Warner Board of Selectmen
Meeting Minutes
Tuesday, February 7, 2017
APPROVED

Selectman Carson opened the meeting a little after 7:00 pm
In attendance: Selectman Clyde Carson - Chairman, Selectman Allan N. Brown, Selectman John Dabuliewicz

1. Solar Array Public Hearing

A. Clyde thanked the audience for attending the hearing. At the time of the hearing a snow storm was underway.

B. Clyde said according to RSA 33:8-a, a public hearing is needed for the solar array warrant article that will be presented at Town Meeting. Clyde is bringing the same project that was presented in a warrant last year to this coming Town Meeting. Clyde said George Horrick from Harmony Energy is trying to get to this meeting from Hampton, he's not sure if George will make it. George has all the technical back-ground. Clyde will call for questions after the presentation.

2. Presentation

A. Clyde acknowledged the creator's of the handouts for this evening. Darren Blood, both Energy and Solar Committee member created an informational handout and Kimberley Edlemann created a financial analysis that goes out 15 year's.

B. Clyde said this would be the second solar array built in town, the first being at the water treatment plant.

C. Net metering in New Hampshire is a concept that says if there is solar on a building, the produced solar can be used against the solar usage and anything in excess can be put into the grid which will be credited by Eversource; this law was passed in 2012.

D. In 2013 the Legislature took the next step and went into what's called group net metering which means if your producing more electricity than your using at your solar location, you can allocate to other meters. Clyde said this is the change that makes this solar array project workable and possible.

E. In 2014 the Public Utilities Commission which administers the solar array projects put their rules out and the power companies must adhere to these rules and laws.

F. 2014 Warner formed a Solar Array Committee. The members are Clyde, Darren Blood, Neil Nevins, Town Administrator, Jim Bingham and Ray Martin. The Committee put out their first Request for Qualifications (RFQ) in September of 2014. They didn't really know what they were doing in terms of requirements and put out a general RFQ and received a general response back. The Committee learned a lot from the experience and created another RFQ in July 2015 and found out if the arrays were broken up, one for the water district and one for the town, the best pay back from the state would be achieved. The state differentiates an array that puts out 100 kilowatts and under, your reimbursed for the amount of solar put into the grid at a better rate than if your array is greater than 100 kilowatts.

G. The Committee received 3 responses back from the second RFQ, Harmony Energy Works was chosen. Two warrants one for the town and the other for the water district was put before the town in 2016. The one for the water district was approved and built and the one for the town failed by a few votes. Still feeling the array is a good idea, it will be placed on the warrant for this year.

H. Clyde shared a statistic he recently learned about. In 2013 the state had roughly about 9 megawatts of solar capacity in the state, over the years it has gone from 9 up 56 megawatts of capacity in the state, this is a huge growth in a short time. There were several building permit applications in town for solar power installations, there are 42 taxpayers in town that receive a solar exemption.

I. The warrant being presented at Town Meeting is asking to raise $338K, $65K will be from PUC rebate and the remainder will be through a loan, $10K from the loan will be used for the first year payment on the array, $263K is the amount the town is looking to raise.

J. The cost for the array is less than last year by about $10K for the following reasons: The cost for clearing the land, a contractor has committed to clearing the lot for the lumber, Eversource has agreed no facility upgrades are needed, and no legal costs will be budgeted.

K. The Community Development Finance Authorities will finance the project at 2% for 12 years, last year the rate was 3%. Clyde said the project, from year one, provides a positive net revenue back to the town, when the array is paid off, the town will be making cash off the project.

L. In 2016 the town used 134,000 kilowatt hours of electricity, which is less than the year before, 154,000 kilowatt hours. But the electric bill was not lower, it rose by 11%. Clyde feels the cost of electricity will continue to rise, having a solar array will address the increases.

