

MINUTES – HULL BUILDING COMMITTEE



September 21, 2010 – 4:30 P.M. TOWN OF HULL MUNICIPAL BUILDING 4550 WOJCIK MEMORIAL DRIVE, STEVENS POINT, WI 54482



1) **Call to order:** The meeting of the Hull Building Committee was called to order on, Tuesday, September 21, 2010 at 4:30 p.m. by Hull Supervisor Co-Chair Dave Pederson at the Hull Municipal Building, 4550 Wojcik Memorial Drive, Stevens Point, WI 54482.

<u>Present:</u> Co-Chair David Pederson, Co-Chair Melvin Bembenek, Marilynn Kranig, Fire Chief Mark Kluck, citizen member - Alan Hucke, Owner Representative-Todd Grunwaldt, Building Committee Secretary Patty Amman.

<u>Absent/excused:</u> citizen member - Lance Reeve, Road Foreman Pete Kaminski, Mark Fritsche, citizen member Ted Stoltz

Audience: Dave Wilz, LaVerne Syens, John Holdridge, Janet Wolle, Brian-Stevens Point Journal

2) Citizens wishing to address the committee on non-agenda items. Agenda items are for discussion and possible action: None.

3) Announcements/comments/reports from committee members and citizens.

Pederson Reports from anyone? There's an annual office show at the Ramada that deals with office furnishings. It might be useful for those of you who will be working with the furnishing space after the building is completed, if we build. Marilynn, I see that you brought up the information that keeps coming back. For 2 years we've looked at the same deal. Our town median income is too high to qualify for grants. We qualify for low interest loans and that is something the Board will consider if we go ahead. I was looking through my notes on the Town of Stockton and they did use the State trust fund to finance part of their building project. It is certainly something we can consider.

4) Approval of minutes of September 7, 2010. *A motion was made by Marilyn Kranig to approve minutes, seconded by Mark Kluck. Motion passed.*

5) Discussion of architect's project cost estimates and decisions on cost estimates to be included in recommendations to the Board.

Pederson I'd like to open a discussion on the project cost estimates that were brought up at the last meeting and tender any decisions on those recommendations to the Board. We've had some time to think about those numbers. Any thoughts or reactions?

Kranig From what little I understand about this, geothermal seems a very expensive option for us. To operate, it's very expensive. Solar, I have my doubts about solar. We had a really overcast summer this year. So I have my doubts about how that would work. That's just my opinion.

Pederson The geothermal probably is not cost effective. Although looking through Stockton's evaluation of their system, they came up with these numbers and they did install a system. Geothermal heating and cooling for their town hall. The estimated installation / operating cost for 20 years was \$93,331 compared to \$117,728 for a conventional system. Their figures produced a savings. The things you brought up, Al, about the mechanics of the system, needing more maintenance than a conventional system which has motors too but probably not compressors.

Grunwaldt Did that include the cost of the system? That was just the operating cost, right?

Pederson It says estimated installation and operation. There was also a solar conventional system for the maintenance shop, fire house, \$432,200 for a conventional system and for the solar system it was \$369,100 so there was roughly a \$70,000 savings there as well.

Kranig Both of those buildings are much smaller than what we're planning.

Pederson I've looked at the square footage. They bought 16,335 s.f. for theirs and their estimate came in at a little over a million, 1.86 and I think they built it for 9. That is approximately 10,000 s.f. less than what we've got on the plans. I took the s.f. of the firehouse, wash bay, plus the municipal meeting room and office and the addition but it doesn't include the cost of the renovation.

Holdridge In one case, it says 40KW solar was \$216,500, then there's an incentive for \$150,000. Does it mean that FOE will split that cost?

Pederson Focus on Energy has an incentive. In addition to that, WPS also matches that incentive. That's where that number comes from.

Grunwaldt This year they did.

Pederson Yes, this year they did. The new year starts January 1st and they anticipate it being similar but there's no guarantee. But we're not ready yet either.

Holdridge Marilynn raises a question about solar and I'm just wondering what is your judgment in terms of effectiveness of solar?

Grunwaldt If you want to get into that now, we can.

Pederson I think we need to. We need specifics.

Grunwaldt My engineer did a cost savings analysis based on Northwind Renewable Energy. At first, the figures he gave, I thought wow, they're giving over \$8,000 savings on electricity a year on a

20KW system. But then he went back and used some more conservative numbers and what he came up with was \$2,839 a year on a 20KW system. That's energy savings for electricity per year.

Hucke	20KW and how much was the system?
Bembenek	\$121,500.
Grunwaldt	Correct, \$121,500.
Hucke	That's with the Focus On Energy money back?
Grunwaldt	No, you offset it by 44 so what is \$121,500 – 77,000?

Pederson The question I would have is do we have the electrical demand in this building to match that system?

Grunwaldt My electrical engineer consultant did an analysis on what the demand would be. He's got a bunch of calculations here and it's based on the number of daylight hours, which reflects Northwind's analysis. For one day output, 1 month output, 1 year output. One year output average generated power would be 87,612 kw hours. They use a 27% maximum system output that takes into account the cloudy days, nighttime. They're also finding now that you do get energy on cloudy days. You still get some energy. I read where it was up to 75% of the maximum available power.

Kranig Isn't there a like a 20 year payback?

Grunwaldt No, these were short, like 12-14 years. We're down to \$44,000 for the system with the incentives. That gives you a 12-14 year payback. That is one of the best scenarios we have available to us.

Pederson If we have a 20KW or a 40KW system, what we don't use gets sold back to the utility company.

Grunwaldt Let me correct you Dave, probably not as you wouldn't get all of that energy.

Pederson That's what I wanted to know, whether our load would meet what it could produce. In essence it then covers our electrical cost. Then after the 12 years, our electrical costs are covered by the system and we're not buying electricity, except at night, but then we put it back in during the daytime.

