take it down, and the manufacturer will give you a new one. The Town could do its own maintenance, or contract it out. If the Town were to do its own maintenance, then you would have to buy bucket trucks, or hire someone to do it privately. Tanko could do the maintenance - and -he said - they would charge less, because they can respond any time it occurs.

After the street light audit is completed, they map it, and do a lighting design to determine the best lighting for the area. This would be different than simply putting new lights on existing poles - that may not be ideally situated to provide the light where it's needed. So the lighting plan would look at the need for brighter lights at key areas - such as the commercial areas, and busy intersections; and a little lower in residential areas. The existing street light system may have been installed many years ago, when lighting needs were much less needed - such in rural areas. But as these areas experience growth, the lighting needs may not have been re-assessed. It may result in installing new lights, or decommissioning existing lights. Tanko wants to make sure the Town is satisfied with the overall street lighting system when it's done.

Grace Adams asked about adjusting lights that shine into homes. Mr. Bollinger responded that there are various means to do that. He explained that the HPS lights have a full bowl on the bottom that shines the light out in all directions - which allows the light to shine up. The new lights are all 'Dark Sky' compliant - so they just shine DOWN and that helps in the light distribution to shine the light where you need it on the Street and sidewalks. Where there have been complaints about light shining into the house, they can install a house light shield LED lights can be adjusted to shine the light only where it's needed.

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Once that is complete, they would submit their recommendation to Public Works on the lighting needs. When the Town gives the go-ahead, then they would start work. Generally, they hire local contractors to do the work because they know the Town best; and it keeps the money on labor in the local community.

Tanko coordinates the rebate that the Town would get from Eversource - which is approximately 30cents per kilowatt hour in savings. Tanko coordinates the rate changes with the power company, and provides the documentation to the Town. Tanko would also coordinate the environmental recycling of the old lighting material. At the completion of the audit, and environmental work, Tanko will turn over all of the data to the Town for its purposes. Tanko doesn't hold the information - or charge monthly or yearly fees. Tanko would then provide the documentation for proof to contact the utility to advise them that the Town has changed its lighting system with lower consumption, and must charge accordingly.

The Chair said that one of the concerns is that the Town charges the Power company taxes for their equipment; so how will this affect the tax revenue.

Mr. Bollinger explained that the Town would request a valuation of the lighting system from Eversource, and the utility will respond back with a spreadsheet on the inventory of what you have, along with a breakdown and cost by depreciation method. Tanko then takes this into consideration in evaluating the overall cost of conversion.

The Chair said that looking at the valuation that Eversource sent, we have one figure of \$181,000, and another at \$460,000.

Mr. Bollinger replied that Eversource can only sell the poles that are just for the street lights. So the \$181,000 figure is just for the fixtures - where they can't sell the poles, such as the light and attaching arm. The larger figure was for the poles that they could sell. He added that he would take these figures and calculate a weighted average, coming up with a cost of \$235.11 per fixture. So rolling this all into the financial spreadsheet, he can project the overall project would cost with acquisition and complete conversion; that's turnkey replacement as well as acquiring the system. They also provide a projection on the payback based on the energy savings, and how much less energy will be used - that will show when it will break even.

The Chair asked about legislation that she thought was implemented that required the utility to sell the poles to communities in pieces - or incrementally - rather than all at one time - so we don't have to make the big lump purchase.

Mr. Bollinger answered that none of the Towns have asked for them to do this because its better to do all the project at one time - as you would realize your savings sooner rather than trying to do it in increments. He then outlined a preliminary evaluation recommending a replacement of the General Electric ERL Streetlight at \$839,235 with a rebate of \$173,123 for a net cost of \$665,616. This would have a payback of 2.9 years. Currently your annual energy costs are about \$287,000 per year - for the street lights. This would drop to \$59,000 - saving you \$228,000 per year. Over the span of twenty years, the Town would save over \$4.8 million. This is based on the Town buying the whole system from CL&P, getting off of Rate 116 and onto Rate 117, and absorbing your own maintenance.

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The Chair asked how he calculated the savings over twenty years. Mr. Bollinger said they include a utility rate increase of 1% per year and the estimated federal inflation rate at 4% per year.

The Chair asked if he had spoken with Elaine Lind of Titan Energy, and he said that he spoke with her, and she was going to get him the street light bills. However, Elaine told him they'd be putting a bid together (an RFP) on the streetlights, and would be contacting Tanko when the time comes.

Titan Energy sells the Town some of the power it uses, but there's another company that also sells power to the Town. So they are trying to wade through all the information. In some cases, Cities pay CL&P a portion of the bill, and then may have a power purchase agreement with Trans-Canada. Windham is different, but Elaine said she would get him all the street light data so he could do his calculation.

The Chair asked if Titan is an actual provided power, or are they just the consultant. She added that Mr. Bollinger said they actually provide some power to the Town. Mr. Bollinger then completed his presentation by phone. Since there were no other questions, the phone call ended.

After some discussion the Commission voted to recommend that the Town speak with Mr. Bollinger at Tanko Lighting to explore their proposal further.

Website with Pat Bresnahan - Pat then presented some options for the Commission to consider in developing the Energy Commission's web page. Much discussion ensued, and Pat will return with a more fully developed draft. James showed pictures of Ice Dams, and mentioned that Kate Donnelly had identified this as energy loss. The Commission agreed that these should be on the web page.

FY 15-16 budget - James explained that the Town Manager did not include the Energy Commission's request for funds to hire a consultant to prepare an overall Energy Strategy for the Town, but the Commission could go to the Town Council and ask them to include it. The Manager has included funds for clerical support. The Chair said that the Town Council should include the Street lights in the Capital Improvement Plan.

Micro-grid report - no report available as Commission contact couldn't attend meeting.

Future meetings - The Commission discussed just meeting the 2nd Monday of the month, unless something comes up.

Miscellaneous - Energy reductions by 2018 - some discussion ensued. James commented that he wasn't sure that the Streetlights would be credited for reducing energy consumption, as CL&P told the consultant not to include it - so it's not in the portfolio manager.

Meeting was adjourned at 8 PM -

Respectfully submitted, James Finger