M. In summary, if the warrant article passes, construction will happen in 2017. The water district array has been performing above the expectations that were projected for the savings. It had a positive net revenue starting in the first full year of operation. It has no impact on the town tax rate, the revenue generated covers the cost of the array itself. The estimated net revenue for the life of the loan is just under $60K profit for the town. After the array is paid for the estimated first year revenue is $171K. The array will produce enough power to cover 100% of the town's buildings. John pointed out the town will still receive and pay an electric bill that will be part of the operating budget. Clyde said once the array is paid off the revenue produced by the array should pay for a significant chunk of the electric bill.

3. Hearing Opened to Public Comment

Peter Ladd: By year 15 the town will own the solar array system and it will be paying the town close to $40K a year, can you expand on what happens after year 15?
Clyde: The estimate is the array is a 25 – 30 year array, it will continue extending profits for another 10 – 15 years beyond the loans final date.
Walt (?): What kind of guarantee, how many years.
Clyde: Harmony Energy Works guarantees all the parts of the array for the life of the array, 25 year warranty.
Walt: What about wind damage, tree damage.
Clyde: That type of damage would be covered under the town's insurance.
Ray Martin: The guarantee was for all of the components and labor. The first five years the array is fully guaranteed, including labor. Five to twenty-five years it's guaranteed for all the parts. The average life of the solar panels is between forty and fifty years.

Duane Sauder: I have two observations. I went to the website that produces the solar panels that are installed down on Joppa. They clearly state for those panels on the website that they are guaranteed to run to 90% after a certain number of years and 80% after that. And they are only guaranteed, as you said, for 25 years, most solar panels don't survive after 25 years. Especially, in weather like this. The second observation that I would make is there is no guarantee that company will be around.
Neil Nevins: I think your incorrect, the assumptions that you are making are not correct. The warranties extend out to twenty five years and the panels, through out the industry, have a life expectancy of 40-years. The efficiency does drop, but, every indication that we have is that these panels will continue to work, and work well through this 40-year period.
Duane: I'm not assuming sir, I'm going based on the website, and the manufacturer stated the warranties on their website.
Neil: The company that we are working with, has demonstrated that these panels stand up to time over this 40-year period.
Duane: How long have they been in business?
Neil: I don't have that from the top of my head, but they are the most long lasting company that has been involved in the manufacturer of these solar collector's than any other company. It's based on sound analysis of how long these panels stand up.....
Clyde: If these last 20-years we have more than recouped the cost of the system. We'll come back in 30-years to see how they are doing.

Jerry Marsh: (Jerry asked to go back one panel on the presentation screen) Is that the charge for the year at each one of those buildings?
Clyde: Correct.
Jerry: There's just no way that your getting away using the Highway Garage for $208.42 for an electric bill. Something is wrong there.
Clyde: There are two meters at the Highway Garage, the second one up there is the Highway Department, and that's a big one, 3,800.
Jerry: OK
Clyde: There's two meters up there, the other one I think is for the Festival.
Allan: It's either the Festival or the salt shed, not sure which.
Jerry: OK
Clyde: Did that help?
Jerry: Yes.

John Leavitt: Since it's guaranteed for 25-years, I think we can all go back. But when you start saying it's gonna last 40-years, and the testing of these panels is done by the manufacturer who is selling them, brings the whole thing into question. But the 25-years, I think it's safe, just assume it's going to last 25-years, and just leave it at that.
Clyde: You and I will talk about it in 40 years.
Peter Ladd: I think it's true though, there are solar systems used today that have been around for more than 30 years already.
Clyde: But, 25-years, it's still a great project.
John Leavitt: 25-years is a good assumption.
Clyde: Yes.

Darren Blood: My parents put panels on their garage in 1985, and it was a different type of system, but the panels still function, I don't know the level of efficiency. These panels are guaranteed to have a certain efficiency at year 25. Even just given that efficiency, it's going to create revenue between year 12 and 25, even if the efficiency goes down 5%, the revenue that produces on those years is irrefutable.
Neil Nevins: Just to pick up on that, we can argue about getting to year 40. Let's focus on what we know, the net revenue by year 15 is $171K, extend that out to year 25. After year 25 the efficiencies go down a bit, but the percentage doesn't take away what we saved from year 1 to year 25.