Holdridge	So that would be the self-sustaining system. That would be your electrical supply.
Pederson	It would but we'd still be hooked to the grid, we'd have to be to cover night time.
Hucke	You're talking about a savings of \$2,000 some per year? \$2,800.
Pederson	Plus your utility bills.

Grunwaldt No, this is what it would save you. I don't know how much your actual bill would be. So this would save you that much per year.

Hucke So if you had a \$4,000 a month bill, and that's \$2,000 a year, you're looking at about a few hundred dollars a month off the bill?

Grunwaldt About \$250 a month.

Pederson But you're saying we'd still have to buy power above and beyond what it could produce?

Grunwaldt Yes, this is just a savings per year.

Hucke It all depends upon what month it is, if it's cloudy out or not. In November when it's always cloudy, you're not going to save anything.

Grunwaldt Per that savings of \$2,800 a year, that savings is going to offset that installation cost in 12-14 years. So it will pay for the installation, that \$44,000 that will cost you up front.

Pederson That's the number he's using to calculate the payback then.

Grunwaldt Yes. So that paid for the installation of the system and then after that, it's just you're saving \$2,800 a year off your regular electrical bill.

Kranig Does that cost include the entire heating/cooling system?

Grunwaldt No. This is only electricity.

Pederson This is the power to operate everything that runs on electrical energy in the building.

Grunwaldt No. I don't know that it's going to be everything because it's 20KW. We can go to 40KW which would come closer. I don't have all that detailed analysis to give you right now on that option.

Bembenek	Almost \$100,000 more for the 40KW.
Pederson cost.	But you're suggesting we could double the savings but we'd also be doubling the
Grunwaldt	But the payback would be the same. The timeline would be the same.
Kranig	What's the lifespan of this stuff?
Grunwaldt	The module of the system has a 30 year output warrantee.

Pederson Then there's some degrading that takes place but they still produce power even after that 30 years, but it may not be as much.

Hucke Just to get back to that, let's say \$3,000 a year you're going to save, if it costing \$44,000, in 10 years, that is \$30,000. I don't know where he comes up with 12 years.

Grunwaldt	Focus on Energy \$41,500 system cost \$38,500.
Pederson	So for a 40KW it would be about \$72,000 or \$76,000.
Hucke	How much a year are we going to save on that?
Grunwaldt	It would be double. So \$6,000.

Kranig Will that system be able to handle all the computer needs?

Hucke It's backed up, you're actually pumping electricity back into the grid. You're basically running the meter backwards, if that's the case. You're still going to have power from the power company that's going to be running things. You'll be hooked up to the grid.

Pederson So when we have high demand, we'll be buying it from the grid, and when we have low demand and have more power than we need, we'll push it back into the grid.

Kranig	That's a little clearer.
Brian/St. Pt. Jrnl.	What is the total project cost estimate?
Pederson	That's what we're trying to arrive at.
Kluck	What's the advantage of having a 20KW versus a 40KW?
Grunwaldt	You'll have twice the number of solar collectors on the roof.
Hucke	How many solar collectors already with the 20KW?
Grunwaldt	I thought I saw it, but I don't see it here right now.
Kranig	Will that demand a stronger roof to put those solar panels on?
Pederson	They don't weight that much.
Kranig	Do you have to worry about wind damage, hail damage?
Hucke strong.	If you have baseball size hail, everything could be damaged, but these are pretty

Pederson	But we have enough roof area to support the system?
Grunwaldt	Yes. If we didn't, they would have told me so, so I'm sure we do.
Hucke	It will be big. A 20KW system is big. There will be a lot of collectors up there.

Bembenek With the geothermal, are we not interested in it? For myself, I don't know if I'd be happy with the geothermal by listening to other people, putting tubes underground, you're excavating, you have to depend upon your water system with a lot of moveable parts. We talked last month that maintenance is a huge issue on that. Then with what you had to say, Al, before, talking about the pumps and moving equipment, is it worth getting involved in this geothermal?

Pederson My thoughts are that if we're looking at geothermal, we're looking at it because we want to be greener. The payback is pretty long and maintenance issues leave some question. The cost analysis with the incentives, there's not a lot of incentive to do it. The only real incentive would be that we really have a strong feeling about going green.

Kranig But cost wise, will the regular tax payer look at it like green, or we're really digging deep into their pocket. That is one of my biggest concerns. We need to do this cost effectively and the best way that we can for our taxpayer.

Pederson	You feel that they would not want to go green?
Kranig	Not if it's going to cost them \$100,000 more. I can't justify that.
Bembenek	It isn't only the price of the system, it's the maintenance.
Pederson	Do we have figures on maintenance cost with experience of existing systems?
Grunwaldt	No, but Focus on Energy would provide that information.
Pederson	If they did an analysis.
Hucke those pumps.	Once again, you can talk all the green you want but it still takes electricity to run
Pederson	What we're doing is eliminating the gas.
Bembenek	You're not burning any petroleum but you are using up more electricity.
Pederson	Which comes from coal.
Bembenek	Like you said, the maintenance, I'm not too happy about that.
Pederson	That would depend upon the dependability of the equipment that you end up with

Pederson That would depend upon the dependability of the equipment that you end up with. Is there a motion regarding the geothermal? Any other thoughts on geothermal?

Kranig What are our options? Geothermal, solar and conventional?

Pederson Let's take a look at each one individually. The geothermal is probably the least attractive financially.

Grunwaldt There's two things. We've got this alternative energy which is the solar hot water, solar electric and the geothermal heating. All would have some type of a payback someday. Then for heating, we've got several options. A normal forced air system similar to what you have now in this office, in the office area it would be gas fired forced air/heating and cooling. Then you've got in the office area that option then you have the same kind of furnace but you could use hot water to do your heating and then your cooling would still be by electric. So your hot water comes from a boiler and that heats your furnaces which provides the heat for the building. Larger areas like the apparatus bay in the fire station, there they would maybe use gas Modine suspended units like out in Pete's area. That's one option that uses gas, there's no cooling out there. They have another option that they could use infrared for heating. They could do it with hot water off a boiler as well and they would put tubes in the floor and heat the floor that way. The infrared heats the floor, or the suspended infrared heaters.

