Islesboro Energy Committee
Regular Meeting
Tuesday, March 10, 2026
In-Person and Zoom Meeting at 5:15 PM

☑ APPROVED
4/7/26

MINUTES

1. Call to Order
   Chair Harriet Bering called the meeting to order at 5:17 pm.
2. Establishment of a Quorum
   Quorum was established with over 4 members

   Members Present: Chair Harriet Bering, Holly Fields, Janis Petzel, Kathy Kerr, Monica Mullins
   Members Present via Zoom: Cressica Brazier, Trevor Blackford
   Members Absent: Vice Chair Bill Thomas, Ava Schlottman, Peter Rothschild, Ex Officio
   Others Present: Island Fellow Elizabeth Dyer
   Others Present via Zoom: Bob Kochan

3. Approval of minutes from previous meeting: February 10, 2026.

   Monica suggested editing the reason for leaving early due to "personal matters."

   Motion: To approve the Minutes of February 10, 2026, as amended, K. Kerr, seconded by H. Fields. No discussion. Roll Call. Motion passed, 6 yes, 0 no. H. Bering abstained.

4. Project updates

   a. Fire station
      - Monica stated that she reviewed the report on the thermostat data Bill sent by email. There were multiple emergency calls in January, so the fire station doors were opened a lot. The data seems to be in alignment with that.
      - Harriet added that Bill doesn't have data on when the doors were open, so can't correlate that. However, the heat pumps seem to be doing a good job.
      - Harriet reported that Evergreen has provided an estimate to fix up the generator room. They're proposing putting in a new door, installing insulation all around, repairing the wall between the generator and the garage, and putting in a new sealed hatch. The price would be $10,208, with a discount of $1,000 if we sign within three business days, and an estimated Efficiency Maine rebate of $1,800. After those two things, the total would be $7,300. If we pay by cash or electronic funds transfer, there's an additional discount, bringing that to $6,846. If we don't pay within three days, it would be $7,846, which is within our budget. The only issue is that some island-based contractors have expressed interest, but have not gotten back to Bill. Do we need to address this? We've worked with Evergreen. They do a good job and are reliable, but they are not island-based.
      - Kathy stated that since she joined the committee late last spring, Bill has been trying to get the contractors to respond. The work has been delayed. She recommends going with Evergreen and giving that reasoning to the Town.
      - Holly added that the Town is losing money because that room is not as efficient as it could be.

- Cressica stated that in 2022, she did a study of how much heat we were losing due to the doors opening. It was about 10 – 15% when it was warmer, on average. The furnace had to run between 1 – 2 hours extra every time the door opened. Now the furnace is running significantly less, in concert with the heat pumps when the door is open. There are many reasons the heat pumps are effective, in addition to the fact that the furnace is rarely running, except on really cold days, according to those temperature records.
- Cressica added that the estimated cost for the generator room seems significant compared to what needs to be done. She would like to look over the proposal more, and revisit it when Bill is back.
- Monica agreed that we should wait for Bill, as he is facilitating all this.
- Kathy stated the estimate seems to be in line with other similar projects.
- Harriet stated she believes $10,000 is the threshold for requiring a formal RFP.
- Harriet added that the original budget for this project was based on moving the generator to an outdoor shelter or even purchasing a new generator. Fred and Murt have since let us know they don't want to go forward with those plans, so we're just focusing on the existing room now. We can table this for more discussion.
- Janis added we can always wait until later and get another quote. It would be important to know when the Efficiency Maine rebate expires.
- Harriet stated we don't have to wait until next month to decide.
- Cressica asked if anyone knows if the rebate is part of the home program or the commercial industrial incentive program. Harriet stated we can call and ask.
- Cressica pointed out that they put this on a home improvement proposal, so she doesn't feel confident that they're applying the correct rebate.

b. EV chargers
    - Holly reported that she hasn't been able to talk with Bill about the options. She's thinking about contacting various providers to see what they offer and what the cost would be.
    - Candice has stated that the ICC subsidizes the charger there. Janis suggested that perhaps the fees charged to run the service are separate from what people pay per kilowatt hour, so those monthly service charges might be what the ICC has to pay.

c. Ground Array
    - Harriet reported that she has been in touch with the consultant that Cressica had worked with when this was first proposed, regarding the wetlands and permitting. The consultant had supplied her with the schema for the size of the array that would provide sufficient output to cover the needs of the Health Center.
    - We weren't sure whether the cost of permitting would be prohibitive. Cressica had suggested going ahead with the permitting process before we submit an RFP. We signed an agreement with the consultant from Gartley & Dorsky, Alyssa Pulver, for $2,500. This comes out of the grant that Cressica got for the Health Center. Alyssa will create a more detailed site plan that shows how much the array will impinge on the wetlands. Her estimate was that it would come to about 14,000 square feet total area, and 4,000 square feet of direct, meaning the area affected by the support systems for

the array. Those numbers fall below the level at which a fee is charged for the permit, but at a level Alyssa felt would be worth meeting with the State Department of Environmental Protection and the Army Corps of Engineers. She will set that up for us.

