Dunbarton Energy Committee Meeting Minutes, January 17, 2022 (Virtual meeting) Members Present: Bob Ray, Dana Lavoie, Mike Kaminski, George Holt, John Stevens

Public: None

Meeting opened at 7:06 PM 1. Public comment: None

- 2. Dec. 20, 2021 meeting minutes approved
- 3. School Solar electric.
 - Property restrictions make Fogg property on Gorham Pond Rd. not a possible site for solar panel field installation
 - Town property C3-01-02 looks to be a good installation location. Check for any other possible use restrictions
 - Check Eversource for power line feed capacity and 2 or 3 phase availability. Estimated line capacity 168 kw.
 - Will need a shed for power meter
 - George will send out property boundary drawing. Downloadable on Google Earth.
 - Dana will contact Granite State Solar to involve them in site evaluation.
- 4. Status of the school hot water solar panel system.
 - On hold for weather for roof access.
- 5. Residents' advice and tours for Solar and other energy savings opportunities
 - With little response so far, Dana will re-post the DEC offer on the Facebook Community Group page and the EC website.
 - Bob will check the DEC email contact address.
- 6. School energy savings
 - Bob and John will do a thermal camera walkthrough of the school in the next few weeks.
 - John will explore cost for a professional energy audit. The last audit was performed in 2011.

Meeting adjourned at 8:22 PM

Next meeting: February 21, 2022

Dunbarton Energy Committee Meeting Minutes, March 21, 2022 (Virtual meeting)

Members Present: Bob Ray, Dana Lavoie, David Elberfeld, John Stevens

Public: None

Meeting opened at 7:00 PM 1. Public comment: None

- 2. January 17,2022 meeting minutes approved, no meeting in February
- 3. School Solar electric.
 - Dana contacted Granite State Solar for initial assessment of town property lot C2-01-02 in Rt.77.
 - The Rt. 77 site has good southern exposure.
 - Site is quite level and will need only modest tree clearing.
 - Dana will meet with members at the site for review.
 - Once initial investigation is done, Dana will contact more Solar installers
 - Not near neighbors property and not visible to neighbors.
 - Concerned that there are no power poles on property, only phone lines.
 - Nearest power line to east may not have 3 ph. service. Nearest power line to west comes from Ray Rd, 10 to 15 poles away. Will need a transformer to connect to solar site.
- 4. Status of the school hot water solar panel system.
 - On hold for weather for roof access.
- 5. Bow Energy Committee.
 - John will contact them to check on their progress. Have they done any Town Solar installations?
- 6. Residents' advice and tours for Solar and other energy savings opportunities
 - Earth day is April 22.
 - Dana could set up a tour of some resident's homes exhibiting energy related installations
 - Bob will check the DEC email contact address.
 - Conduct during a 4 hour period on or the day after Earth Day. Live or Virtual?
 - David will make a listing his solar array performance.
 - Dana will contact Police Chief to show his electric car
- 6. School energy savings
 - Bob and John did a thermal camera interior walkthrough of the school a few weeks ago. No major problems seen, just some small fixes involving leaks or small missing insulation areas.
 - Possibly inside storms on north facing windows.
 - John will contact auditors for a whole-school professional energy audit and any possible rebates on cost
- 7. Dana presented the idea of an electric police vehicle. Will meet with the Police Chief to provide information.

Meeting adjourned at 8:01 PM

Next meeting: April 18, 2022

Dunbarton Energy Committee Meeting Minutes, April 18, 2022 (Virtual meeting) Members Present: Bob Ray, Dana Lavoie, David Elberfeld, George Holt, John Stevens Public: Jessica Dunbar, Bow Energy Committee

Meeting opened at 7:05 PM

- 1. Public comment: Jessica Dunbar announced the restart of the Bow Energy Committee.
- 2. March 21, 2022 meeting minutes approved
- 3. School Solar electric.
 - Dana contacted Granite State Solar. They are not interested as the project is not part an existing facility and needs a meter added.
 - Dana is looking at other firms and rough specifications, will set up a Google Drive to share documents.
 - Former director of Five Rivers Assoc. is now with Revision Energy.
 - John will seek installer names for other area municipal solar installations
 - This installation will be 2 to 2 ½ times the size of the transfer station installation.
 - George will speak to the selectmen about this installation and possible warrant article.
- 4. Status of the school hot water solar panel system.
 - Now that weather is getting warmer George will work with Dana
- 5. Bow Energy Committee.
 - Will discuss sharing this year's energy Expo, Bob will need additional help as he will be out of town at camp for the summer.
- 6. Residents' advice and tours for Solar and other energy savings opportunities
 - Dana very interested in this activity but his schedule is guite busy with trips and vacation.
 - Get residents to make a list of items they can show. Maybe get pictures of their items? •
 - Maybe 5 or 6 sites?
 - Dana will post on the Dunbarton Community Facebook page to solicit residents display sites.
 - Visits maybe Saturday mornings, around Memorial Day, May 21 or June 4 display dates?
 - Mention the Energy Expo on the visits?
- 7. School energy savings
 - The last school energy audit was done in 2011, should do a current audit. John will investigate who and when.
 - Bob and John recently did thermal images of the school, interior and exterior.
 - Look at present situation for heating/ventilation system balance.