Pederson	The office area does include in-floor heat as well right?
Grunwaldt	It can. That's what we need to determine. What systems do you want?
Pederson	As far as a boiler, it's a glorified hot water heater that just keeps the tubes warm.
Grunwaldt	Keeps the water fluid warm, yes. You may have a number of boilers, more than 1.
Kranig	That comes from electricity or gas?
Grunwaldt	Gas.
Pederson	Yes, a gas hot water heater.

Grunwaldt If you have a hot water hydronic system heating the floor everywhere, that's where geothermal would be the same kind of system that would provide tempered ground water that goes through an exchange and gets heated up to temp. because it's at 50 degrees. Then it's distributed throughout the floor for your floor slab heating or it's in the furnace for forced air heating by water. It's the source of the energy. Gas is heating or geothermal is heating. Geothermal also cools. So we will end up with one of these 1st systems to begin with. If you think you want geothermal down the road, then we would put in boilers with a hot water system and you could always add geothermal to it.

Pederson I think that's what Stockton did with their shop building and fire house. They put the tubes in and left them with the option of heating with wood, waste oil, and so on, but the tubes are there.

Bembenek You sent us the information on the sheets that the heating of gas forced air is the most common, hydronic hot water heating, infrared, solar and hot water and solar electric. The most common type is the natural gas forced air. What would be if we'd go that route.

Grunwaldt Then you'd have a system like you have in here right now. The fire department has an option, they could use the Modine units. They can use the infrared. They can use the hydronic off a boiler system, they don't have to cool, just heat.

Hucke We could use the boiler and run it through the duct work, and we could hook up the air conditioning too with the ductwork.

Grunwaldt	We still need something like a furnace for air c	onditioning.
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Pederson You need a heat exchanger with a compressor.

Bembenek That would be one good way of going, right? With natural gas forced air.

Grunwaldt Yes, or as Al just mentioned, to use a boiler. Natural gas forced air is probably going to be your cheapest. Then you get into the heating of the slab with a boiler. You have an air exchanger and air compressor for the air conditioning. So you have a ducted system and a floor system so it's a little bit more money. Does your human comfort go up, oh yes, it goes up. You have more control over the heat.

Pederson I think that's part of the issue. Right now we've got forced air. We have warm air and cold floors in this area. So unless we do something with the floors, we're still going to have warm air and cold floors.

Grunwaldt We would be putting 2 inches of insulation below the floors anyway, which is going to help keep the floor warmer. I think this one might be slab on grade, I'm not sure. We would have foundations 4' down and have more insulation to help minimize that. But still your better systems are going to be having the hydronic floor and your air.

Bembenek But you could do that with the natural gas.

Grunwaldt Its still natural gas and you're still heating your boiler or air exchanger.

Bembenek What do you think?

Hucke Yes, especially on a bigger building like this, with a boiler, you can always heat the water with the boiler too right?

GrunwaldtYes.PedersonYou can use it for your showers, bathrooms.

Bembenek In reading up on all of these, that would be my favorite. On reading up on the geothermal, I've known people that had them in their houses and they didn't like them. It says that it imposes a fairly large electrical load with the compressors, pumps, etc.

Pederson	Do we know what that load is?
Grunwaldt	The electrical load, no.
Hucke	Would the fire station put the foam and tubing in too, in case we ever hook it up?
Grunwaldt	That's up to you.
Pederson you use them now	My feeling is that's a given. When you pour the slab, you put the tubes in whether or later, they are there.

Kluck Because you aren't going to put them in later.

Pederson You can't. I think at this point there is not enough payback or incentive with the geothermal to support it. I don't know how anyone else feels, but I'll entertain a motion whether to include geothermal or not.

Bembenek I agree, I'm not in favor or geothermal. I make that as a motion, to not include geothermal.

Hucke I'll second that.

Pederson Mel makes a motion that we not include geothermal in our planning, seconded by Al. All those in favor signify by saying aye.

Motion passed with no negative votes.

6) Discussion and decisions on project's heating, air exchange and electrical systems and their costs to be included in recommendations to the Board.

Wolle You've been talking about the heating. In talking about using a system like we have here, my questions is about air conditioning. Todd and I have talked about the humidity we have had this year in here which has been terrible and our papers are affected by that.

Hucke	You're going to have a whole new building.
Kluck	You're current system probably can't keep up right now.
Wolle	That's why I want to make sure. Marilynn can attest to that as well.

Grunwaldt I'd like to say I can guarantee it, but I can't. But you will be fine. Sometimes what you need to do, when it's that humid, turn the A/C thermostat down so it will run and get that water and moisture out of the air. I just moved into a new building and it was the same thing. We set it down to 68 or 67 degrees and the water was just pouring out of the condensing unit. If you get that out of the air, then you're comfortable and you can raise the temperature back up, but you've got to get that moisture out of the air. I think your system is not set up right.

Wolle We've talked about that too. But you can have that scenario over a weekend and we have the system turned up so we didn't have it running over the weekend. We come in on Monday and....

Grunwaldt Then something is wrong because if it's dry, 40% or 30% humidity in the building, when you come in on Monday, it should be about the same unless you have all the doors or windows open for some reason.

Hucke When we're talking about the in floor heating, I know we talked about that before, but you can't come here one day and have it 70 degrees and come back at night and turn it down to 60 degrees and come back in the morning and turn it back up. It doesn't work like that. It's got to be set and leave it there because it takes almost all day long to get going again.

