### Isle au Haut Power Company Annual Meeting August 26, 2017 Meeting Minutes

We have 16 members present — a quorum.

### Agenda:

**Business Meeting** 

**Review of the Financial Statements** 

Status of Solar Project

### Notes:

2016 Meeting Minutes read by Bill Stevens. Approved unanimously.

In attendance: Jim Wilson, Bill Stevens, Arlena Tully, Dana Perry

Members (to be completed)

#### Financial Statements/Treasurers Report:

Some minor changes from the prior year. Sales were down \$13.3k from the prior year. Explanations discussed were that people are being more energy conscious, not a major population change. There have been less workers this year. Also according to the PUC POCO can no longer sell fuel costs. Fewer people on the island over the winter.

Jim Wilson noted that the company is in good shape with no debt.

Question: How much is set aside for the solar project? We currently have \$117k in CD's set aside. The PUC gave us permission to use cable fund for the solar project.

#### **General Manager's Report**

Bill Stevens reported that there were no major issues. Approximately 10 hour of back up generation used. EMERA Maine has improved their own line maintenance so there have been less outages. There have been some blown fuses and some damaged poles. There is a need to build a decent garage to house the equipment. We are finalizing the move from the old office in the next month or two.

## **Election of Board**

Abigail Hiltz nominated in addition to the existing slate of directors:

Sam Chamberlain, Lee Davis, Dana Perry, Dane Stevens, Jim Wilson

There was unanimous approval of the board.

#### **Solar Project Discussion:**

Jim Wilson reviewed the FAQ issued with the financial statements which are attached hereto as part of the minutes and noted the following:

#### Alternative energy sources:

- 1) New single phase cable cost \$1.4 million to \$1.6 million plus annual purchases of power.
- 2) Wind not feasible, need to be connected to mainland to be workable
- 3) Diesel annual costs would triple due to cost of fuel
- 4) Micro turbines \$275k each plus diesel so not economical. Approximately 2x our current costs

- 5) Tidal power and fuel cells not practical
- 6) Solar array \$1-\$1.4 million pre tax credits

Solar is the lower cost

Question: What is the difference in the ROI between the solar array and a new cable? Jim estimated that with the new solar array our costs would be about the same (\_\_\_\_?) vs 82 cents/kwh for a new cable. (JW/DP to discuss calculating the ROI)

The location will be hidden from view.

The project will be divided into two phases (see FAQ).

# Question: Where are we in the inverter process?

This has been our most difficult problem, Jim Wilson explained. It is a business problem not a technical issue. The market for phase 3 equipment is expanding rapidly. We have phase 1 equipment starting in Stonington. The cost for phase 1 equipment is 1/3 of phase three. Phase 3 is for large industrial applications. Most manufacturers are chasing phase 3 market.

We have convinced 2 companies to look at single phase: Dynapower in Vermont (ETA TBD) and EPC Power (who provide military applications) who will provide a solution by February.

Steven Strong is a consultant to the industry that is putting together 6 different communities like ours that are in the same situation.

**Question**: Are there other components that aren't off the shelf. According to Jim Wilson, not that we are aware of.

#### Costs

We have modeled our costs and compared them with other industry models and they are all within 2-4% of each other. We have a good idea of the costs. Biggest uncertainty is final pricing, which is going down. For example solar panels were originally \$1.5/w then went to \$.60/w and are now being quoted at \$.45/w.

pre any tax credits.

**Question:** What happens if phase 2 isn't needed until after the tax credits expire? It depends on the cable, but prices are continuing to drop so any loss in tax credit may be partially offset by a drop in pricing.

**Usage** Jim discussed that peak loads now are Fridays in the summer.

## **Heat Pumps**

Jim explained that Heat Pumps are good way for the Power Company and the Island to keep fossil fuel costs down by helping store energy when the batteries are full. When the batteries are full certain of won't be drawing power from the cable. There was a discussion of the benefits. Peggi Stevens from the Town said they were on board with it.

## Question: Should we pursue heat pumps now?

Yes – it will reduce the reliance on fossil fuels now.

Question: Why not convert the island to Phase 3 now so we will be compatible with the most common solar equipment when the market is growing rapidly for it?

Per Jim Wilson, we have had several estimates to convert to Phase 3 which range from \$720k to \$1 million in costs. This would almost double the cost of the solar conversion and cancel any economic benefit of moving to solar. The technical benefits are negligible.