Jerry Marsh: Is there any maintenance?
Ray Martin: There is dust that builds up on them, these are sloped at an angle, all the snow has slid off. Harmony monitor's the panels and if they see a decrease they will look at what's going on. Major snow may need to be plowed away sometimes.
Peter Savlen: From my experience, I find 25-years is a long time, I find it hard to believe they're not going to come up with new technology for the panels.
Clyde: No doubt.
Peter: As far as efficiency goes, you buy anything brand new, it's not going to stay efficient, that's the basic law of physics.

Audience member not identified: Has the town obtained 3 independent bids for any wiring necessary to put solar facility up in a commercial district say down at Exit 7, if not, why?
Clyde: At Exit 7?
Audience member: Yes.
Clyde: The town doesn't have any meter's down there to take advantage of the net metering.
Audience member: The reason I am curious about that, because you mentioned with the group net metering rules, if I wanted to share my electricity credits with a person in the next town I could do so, so, the location of the meter wouldn't be …….
Clyde: Your suggesting that we find some private individual down there that wants to host it for us?
Audience member: No, what I'm saying that right now your meter over at Joppa, you haven't installed a meter.
Clyde: We have a meter there, we have a waste treatment facility that's part of of the water district. That made it ideal, they use a lot of electricity there.
Ray Martin: Part of our contract with Harmony included the meters and the installation. We have a meter that measures the production from the solar panel and we have the main meter that can either go in or go up. All that wiring was part of the contract.

Natalie Wells: I'm just curious, do you know when we get the rebate from the net metering, is it retail or is it market price.
Clyde: We get the rate at which we're paying at the Transfer Station, and we get reimbursed for the amount of electricity we use plus the, I believe it's called utility charge. Right now we are estimating it will be about 12 or 13 cents per kilowatt hour.
Natalie Wells: The PUC right now, what kind of a rate are we getting.
Clyde: They set it by the size of the array, by being 100 kilowatts or under it's different, above 100 kilowatts, we would be getting the commercial rate, which is very low. By staying below the 100 kilowatts, we're getting the rate at which we pay at the meter at the Transfer Station. So if you had solar at your house you get paid basically off everything that's related to your electrical usage, it's the same for the town.
Neil Nevins: That's why we wanted to keep this system within 100 kilowatts.
Natalie: I know there's a Bill coming up, they tabled it right now because PUC is going to come up with their rates in June, we don't know what that's going to be.
Clyde: Yes, you never know what the Legislature is going to be, but, what that tells me is that generally the Legislature would be passing things for people going forward from this point in time. If you have solar on your house and the Legislature passed a law changing the rules, you would be grandfathered under the rules that were there, same for the town. So doing it this year is a good deal. They have money to give us a rebate and the rules in which we get reimbursed will be grandfathered. Another thing that's important, last year we put in for a Rural Development Grant, this year we also applied, it's not included in the calculation because grant awards won't happen until after Town Meeting. I did hear from Rural Development today, they did get their grant funding so they have their allotment to give and word was that the amount of grant requests is only slightly greater than their allotment amount. If we got the grant from Rural Development we would reduce the amount borrowed making the numbers better.
Jerry Marsh: Are you talking about $30K, $100K, how much?
Clyde: We were advised to put in for $25K to $35K for a grant, I put in for $35K.

Clyde: One thing we didn't talk about, as we produce electricity, we receive something called renewable energy credits. In addition to the electricity that we put in the grid and we'll get a check back from Eversource, part of that profit number includes the amount of electricity we sell to Eversource, but it also includes these renewable energy credits that we can sell on the open market.
Darren Blood: Ray have you sold any credits yet?
Ray Martin: No, it takes a while.
Darren Blood: It took me about 9 months before I got my first check.
Ray Martin: We submitted the first meter reading as of December 31, and then it has to go through this God awful process and we eventually might see some money in June.
Kimberley Edelmann: Don't you trade through a Broker for that?
Ray Martin: Yes, they have a lot of steps to go through, once you get started you will be rolling along in a quarterly basis.
Neil Nevins: At the book store we have an 11.5 kilowatt system, we've been active for 5 years and the energy credits that we are getting quarterly is close to $700 if not more.
Susan Hemingway: It just seems like, if your looking at this strictly financially, we have to pay an electric bill anyway, if we don't do this we're going to have to keep paying an electric bill every single year, if we do this, it looks like it's cash positive and then year 13 it's ours. The other aspect that hasn't really been discussed tonight is the environmental advantage and that we are using a renewable energy source.
Kimberley Edlemann: It's the right thing for the planet.