Grunwaldt Good point. Let's expand upon that for a moment. The system we're describing now is your sole source of heat from the floor. The air exchanger will blow air but it will just mix the air. My last office was like that and I don't really care for that much. The step above that which might be better would be to have a furnace. You would have separate thermostats. You'd have one for the floor. The floor would be set at 60-65 degrees. Then during occupied times, you'd have it programmed so the furnace kicks in Monday morning at 6 a.m. and someone is going to be here at 7 p.m. It will bring the temp. up from 65 degrees and with the furnace up to 70 or 72 degrees. Then it will keep it at that temperature all day until whenever you have it programmed, like 4 p.m. or 5 p.m. when the furnace will shut down and the floor will maintain at 65 degrees throughout the night. You leave that set throughout the winter at 65 degrees and your feet will always be warm.

Pederson There is a cost savings because the furnace will only have to bring the temp. up from 65 to whatever is comfortable and it doesn't have to bring it all the way back up.

Grunwaldt That furnace is going to circulate during all the occupied hours that it's programmed for. Then if you have an evening meeting, you have an override, some are set for 3 hours. It will be simpler than this one. This one is a monster. You will be able to override it and set it for occupied times which will bring it up to maintain at 72 degrees during the 2 or 3 hours you need.

Holdridge So the clarification of what you are talking about is hydronic in the floor, no hydronic registers at all.

Grunwaldt No.

Holdridge I have in my house hydronic in floor in the lower unit, it's a split level and I've got registers where water just circulates and its great even heat but the one planned in here would strictly be in the floor.

Grunwaldt Yes, pretty much the perimeter. The tubes would go 8-10' around the perimeter but still in the floor.

Pederson	That part would probably have 4" instead of 2" of insulation?
Grunwaldt	No, just 2".
Pederson	The outside and foundation would be insulated?

Grunwaldt Yes.

Hucke Another thing about that in floor is each zone with 3-4 offices that you can set it. The break room where you don't need it, you can keep that at a different temperature and the meeting area too.

Holdridge Mine is on 4 zones.

Pederson I think you had talked about having different units for different parts of the building?

Grunwaldt Yes, it would be broken out with the zones. You have your hydronic system which would be in zones, then you have your heating system which would be in zones also. Hydronic would be broken up into smaller zones, heating would be larger zones, forced air. That would be a good way to go.

Hucke I think we'd be saving money. The open areas where it's not needed as much, it would be on its own system.

Grunwaldt You could not heat the floor in there. If we decide to go this route, when we get to the designing of it, we can go over that in more detail. Look at plans and decide where in the floor we want it to go. Like in the fire department offices, not knowing how much or when it may be occupied, does it pay to keep the floor heated all the time, I don't know. It might just be a forced air system in there with gas. Your training room would be on one, all the rest of the office area would be on another.

Kluck	Anything from the office to the wash bay wouldn't need it.
Grunwaldt	That would be on the in-floor heat and you would set it at 55 or 60 degrees.
Pederson	That would maintain enough heat in the area so that it wouldn't freeze up.
Kluck	Would the bay also have the in-floor?
Grunwaldt	The apparatus bay? Oh yes.

Kluck Then do you need to back it up with something else?

Grunwaldt Out there, probably not.

Kluck My question is, if you have 8 doors that will be up all at the same time and it's 20 below zero outside, what's the recovery going to be?

Pederson The doors would open and the air would escape. Once the doors are shut, you haven't taken all the heat out of the slab, it's still there. You won't have a blast in your face like the Modine. By the next day, you'd be back to the same temperature and the trucks would be warmed up.

Hucke If the doors go up, that thing is going to kick in.

Grunwaldt We can talk to our engineers and maybe it would pay to stick a couple of Modines in there. Maybe.

Pederson The calculations would come on the recovery of heat and what kind of temperature you would need to maintain.

Kluck The apparatus bay doesn't need to be over 60 degrees in the winter. There's just not enough need for anything above 60 degrees in there.

Pederson You just need to keep everything from freezing.

Kluck That was my only concern, the recovery point. The Modine you'd be talking about would be just to assist the system coming back up.

Pederson If it was needed. I would lean on the engineers to calculate all that.

Grunwaldt If it was 60 degrees on the floor and you open all the doors and it's 20 below outside.... (*tape turn*) then your floor system is going to recover. It's an economical system.

Bembenek So you think we're on the right road with this?

Pederson If we combine this system with a photovoltaic system that covers some of the electrical cost of operating it, we might have something.

Grunwaldt I think you would be real pleased with that system.

Pederson I would entertain a motion to include in floor heat in our plan along with the forced air where it's needed. On the forced air, you'd have the chillers in that system so that it would condition as well?

Grunwaldt Yes.

Kluck I'll make that motion. (to include in floor heat in our plan along with the forced air where it's needed.)

Hucke Second.

Motion passed without any negative votes.

Pederson Now we'll be looking at the photovoltaic systems and whether we want to include that in our plan. Personally I'm always looking for ways to have a payback. In some of our road equipment, we find out that renting it for 2 years will cover the cost of buying the piece of equipment that we would have for 20 years or more. That is sort of a no-brainer. This one, the payback is 12 years, but after those 12 years then it will be covering our cost of electricity including the savings that would be added in.

Grunwaldt You are looking at a 50 year building here easily.

Pederson We need to plan for that because this building has served for awhile.

Grunwaldt With maintenance and everything, it should last longer than that. Some of your system parts, furnaces may need to be changed out, motors. Boilers have a lifespan.

Pederson Then too, technology will be improving in efficiency in many of those things. I think that is why we need to include the tubing in the floor at this point whether we use it or not. I would entertain a motion for the photovoltaic systems.

Hucke I think it's a good idea to do the 20KW system to get some sort of green on the building. Just to go over this again, \$121,500 that's for the whole system without any breaks correct?

Grunwaldt	Correct.
Hucke	Then \$77,000 comes back from Focus?
Grunwaldt	And WPS, yes.
Hucke	That's \$44,500.
Grunwaldt	Well no, it's less than that.
Hucke payback.	Even if you figure that it's \$3,000 a year that you are going to save, it's still a 15 year

Pederson But if electrical rates go up, I don't think they'll go down.