Meeting adjourned at 8:11 PM

Next meeting: May 16, 2022

Dunbarton Energy Committee Meeting Minutes, May 16, 2022 (Virtual meeting)
Members Present: Bob Ray, Dana Lavoie, David Elberfeld, George Holt, Mike Kaminski, John Stevens

Public: Jessica Dunbar & Michael Leuchtenberger from Bow Energy Committee

Meeting opened at 7:02 PM 1. Public comment: None

- 2. April 18, 2022 meeting minutes approved
- 3. 2022 Energy Expo
 - October 1 event date approved
 - Invitation emails to be sent from and replied to Dunbarton and Bow committee email addresses
 - Jessica has created a vendor and exhibitor spreadsheet in Google Docs and requested gmail addresses of DEC members to let her share the spreadsheet with them.
 - Contact Goffstown Ace Hardware for LED lamp donation. Offer lamps to kids that attend. (From school energy kids session)
 - Share attendee gmail addresses to Dana, Jessica and Michael.
 - Bob will share vendor 2019 invitation text to Jessica
- 4. School solar electric.
 - Dana looked further at the potential Rt. 77 site
 - Land assessment good, dry and level
 - Dana spoke to Revision energy. 3 possible options: Single phase possible up to 100 Kw but the
 desired proposed capacity is 150Kw. 80 100 Kw array not feasible for tax breaks. Needs
 fencing and tree clearing, additional costs.
 - Revision comments: 1- reach out to the Bow school district to share output and find a larger 3
 phase available site. Possible issues if Dunbarton is not connected with the Bow district in the
 future. 2- School roof is suitable for solar installation and connection but would likely have less
 output to fully meet school's electric use.
 - GSS not interested in the project at the present Rt.77 site.
 - Dana will continue to speak with Revision and GSS.
- 5. Status of the school hot water solar panel system
 - Now that the weather is improved, George will go the roof to examine the panels to correct issues.
- 6. Progress on tours of residents' homes for solar and other energy improvements: Update in future.
- 7. School energy savings opportunities.
 - John will get quotes from professional energy auditors.

Meeting adjourned at 8:15 PM

Next meeting: June 20, 2022

Dunbarton Energy Committee Meeting Minutes, June 27, 2022 (Virtual meeting)

Members Present: Bob Ray, Dana Lavoie, David Elberfeld, George Holt, Mike Kaminski, John Stevens

Public: None

Meeting opened at 7:15 PM 1. Public comment: None

- 2. May 16, 2022 meeting minutes approved
- 3. 2022 Energy Expo
 - Granite State Solar will be attending with table
 - Revision will attend only with workshop
 - Capital Well will attend so not contacting Skillings
- 4. School solar electric.
 - Dana is looking at both Revision and Granite State Solar for information, quotes and suitability of site.
 - Dana will meet with Revision in June 30 on panel location on School roof.
 - The Rt.77 site out of the picture as it lacks 3 phase connection and lacks financial attractive. The school roof location has 3 phase available.
- 5. Status of the school hot water solar panel system
 - George found a small leak in a tube in a panel and repaired it.
 - Still can't find a remote way to track the system output, Dana can connect on-site.
- 6. Progress on tours of residents' homes for solar and other energy improvements.
 - John will refer a resident request for solar advice to George.
 - Will hold on our audit service till cold weather seasons.
- 7. School energy savings opportunities.
 - John will get quotes from professional energy auditors.
- 8. Town solar system
 - One panel has reduced output, inverter or wiring, GSS will check.