David Hartman: As I understand it, blue line is our energy bill...
Clyde: This is the cost of the solar array, the financing of it....
David: And that's the cost of the solar array, how does that actually work against the bill that we get for electricity over the next 12 years.
Clyde: Well, that's something I looked into and the state doesn't give us a lot of help in this area. What would be ideal is to take the check from Eversource and have it go right to the lender to pay for the solar array. The state won't allow this. So we have to recognize it as revenue and then we get revenue and we use our revenue that we get to pay for the solar array and the state has some very good reasons for why we want to do that.
David: I have solar array myself, it seems to work very well. Many of us in this room have solar arrays that are working and it seems like the details being presented tonight....show me that this is an investment that the town should be making, because it is to our advantage financially. It may not be guaranteed, but, it is so much along the main stream of what is going on right now about doing alternative energy, and you've shown us. I think you spent

an enormous amount of time developing the proposal that I don't see why you would ever want to deny us going into it. It is making us money, it is saving us money as a town.
Clyde: I see it that way as well.
Allan Brown: I think one thing we do know, is that Bow power plant that burns coal is going to shut down pretty quick.
Peter Ladd: Going along with David Hartman, we are not the first town to do this. There's many other large installations in many other town's. I haven't heard any regrets.
Clyde: A lot of town's have done it through a power purchase arrangement which means you just pay a lower rate. Buying it out gives us that advantage in year 13 the others don't have. Webster has a proposal to do theirs this year. I've heard Bradford has got one, and several others are looking at buying your own.
Neil Nevins: Just to follow-up, we know it works for us, those of us who have these systems. It makes sense to all of us, that's why we moved in this direction. From our experience and taking a look at what's going on in every community through out the country and the world, this works. This gives the town the opportunity to be reasonably self sufficient and the power it produces to provide for the electric needs of another community. I have been working in this area for 42 year's and I have seen the technology change significantly. And most recently, the economics and environmental aspects have now (not audible), so it makes economic sense.
Clyde: It also says something about the town. When other people are looking at the town, it says Warner has something going good for it, it's common sense.
Neil Nevins: It's common sense and it protects us going into the future, because we have now the capacity to capture all the sun that falls and use it to our advantage.