Grunwaldt They're just saying system cost after all incentives is \$38,500, they're saying from Northwind. I'm not sure where I got the \$77,000 from. \$121,440 was the installed cost, maybe they did their math wrong here.

Hucke That's over 50% back.

Pederson I think what I found on the Focus on Energy site was 35% tops. I don't know if that includes WPS as well.

Hucke	I don't know what WPS gives back.
Pederson	My understanding was that there was some kind of a match.
Hucke	I never heard that.

Grunwaldt I'm coming up with \$83,000 in incentives.

Hucke The way it used to work was Wisconsin Public Service....a 20KW system is the highest system you could go with. If your cost is 12 cents a kilowatt hour, that's what they would pay you back. Anything over that, they'll pay you like 6 or 7 or 3 cents, whatever they want to pay you.

Pederson Yes, there is a contract involved. If we decide to go with the system, that's where Focus on Energy does the analysis, is that correct?

Grunwaldt On the electrical, they come up with a number. I want to clarify that because when I met with Focus on Energy they said that it's a maximum 35% of the system and WPS matches so that would be 70%.

Hucke	They match it?
Grunwaldt	Yes, Focus has a 35% maximum then WPS would match whatever Focus does.
Pederson	This year they did that.
Hucke	Is that just solar, or is that wind too?
Grunwaldt	I don't know, we didn't discuss wind.
Pederson	Your comments regarding wind indicated that it just wasn't feasible.
Grunwaldt in either case, I th	Now they may not do 35%, they may do something less than that, I don't know. But ink it would be a good deal.
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Hucke Right, if we got 35% and hopefully if WPS would match it.

Grunwaldt I'm saying next year they may not do 35%, maybe they'll do 25% or 28%, but WPS will match it. If that happens, we could decide to scratch it. But either way, it's a good deal. And a 12 year payback.

Kranig	Who pays the costs for the analysis?
Grunwaldt	For the electrical, they would just do it, I believe.
Hucke	Northwind would do it, they already did it. Did they charge you for that?
Grunwaldt	No.
Pederson	Because they want to bid on it too.
Hucke paperwork, that's	A solar site assessment, that's what they would do and he already has all the done already. I'm sure they probably handed that in to Focus already.
Grunwaldt	I don't know that they did that.
Pederson	I think until we have a definite commitment, they don't look at it.
Holdridge	Do they lock that in once you are ready, will they made a firm commitment?
Grunwaldt	I'm pretty sure they do, yes.
Hucke for you.	Focus and WPS, once you make the commitment, they will put the money on the side
Pederson	Do we want to discuss the advantages and disadvantages of 40KW versus 20KW?
Hucke	I'd like to see how many solar panels it's going to take.
Pederson	Should we leave that option to the Board when we find out how many?
Hucke	On that 20, it's got to be huge.
Grunwaldt	Maybe it was given to me verbally, I don't see it here right now. I don't recall,

Grunwaldt Maybe it was given to me verbally, I don't see it here right now. I don't recall, because there's different configurations and calculations on how big these should be. It wouldn't take much for me to find out and e-mail you back. But if you want to make a decision tonight and say yes, you want 20 and then say, if feasible to work in a 40KW. We're talking \$38,000 versus \$76,000. So we'd be talking an additional \$38,000. With the total overall amount of money you're working with, that's not a whole lot.

BembenekBut do we need it? Like Al says, how many do you have on there?PedersonYou said the engineer said that it would come close to equaling our load.GrunwaldtNo. The 20K?PedersonThe 40K.

Grunwaldt I don't know that, they were just looking at the 20KW. He looked at it in terms of energy savings. It's not covering everything, it's just a savings. I don't know what the dollar amount was of what the estimated total energy cost was for electricity. I don't think I have that but I could find out.

Kluck The price on this 40KW is \$216,500, then the figure below that is the payback and incentive like it was this year. It's about \$66,000. If it's 44,500 or 66,000 that's a good deal for doubling your system, right?

Grunwaldt Yes.

Hucke I think we need to find out how big that system would be and how many panels would be up there on the roof.

Grunwaldt That's 35, the maximum the incentive would be is 35% and that's what they used was the maximum, it may be a little less than that.

Kranig Is there any way you can find out what WPS is going to give us for next year?

Grunwaldt They were thinking about 25-28%.

Kranig When do they make that decision?

Grunwaldt They don't have the money now, so that would be January 1st and you would need to make a commitment to them to go ahead with the project and I would just have to see.

Pederson The money comes from part of your electrical bill that is put into a fund and this is a way to tap that.

Grunwaldt That is how Focus on Energy if funded, as part of your energy bill.

Pederson WPS has incentives from the State to use more green power so that's why they are kicking in.

Kluck So if you can give them a system figure that you want in January versus June, is there a chance they could run out of incentive money?

Hucke Oh yes.

Kluck It's a first come, first serve, okay.

Kranig I would hope by January we would know exactly where we are going. Maybe sending out bids.

Holdridge With all those panels on your roof, will that extend your roof life for 50 years?

It would be nice if it did.
That's a good idea. I don't know how that works.
If you redo the roof, that stuff would come down.
With a 10, 20, 30 year rubber roof.
We were talking about steel weren't we?
That's right, metal. It's not flat, it slopes to the back.

Pederson Someone had questioned me on the degree of slope, if it was enough to keep the snow off or moving and that would part of your design, figuring that out.

Grunwaldt Right, we do it per manufacturer recommendations. They slope anywhere from ¹/₄ inch per foot to in a metal, 1 in 12 pitch. It all slopes from front to back.

Pederson Perhaps we could put it in the form of a motion that we would like to include a photovoltaic system and sizing it depending upon the space available and incentives. We could try for 40KW and if it doesn't work out, we could scale it back.

Grunwaldt Let's say you put in a 20KW and decide that this is just a great system and we actually getting back more, electricity has gone up more or doubled or something and say put in another 20KW system?