- The next step of submitting all the paperwork for the permits would probably cost another $3,000, so we signed the agreement to go ahead with the first step.
- We started exploring what we thought would be the maximum size we'd want. If it looks like that will be cost prohibitive, we can scale it down.
- Cressica added that this first phase will tell us the feasibility of whether we'd be able to get the permits. There are some challenges with the Army Corps of Engineers and whether or not they'll allow construction on wetlands. Gartley & Dorsky did the wetlands survey, so they are the most qualified to go through this process with us.
- Harriet stated that we could contact the abutting neighbor anytime. Kathy will reach out to him after Harriet, Cressica, and Kathy talk.

5. ETIPP Update
    - Janis reported that they're still in the scoping phase.
    - Barbara Talamo attended, and is interested in working with the Energy Committee.
    - The team is planning a site visit the week of April 7th to 10th. There's a meeting of various Committee Chairs at the library on the 10th in the morning. We might use that as an opportunity to connect ETIPP folks with other people on the island. We could also plan a lunch and invite people who we think would be worthwhile for them to meet.
    - Elizabeth stated that she talked with Melissa Olson. She is interested in having the ETIPP folks visit during the meeting at 10:30, after regular business ends, for a presentation. Melissa recommends doing both the meeting and a lunch later in the day.
    - Harriet added it would be nice to invite Select Board members to the lunch.

6. MAINECAN Conference Participation
    - Monica reported that Cressica helped with editing for the poster.
    - Cressica stated that we are able to combine the print job with the print jobs at UMaine. This will make logistics easier. Cressica finished going over it and will send out the document for review.
    - Members who are planning to attend: Bill Thomas, Harriet Bering, Kathy Kerr, Elizabeth Dyer.

7. Maintenance of Equipment
    - Harriet stated that the committee decided to recommend to the Town that there be a Facilities Manager who would take over responsibility for maintaining the heat pumps. The committee's intent was that it should not be the responsibility of this group of volunteers.
    - Trevor asked if this person should make regular reports to the Energy Committee on the state of the equipment. Holly suggested that this would be Janet's responsibility.
    - Bill has sent the committee's recommendation to Janet. The topic of a Facilities Manager will probably be on the Select Board agenda in the near future.
    - Janis asked about service contracts. She was unaware we'd signed some. Harriet explained that the heat pumps in the fire station have a service contract. Fred Porter was adamant about that.

- Cressica explained that the $3,000/year contract is for solar. In order for insurance to cover it, they required a service contract. This is something we need to review because it could get very expensive very quickly if they need to have contracts for every array. There's a lot of ambiguity about which arrays need service contracts, and who's actually following through on them.
- Cressica added that under the PPA, the company that owned the array did the service work and had the service contract. When the Town bought the array, the Town both needed to insure it and provide the service contract. We need to have a handle on all of the elements of operations and maintenance of these arrays in addition to the heat pumps. There are issues that we have to address, like making sure the monitoring is continuous. It turned out that the library internet has been a problem. There's also vegetation management and snow management, and regular maintenance and whatever insurance requires. We need to come up with a strategy to help the Town maintain these arrays, especially because we're adding another big one soon.
- Kathy asked if there's any way to renegotiate the service contract. Cressica replied that yes, it's a yearly contract. It would be helpful for us to talk to Janet and ask about the parameters that led to the contract, and what other arrays might or might not have needed that contract, and whether we can aggregate them, and whether we can negotiate.