David (unknown): I'm a little worried that the plans look very much like they did last year at Town Meeting. The idea seemed every bit as good then as it does now. Those of us that were at Town Meeting, about a third of the people in the room, slightly more than a third of the people voted against it, I'm just wondering if anybody recalls what the reasons were that swayed those people. I think that's important if we could get some of those people to re-think their position.
John Leavitt: I voted against it last year, I have solar panels on my house. I don't think solar panels are the way to go, unless your tax subsidies reduce the payback to 12 years instead of 22 years. And I would encourage anybody to go that route, but if I was voting at the Legislature, I would take away all these tax subsidies. If they are available though, take them. Last year the reason I voted against it is the change that I heard in this year's presentation. Last year the buy back from Eversource was presented as being less than the cost of the electricity that the town is buying. At least that was my perception of what happened last year. This year it seems like what is being presented is the buy back is the same as the.....
Clyde: At the same rate.
John Leavitt: Right, I'm still having a hard time wrapping my head around that. It doesn't make any sense to me that Eversource would do that, that's the way it's being presented. The other thing about last year, this still applies to this year, is a lot of these projections are based on PUC and Eversource, which can change at any time. And the other thing that was stated was the 11% increase in electricity last year and the chances of electricity going up at that rate...
.Clyde: Probably not.
John: With the new administration, probably will not happen, but it still could. And the coal plants that are suppose to shut down in Concord may not shut down now because the EPA may reduce the regulations on those brand new scrubbers they put in a couple of years ago. I'm undecided, but leaning towards voting for it this year because the presentation is a little bit different.
Audience member: I'm glad you brought up Eversource because very recently Eversource has challenged and continues to challenge the rate they have to buy back at. And their last argument, which was just decided upon, was regarding.... there's two part's to the electric bill, the supplier/generator cost and then there's the poles and transformers and infrastructure and basically what you are is a generator, your not a delivery. Eversource is trying to get that separated out from the rebate and the payback. They want to pay you back for generation, but not for distribution. Eventually I suspect they will win that argument.
Clyde: We would be grandfathered at that point.
Audience member: You don't know that.
Clyde: Yes, we would. The Legislature would not allow....the Legislature doesn't do retroactive legislation. One Legislation tried to do that in Nevada and the Legislature, I think they were at gunpoint from the population, they back tracked on it. Every Legislature that since has done some of the things in terms of giving their power companies some resources to compensate for the delivery side of it has moved forward and kept everything before grandfathered. I expect we would do the same here.
John Dabuliewicz: I don't understand what you just said. The rates are set by regulation by the PUC, not set by the Legislature.

Clyde: The law is passed by the Legislature, the PUC puts the rules down.
John D.: Exactly, the rules are what establishes the rate.
Clyde: Right, but, they wouldn't go back....
John D.: Not Legislation, it doesn't establish the rate.
Clyde: You would be grandfathered under the old law.
John D.: You say that, they change the rate we pay for electricity, they can change the rates.....
Peter Ladd: I think the question started about not so much what the rate will be set at, but whether or not they would separate the transmission costs and deduct that.
John D.: Clyde's told us right along, we're not getting anything back for that, we're getting back for the cost of the electricity and delivery charge, not the demand charge.

Nancy Martin: At a recent meeting Conservation Commission meeting, we were talking about solar array and we tried to think back about some of the issues last year. These are a couple of squishier ones that we came up with. There was a concern about the visual impact, here on the picture of one of these handouts you can see where the solar arrays will be located. And it was the feeling of the Conservation Commission that they're set far enough away from the road, the visual impact from 103 is going to be (not audible). The other negative issue that came up last year was that we were going to be cutting a significant amount of trees. So a couple of the people that are smarter on the Conservation Commission said the trees in that particular area are not old trees and they're not particularly good trees. And so if we can get a lumber agent to take them down at no cost, it's a pretty good deal.
Someone asked about the size of the lot.
Allan: Maybe three quarters of an acre.
(The environmental impact was pointed out from the handout's)
Darren Blood: It's equivalent to 713 acres of trees planted.
Allan: Where the array is going sits on solid ledge, you will never get good trees there.
Jerry Marsh: On your cost for clearing the property, does that include stumping it out?
Clyde: It includes the stumping as well, yes.
Audience member: Is the town itself going to waive the timber tax on that?
Clyde: I don't know, did we do that with the water district?
Ray Martin: It isn't due yet.
Clyde: That's a question I haven't even thought about.

Peter Savlen: I was over in Europe two years ago, everything over there is going solar. Any new construction has to have solar panels on it, for one reason, they're losing their power plants and nobody wants them in their ….. not audible. Italy is buying their electricity from Switzerland, but they can't provide them with enough. They also have a geothermal plant in Naples that they use, but it's getting old. Every condo over there that I saw new, there was a panel on the porches. The emissions from the cars are adding to the deterioration of the ancient buildings and they are trying to cut that down as well. I was amazed at the amount of solar, even in the small towns.
Clyde: The cost of the solar panels has come down to the point where it's competitive against other types of fuel.

Jerry Marsh: On the angle that they show on the picture, is that showing towards the southern area to get the most amount of.....
Clyde: Yes, they come out and check the angle and everything, that's why we ended up where we did, because that was a really good location out of all the different places we checked out.