Hucke I think if you have the incentives now and electricity is going to go up, it always goes up, if you ask me.

Pederson The question would be, would the incentives be there in 5 years?

Hucke We're looking at \$70,000, if it's going to double it, you're talking \$6,000 and the payback time would be the same. Then you're money ahead after it's all done.

Grunwaldt Let me say one more thing first. There's also solar how water. It's a similar system but its heating hot water that is stored underground that would be used for the wash bay. That analysis by Northwind was that there are no good incentives for it and it's not cost effective at all for that system. My heating engineer also analyzed that too and in his analysis his final assumption was that they would not recommend putting solar hot water in because it's just not effective for you, doesn't apply to you. If you've ruled out geothermal, let's rule out solar hot water. If you're going to put all your eggs in one basket, this is the one to do it in. This is all you've got left. It would be nice if you could put enough up there to show that it's going to pay for the building.

Pederson I would entertain a motion to include a photovoltaic system up to 40KW.

Bembenek	As we get into it more, we could see if we want to drop it down to 20 then right?
Pederson modify it.	I think by that time it would be in the Board's hands but we have every right to
Bembenek	So moved (motion to include a photovoltaic system up to 40KW).
Kranig	I second that.

Motion passed without any negative votes.

Pederson Considering the analysis the engineers did on the solar hot water, I would entertain a motion to not include that.

Kranig	I'll make a	motion to	o not inclu	ide the so	lar hot water.
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Hucke I'll second that.

Motion passed without any negative votes.

Pederson We need to look at what all this is adding up to. I think the figure at the last meeting came in at \$2.9 million.

Kranig Is the cost of wiring for the computers included in this?

Grunwaldt Yes.

Kranig And the wiring for a new phone system?

Grunwaldt It would not be the wiring, I'm sorry, there would be conduits and outlets in the wall. The wiring done on a commercial project is done by the owner per your vendor, would do all of your internet stuff and phone system but the conduits and boxes would be in the wall.

Hucke	That's not a major piece of the puzzle, the wiring of the computers, at all.
Kranig	Is there a possibility that this whole building would be connected on one system?
Pederson that way.	There again, we would go to the vendor that we are using and they would set it up
Grunwaldt	The phone system for sure. You don't have that big of a system here.
Kranig for the garage.	Is the paving for the parking lot included in this? And how about an exhaust system
a 11	

Grunwaldt They didn't want any.

Kranig They need better or heavier duty fans or something.

Pederson Maybe it's more a matter of flipping that switch on manually when they are going to move a vehicle. That's part of it. Right now if you don't flip it manually, then it has to build up but if you flip it, then you're pulling it out right away.

Grunwaldt We could take a look at it to see if there would be a way to control it. A timer on it or something.

Kranig I think we definitely need to do that. Sometimes when you go back there, it's blue.

Grunwaldt A timer might not be a bad idea if you can do that. Then you can just put it on and it'll shut off by itself. That might be a very simple thing to do.

Kranig Could you mark that down someplace so that it gets taken care of?

Grunwaldt Keep your notes Marilynn. I'm not sure if I'll remember that one but I'll try.

Kranig Where is our compost area going to go? Right now it's there and the building is going to go there.

Pederson That will be part of the site plan. Anything else?

Grunwaldt It will just have to be moved, I don't know where at this point. When we get into more of the design, they'll be resurveying over there to get a better, more accurate plan when we're working on the site plan with Glodowski. At that point we'll have to take into consideration everything including where the well is going to go, what's going to happen out here.

Pederson	That's included in this estimate, the well, the septic.
Kluck	Do we want to talk about a backup generator system?
Grunwaldt used systems.	We talked about it, do we want to make a line item? Dave had talked about some
Pederson	I found used systems that have 500 hours on them.
Hucke	We could always include it as an alternate too.
Pederson	Finding out from the engineer how big of a generator we would need.
Grunwaldt for everything?	You'll need to tell me if you want me to pursue that. Is that for the fire department or We talked about it once for everything with the outlets for it being red for the backup.

Kluck That's like they have at the hospital.

Pederson Bancroft had an outside generator and if the power went down, within so many seconds the other one was up powering the selected items they needed. It was an automated system.

Grunwaldt Something like that you could list as an alternate too. We can make lots of alternates. We could do an alternate heating system. At the time we go out to bid it, we just need to know that so we can list it that way when we get firm numbers. It's hard right now estimating those numbers. I'm talking to contractors but they're not being real helpful. Now steel is going up, thanks to China.

Pederson So you're basing your estimates on standard square footage costs?

Grunwaldt Standard is hard to determine because we have wage rates.

Pederson But wouldn't a contractor figure that in to his square footage? When he bid on something, he has to build in his labor costs.

Grunwaldt They would go through and get hard numbers from the electrical, plumbing, heating, excavator, mason, they would get those hard costs when they put together a bid. I've asked to get a hard estimate down but then they have to put out other people to do that knowing that it's not a real project yet. How do you compensate them for it? I was looking at compensating them for it but nobody was really interested in it. I'm using the maximum of \$75 per s.f. which is cheap. You go to any books or literature and they say you can't build a municipal center for under \$130 a s.f. but we're pre-engineered metal, we're not masonry. We're bare bones as much as we can be.

Kluck I'd like to have a generator looked at as an alternate. Four years ago we tried to get a FEMA grant for a natural gas operated 64 KW and it was about \$55,000. That one would have run every outlet in the fire dept. and every light. There was a huge draw of electricity in the old fire dept. building. I wouldn't think you'd need that much for the new building. All we would need is for a couple of lights and the doors.

Pederson The one that I saw was a natural gas generator for 45 or 50KW for about \$3,800. We could park it outside, put a little shed over it and we'd be set.

Grunwaldt	I saw that and saw the picture of it.
Kluck that way.	It's like the furniture too, if we knew what we'd be needing, we could save getting
Pederson	The university has a resale that's open Friday afternoons.
Kluck	I've been down there, but I don't want to buy anything yet.
Pederson	Anything else we need to include?
Grunwaldt	Did you decide on an emergency generator?