8. Event Subcommittee
    - Janis stated the group has not met.
    - Kathy reported that she has Elaine Gallagher Adams lined up as a speaker for an event. She is a senior staff member at Mazetti, and she works on decarbonization, as well as sustainability in historic buildings. She's been involved in the Smithsonian National Museum of African American History and Culture (NMAAHC). She's very excited about coming. Kathy forwarded her information to Peter Rothschild, but he said the Forum schedule is full. Do we want to wait until next summer, or could we attract enough of a crowd with this kind of topic?
    - Harriet stated we've talked about putting together a panel.
    - Kathy stated she hasn't approached Elaine with that possibility, and hasn't tried to reach Steve Phillips again yet.
    - Trevor stated that the people he's talked with from passivhausMAINE would be happy to come for a non-Forum event as well. They are also involved with retrofitMAINE, which is an entity that they spun out for retrofitting old buildings to make them more energy efficient. They're running a pilot right now outside of Freeport. The model is community training. Cressica added that they are running an energy coaching program, helping homeowners do home energy upgrades. Trevor stated that this would fit nicely within a larger panel.
    - Kathy stated that her concern is that Janis put an enormous amount of energy into an event last month, but most people in the room were members of the Energy Committee. Kathy wouldn't want to bring Elaine here and only have 20 people in the ICC Community Hall.
    - Harriet stated we had hoped to do an event sometime during the summer. One of the goals was to get people who own seasonal homes. She thinks we could attract them.
    - Monica stated that having someone with expertise, such as Elaine and the retrofitMAINE people, may get more attraction than solely the entities of the island.

- Kathy expressed concern about how to get maximum attendance. We'd be competing with the Forum Lecture Series, which is every Sunday in July and August.
- Monica suggested looking at the town calendar and the Tarratine schedule. We could also approach the Forum organizers about fitting in these speakers, to provide more information.
- Discussion about ways to approach an event and the possibility of collaborating with Forum.
- Kathy will talk with Bruce from the Forum committee about whether we could do a joint event.
- The event subcommittee will meet to discuss details.

9. Island Fellow Update
    - Elizabeth reported she is working with Cressica on reviewing the CMP billing and tracking that.
    - The Trashion Show will be held April 14th at 5:30pm. Elizabeth is looking for volunteers and drivers to take folks to and from the ferry. There might be some folks from the mainland.
    - Elizabeth has reached out to Bill for the login information for the portals for the Town solar arrays, to gather data for the portfolios we're building.
    - A TV station in Bangor wants to cover the Trashion Show. The last couple of workshops will be open to adults. Feel free to play with the items left in her office at the ICC! Shout-out to Janis for volunteering and helping with the kids.

10. Other Business
    - Cressica reported that the email with the maintenance contract information had an estimate of $2,000 and not $3,000. The contract was signed in October.
    - Monica stated she is sad to say that she needs to step away from the committee. She has enjoyed being a part of the group, and appreciates being able to work with all the members.

11. April and June Meetings, Date Changes
    - Move the April meeting to the 7th, and the June meeting to the 2nd.

    Motion to move the April and June meetings, J. Petzel, seconded by T. Blackford. No further discussion. Roll Call. Motion passed, 7 yes, 0 no, Unanimous.

12. Adjourn
    Motion to adjourn meeting at 6:23 pm, M. Mullins, seconded by J. Petzel. No Discussion. Roll Call. Motion passed, 7 yes, 0 no, Unanimous.

Respectfully Submitted,

Carrie Reed

Carrie Reed, Secretary

Carrie Reed

From: Bill Thomas <bthomas@mcttelecom.com>
Sent: Thursday, March 5, 2026 12:30 PM
To: Harriet Hoder/Bering; Cressica Brazier; Holly Fields; Monica M; Janis; Kathleen Kerr; Ava Schlottman; Trevor Blackford; Peter Rothschild
Cc: Carrie Reed
Subject: fire station heat

Hello, everyone.