John Leavitt: I have solar panels on my house, so when I travel the country, I'm looking for solar panels. When you travel through the central mid-west, nobody has solar panels. The argument that he has heard is the electricity is so much cheaper out there, it doesn't pay to have solar panels. But yet you will see thousands upon thousands of windmills which are more expensive. So, it's just an observation, I don't know what it means.
Clyde: It's the location, I would say in NH selling a wind turbine is a lot harder than selling solar in terms of people's acceptance.
John Leavitt: I'm not saying go for wind, it was just an observation.
Neil Nevins: I grew up in Iowa and I go back to visit relatives, and they do have a lot of windmills, I have seen a lot of solar on houses and barns. Iowa was, right up there in terms of power generated from windmills.

At this time George Horrick, from Harmony Energy arrived.

4. Informational Meeting
Clyde informed the audience that an informational meeting is scheduled for Wednesday, March 8 and to please let friends know.

5. Water District

Clyde asked Ray Martin what the experience has been at the Treatment Plant. Ray said it's over producing by a little bit. We estimated 150,000 and the first 6 months, July till the end of December, we were on target to produce 150,000. To Ray's knowledge there has been no mechanical issues. The money that is being saved is paying for the loan. A typical monthly electric bill at the plant before solar ran from $1,600 - $1,900, and it's now about $300 and the loan payment is $1,490, the loan is for 20 years. John Leavitt doesn't feel the Treatment Plant array is a good comparison for the town because of the high amount of electricity the plant uses.

6. Harmony Energy Works

A. Clyde introduced George Horricks from Harmony Energy Works, he is the provider for the proposed system.

B. George said when we look at the amount of electricity the town used for 9 years. He said from last year to this year the town used over 20,000 less kilowatts than last year, but the billing increased by 11%. Why is this important? A solar array gives the town that chance to fix their costs as to what power will cost in the future. Two big things are different from last year, Clyde has started the process to apply for a small amount of cash, $35K, even if only $10K is granted the array will be cash positive from day one. This is really a good deal for the town. Another positive factor is the percentage rate for the loan which is 2%. From last year to this year there is a $10K difference in the cost as well, $10K less.

C. George said the state is trying to do away entirely with renewable energy credits, he encouraged prior to February 17th to write to the Science and Technology Committee because they are so short sighted in the effects this would have, not only in Warner, but every town and every solar and future solar.

D. George said he heard someone say the town's array won't benefit the town the same way as the water district does. He said reality is, absolutely it will, it won't effect every single demand charge, but it will off-set your supply and distribution charges 100%.

E. Darren Blood asked George how long the manufacturer of the arrays have been in business. George said 41 years. Do they have panels from 40 years ago still operating? George said yes. John Leavitt said the question should be how many of the solar panels that were installed 40 years ago are still on-line. George said (chatter not audible) every one of those systems that I put in nine year's ago is still operating today and many of those have on-line monitoring systems as well. John Leavitt said what he brought up is the town should be just considering the 25 year guarantee right now, they shouldn't speculate they will last 40 years. George real history suggests panels created 25 years ago are still operating, panels created 40 years ago are still operating. We won't know for another 9 years if the panels created 50 years are still operating, but the evidence shows today that those panels are still operating.

F. Peter Savlen asked George how much change has he seen in the panels in the last 10-15 years. George said not a lot. George talked briefly about some up and coming technology.

G. John D. asked what the cost is to dispose of panels. George said they are returned to the distributor. John asked if there was toxic waste involved with the panels. George said he wasn't aware of any, your talking about sand, boron, glass and aluminum.

H. Gerry Marsh directed his question to the Selectmen. There's no cost for taxation on the value of this type of thing? He said 20-years ago there was no view tax, now there is. Allan said the town voted to take off the first $35K worth of assessment at no extra tax, it would take another vote to undo that.

I. George encouraged the audience support for the solar array project. Hearing closed at 8:50 pm.

Board of Selectmen
Clyde Carson
Allan N. Brown
John Dabuliewicz

Recorder of the minutes: Mary Whalen