Pederson	If we include that as an add-on or alternate?
Grunwaldt	Do you want that shown on this cost estimate?
Pederson	What's the will of the committee?
Kranig	\$55,000 compared to \$3,800 is quite a chuck of change.
Kluck	You'd be talking installation.

Pederson You're electrical contractor would have to do that. Something needs to be in the plan because if they're bidding for the electrical work, they'd have to know if they are bidding to include that.

Grunwaldt Right, we'd have to identify each piece of equipment and each outlet that would be hooked up to that system so that it's wired that way. I'm not sure what you're going to do when you get to the bottom line here, if you approve \$2.97 million and now you add on \$50,000 or whatever, can you just do that, after it's been passed or approved?

Wilz I would think that you would all agree that we need a way to get the building open in a power outage. Either a crank or an emergency generator, not just for fire trucks but for snow plows. I would put that in that document and identify the cost however you think you should. In a new building, I think you need to have that to get the machinery out.

Pederson It can be as small as a 5KW. That would open doors.

Wilz For the ambulance, fire truck and snowplow, if an ice storm shuts everything down, you need to get out, I think that would be a requirement to have some power.

Bembenek I believe you're right.

Kranig We need a generator to open doors so that instead of getting the Cadillac version of it, we get what we need.

Pederson The engineer would come up with the essential circuits that would need to operate.

Grunwaldt You can always break it out later as an alternate when we bid it and you'll see how much that wiring going to cost you and the generator.

Hucke And what they do. You don't need every outlet in the room to be a red outlet. Lighting, a couple of doors back there.

Grunwaldt You know you have emergency lights as part of the building code. You don't have it here. The exits will be battery backup and you'll have a wall pack that has 2 flood lights that when the power goes off, they come on.

Kluck Right, but those are only 2 hour, they don't last that long. We've had them down at the fire station and they last maybe 2 hours and it's not enough to do anything, you'd still be sitting here in the dark. You need something that will turn on every 3rd light in the ceiling or however you figure it. Then you need to figure if the staff wants to work on their computers. If you're down for 3 or 4 days, that might be an issue.

General discussion of what types of things emergency power should cover. The computers do not currently have a battery backup. Bancroft has an emergency generator system that they use.

Grunwaldt We are approaching 40,000 s.f. for the whole building. I'll ask my engineer about that and see what kind of system could be used and what could be run on it.

Pederson If he can come up with some viable options so that when we take it to the Board, they have some choices as to what to include in the final number they put together and what it would cover and what loads it would meet.

Some general discussion about how the phone systems go down without power and does everybody just go home with a power outage because phones and computers would be down. Cell phones would be relied on by the fire station.

Kluck We've had situations where the doors went up and then the power went out and then we couldn't get the doors down and there was a great loss of heat.

Pederson Is there a motion to include something to address the electrical problems and assess the electrical backup needs in the event of a power failure in terms of a backup generator?

Kluck **I'll move to make the motion** (to address the electrical problems and assess the electrical backup needs in the event of a power failure in terms of a backup generator).

Bembenek Second.

Pederson Mel seconds the motion to include some backup generator system to cover essential electrical needs in the event of a power failure.

Motion passed without any negative votes.

Kluck Todd, when you were talking about the phone system, I have no idea what system you are looking at, I would like to recommend an intercom type system.

Grunwaldt I won't be looking at that system. That will be you guys looking into the phone system. Any phone system today will have an intercom.

Wolle We have it now. (she was too far away to pick up the rest of her comments)

Kluck The system we have now is to open the door and yell and you guys never hear us.

Wolle	Because we don't have the windows open. We can't open them.
Kluck	The furniture is on a separate thing?
Pederson	Yes, those are the responsibility of each department.
Grunwaldt	Everything that is fixed will be in the building.
Kluck	What would you call the washing machine, fixed?
Grunwaldt	No.
Kluck	Then I know where to go with it.

Grunwaldt We'll provide the power requirements for it and the plumbing. You'll get a finished office space (but furniture is not included).

Hucke You said you were having a hard time getting someone to give you hard numbers on stuff. Like what?

Grunwaldt Like steel. I was hoping to pay someone just to put a more accurate number together but I still as of yet have to find someone to do that, who would be interested, for the whole building.

Hucke I think I know of someone. He's contacted me about that already.

Pederson So then we would know if bids are coming in reasonably?

Grunwaldt I'm trying to substantiate what I've got here. I want another opinion. I started using Jackson's numbers because he did a net cost for the building back in the beginning. So I used his numbers then used a multiplier for state wage rates that he hadn't figured and then he hadn't figured on a lot of other things so I bumped it up again. These pre-engineered buildings are less expensive but still, if we were doing a masonry building, I'd have no questions about using the \$130 s.f. but we're using a pre-engineered metal building that they say you can do \$25 or \$35 to build the shell, insulated concrete slab.

Pederson Is that insulated to our specifications?

Grunwaldt Yes.

7) Determine the next step and task assignments in the process the committee will follow to arrive at recommendations for the Board.

Kluck What's our next move?

Kranig Is there any possibility that we could have that information available for the November election? Janet and I have talked about this and we would put that in the entranceway where people come to register so that we figure a lot more people will get exposed to this and they will start to think about this rather than have.....well we will have an open house here for informational meetings, but there will be a lot of people that won't come to them. This way, there's a lot more people seeing what's going on. There are a lot of people that don't have a clue that we are doing this.

Pederson My thoughts are that we are making recommendations to the Board and the Board has to make decisions on to go with it.

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Pederson Sure.

Kranig Because I think this calls for a special meeting if we can get all our numbers ready.

Bembenek We wouldn't bring this up to the whole Board with 10 things on the agenda. I'd go along with a meeting just for this.

Pederson Because they would have a lot of questions on what we've included.