Meeting adjourned at 8:25 PM Next meeting: July 18, 2022

Dunbarton Energy Committee Meeting Minutes, July 18, 2022 (Virtual meeting)

Members Present: Bob Ray, Dana Lavoie, Mike Kaminski, John Stevens

Public: None

Meeting opened at 7:02 PM 1. Public comment: None

- 2. June, 27,2022 meeting minutes approved
- 3. 2022 Energy Expo
 - George met with Joshua Singer from local Energy Solutions on EV exhibitor availability
 - Dana contacted Goffstown Ace Hardware
 - Goffstown Minisplit declined
 - Bow Plumbing will participate, location outside gym entrance
 - We need advertising on the Common and Library
- 4. School solar electric.
 - Dana visited school with Revision Energy to examine facility. Looked at main electric panel, 3 phase connection and roof.
 - Police and Fire may ne doing major roof work over the next year or so.
- 5. Status of the school hot water solar panel system
 - No change in monitoring system yet
 - Dana can connect with George at school to do quick monitor of circuits and switches.
- 6. Progress on tours of residents' homes for solar and other energy improvements.
 - Dana had information on Iceland hydro-electric: Rejkavic has most outdoor pools heated during winter, heated year round, may send hydro-electric to Great Britain.
- 7. School energy savings opportunities.
 - John will look for winter timing for professional energy auditors.
- 8. Interface with town residents
 - Dana had an appreciated conversation with a town resident on solar installation at their home.

Meeting adjourned at 7:42 PM Next meeting: August 15, 2022

Dunbarton Energy Committee Meeting Minutes, August 15, 2022 (Virtual meeting)

Members Present: Bob Ray, Dana Lavoie, Mike Kaminski, John Stevens

Public: Jessica Dunbar Meeting opened at 7:04 PM

1. Public comment: None

- 2. July 18, 2022 meeting minutes approved
- 3. 2022 Energy Expo
 - 16 participants so far.
 - Vendors: Yankee Thermal Energy, Newell Crathern, Shakes and Shingles, Misubisihi Electric, waiting application from Bow plumbing and others.
 - Revision to do workshop and if wanted, table for brochures.
 - 14 tables needed so far, 8 for businesses and 6 for non-profits.
 - John will do a floor layout drawing with locations for electric and back surface once attendees are confirmed
 - Electric vehicles: one owner, Bill Barry bringing self and vehicles, Jessica's husband with electrical vehicle. Joshua singer will contact others, George will call him and Grappone.
 - Kids' activity: Jessica will consult with Bow schools for personnel available when schools open.
 - We have about 70 lawn signs, all need event date stickers.
 - John and Bob will count signs and stands we have and then pick locations.
- 4. School solar electric.
 - Dana has met two times with Revision at the school and examined electric panels and location of the 3-phase electric line.
 - The proposal is for a 100 Kw school roof mounted system.
 - Probably lease with buyout in 5-6 years, the installer must own the system for 5 years to take advantage of tax and incentives.
 - Dana can pass around the financial details to members.
- 5. Status of the school hot water solar panel system
 - No change in monitoring system yet.
 - George can monitor output inside the school system but remote monitoring is not available.
- 6. Progress on tours of residents' homes for solar and other energy improvements.
 - Voted to delay discussion of this until post-Expo, January/February.
- 7. School energy savings opportunities.
 - Voted to delay discussion of this until post-Expo, January/February.
- 8. Other matters to discuss.
 - None

Meeting adjourned at 8:23 PM Next meeting: September 19, 2022 Respectfully submitted: John Stevens Dunbarton Energy Committee Meeting Minutes, Sept 19, 2022 (Virtual meeting) Members Present: Bob Ray, Dana Lavoie, Mike Kaminski, John Stevens

Meeting opened at 7:00 PM 1. Public comment: None

- 2. August 15, 2022 meeting minutes approved
- 3. 2022 Energy Expo
 - Will do preliminary set-up the Friday evening starting at 6:30. Involves marking vendor/exhibitor locations, moving carpet strips, setting up workshop room chairs in the Library and a classroom. Mike, George, Jessica and John will do.
 - No more replies yet on EV dealers, George re-contacted Grappone, no response yet.
 - Jessica's co-workers with their Tesla likely to attend.
 - Bow Plumbing will present an efficient gas water heater.
 - Chris Daley may present heat pumps
 - Jessica suggests contacting WMUR, NHPR, Concord Monitor to advertise the EXPO
 - We need larger wall signs at the event to post workshop locations and schedules and EV test drive locations. Jessica will design and George will print 24 X 36 inch signs.
 - Workshop presenters will need HDMI to USB adapters to plug into the video projectors.
 - John will get the EXPO notice and poster on the Dunbarton town website. Bob will post the EXPO notice on Facebook again a week before the event.
- 4. Other matters to discuss.
 - None

Meeting adjourned at 7:35 PM

Next meeting: October 17, 2022