Kluck It's nice to see some of them here.

Bembenek When we have this on the Board meeting, there will be other people coming because it will be known this is in the meeting.

Kranig Is there any possibility this could be done before this November election? Or is it cutting it too short?

Wolle You need to make your recommendations to the Board.

Bembenek Right, that's what we're saying.

Pederson So we need to come up with a total and what we've included in that recommendation.

Wilz If you're running out of time, maybe what you can do is put it on the agenda of the next Board meeting to at least speak to what she's suggesting. To put a display area at the election to give an idea of what we're working on and investigation but that no decision has been made, to create an awareness. Certainly the Board could decide if that might be able to be done. If we can't find out the other things we need to make decisions on.

Grunwaldt In voting over at the fire department, could you have a pile of information sheets to give them to ask if they would look at them and consider what we're thinking of for a new municipal center and fire station?

Wolle It can't be with the ballots but it could be information available to take. We did have someone come over here at the last election who wanted information on that and they looked at the boards that we had available.

Grunwaldt	Could you have the display here and bring people over here?
Wolle	No, we would have it down there if it would be ready.
Grunwaldt interest.	Even if they saw a few boards like this and saw the cost, it would certainly peak their
Kluck	Todd, how far away are we from the final cost?

Grunwaldt We're pretty close.

Wilz The final cost will be known when the individual disciplines are paid out, correct? I'm sensing from you, Todd that you're not comfortable with that number of \$2.9 and you're trying to validate your number, correct?

Grunwaldt Yes, you're reading me correctly.

Wilz So how close are we away from the number? Maybe a long way away, Mark.

Kluck But you have to put some kind of an estimate out there for the Town.

Wilz Right but along with that, he's trying to find a guy to pay who will take what we know and give us a mock-up of the cost.

Bembenek But the point is if Todd can't get something he's comfortable with by the November elections, then....

Wilz You can use the number he's got.

Kranig We don't need to tell people what the estimate is, just that this is what we've been working on for $2\frac{1}{2}$ years. When I tell people we've been working on this for $2\frac{1}{2}$ years, they say, "Really, how come it's taking you so long?" and I tell them the wheels of government turn slowly.

Wilz If we can get this to the Board before the November elections, the only number we have right now is the \$2.9 and I'm just sensing Todd is not comfortable with that. He might be accurate, but we don't know.

Grunwaldt Yes, and I'm afraid....I don't want to be too low. I'm sensing it might be higher. That's my concern.

Kranig I know one of the questions that will come up is how much will this cost. That's the first question.

Grunwaldt John kind of tabled that a couple of meetings ago. That was going to be the Board's decision on how to address that.

Pederson We need to run the numbers and the affect on the mill rate.

Wilz But it comes off the number. You can build formulas but you still need the number to plug in.

Bembenek My question is would we be prepared for the November election?

Wilz Which is why I brought up the idea to just making an awareness down there and that we're working on this.

Kranig That is what I'm trying to do. To just make people aware of this and that we are considering something, nothing is written in stone.

Pederson Probably a sign saying we will be having public meetings to discuss the project and they will be scheduled soon.

Bembenek Maybe have something like that and those things right here and say we will be having public meetings and they can look at them while they're waiting to vote. But other than that, I wouldn't go for anything else because there's not enough time before November 2^{nd} .

Kranig We had 1,108 voters last time. I can guarantee you we're not going to get 1,108 voters at any meeting to look at this stuff. We'll get people that are really for it or really against it.

Pederson Our limit is 54.

Grunwaldt We could also give the price a range too. There's someone out of Waupaca that used to do this that I was going to contact if I can find his card. It might be the same person Al is thinking of.

Kranig If you decide to do this, take off the hose tower from the plans as several people have already asked about that.

Wolle Just something to catch their eye.

Bembenek So if we have something for this November election, then is it really necessary for us to go to the Board in October?

Pederson I think we need to. I agree with Dave that we need to pass it off to the Board to make the decision to publicize it.

Wilz The idea to have something there in the public area when you have 1,200 voters is pretty important stuff.

Bembenek I agree. But I'm talking about discussing it with the Board before November.

Wilz If we can't make a decision because Todd doesn't feel comfortable with the number yet, we could at least throw out whatever to create an awareness. I think their idea is a good idea.

Bembenek I agree.

8) Set next meeting date.

Pederson So we'll try to schedule a special meeting with the Board just to discuss this project so we can move it forward.

Wilz If you can't, at least get permission to put something up for public display to create an awareness.

Bembenek So when do you want to have this with the whole Board? You said we'd need a special meeting on that.

General discussion on when to have that special meeting with the Board and the full Building Committee in attendance. Tentatively it is scheduled for Tuesday,October 19th at 4:30 p.m. as part of the special Board meeting only on this topic.

Pederson in 2005.	Stockton came in at \$50 a s.f. for their fire department and their town hall at \$70 a s.f.
Grunwaldt	That's relatively consistent with my numbers.
Amman	So does that end up being a Board meeting or a Committee meeting or both?
Bembenek	This will be a Board meeting with nothing else on the agenda.
Pederson	It will be a Board meeting with the Building Committee reporting.
Wilz	Because it's a Board meeting, we could take action.

Pederson I think it would be important to share the building deficiencies with the public as our motivation for doing this. But again, we can leave that up to the Board to decide.

Some general discussion on options on how to make the information available in sheets, packets, etc. and options for the Board to consider.

Pederson Our next meeting will be with the Board and the agenda will be presenting our recommendations. I'll sift through our minutes for motions made and what was included.

The Committee members thanked the Board members that were in attendance in the audience for coming to listen and keep informed about what was going on, which they noted as very helpful.

9) Adjourn. A motion was made by Marilyn Kranig to adjourn the meeting, seconded by Alan Hucke Motion passed. Meeting closed at 6:20 p.m.

Respectfully submitted,

Patty Amman, Building Committee Secretary Town of Hull, Portage County