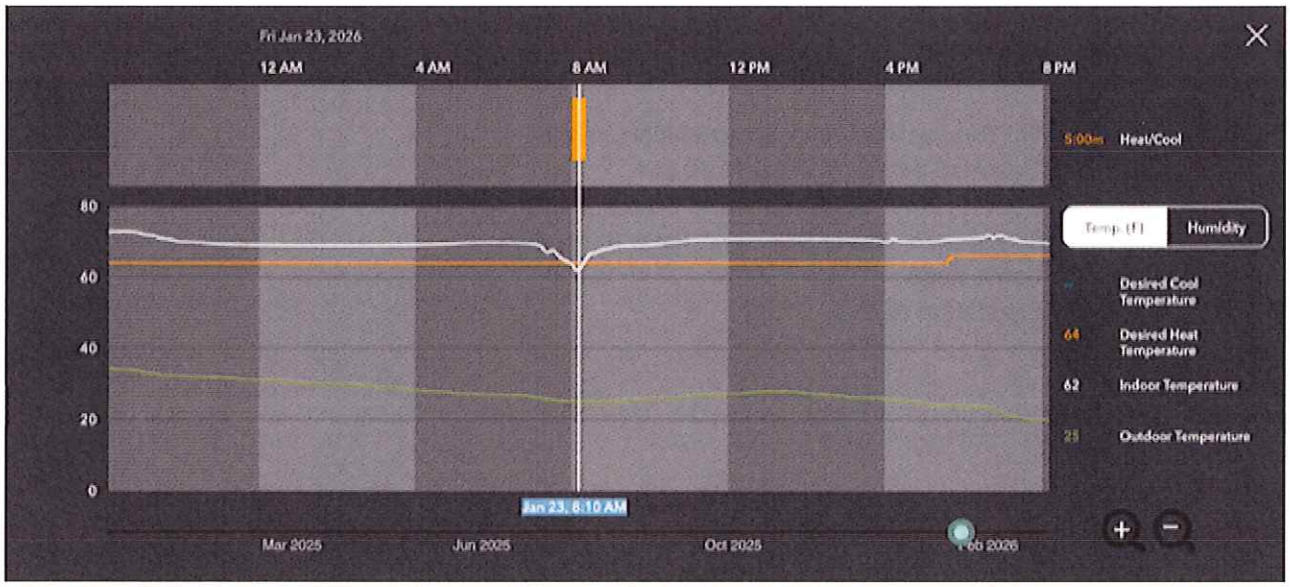
When the heat pumps were installed last year in the town center fire station, there was much concern about whether they would be able to maintain temperature in the station throughout the winter, especially when the station doors were opened (such as for emergency events). This report addresses that concern.

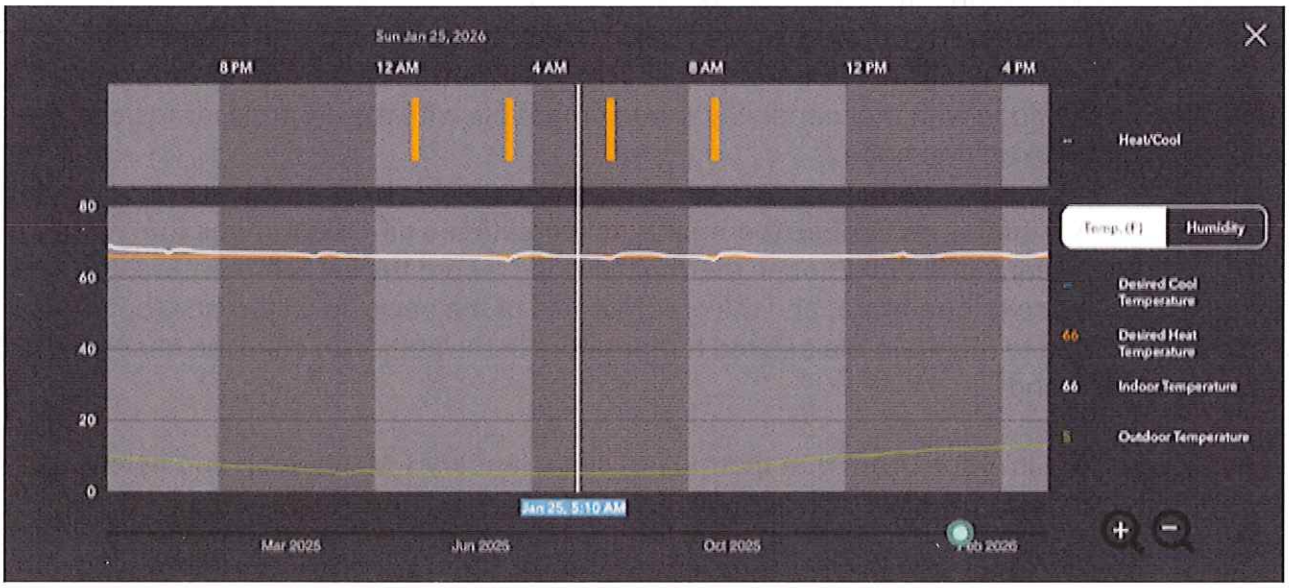
First of all, it is important to remember that the thermostats that control the four heat pumps provide us with neither a continuous record of temperature in the station nor a record of the on/off cycles of the heat pumps necessary to maintain the set temperature. I pushed for the use of thermostats that would give us such information, but none with that capability were compatible with the controls intrinsic to the Mitsubishi units, so we gave up on that hope.

Fortunately, we had already installed an Ecobee thermostat to regulate the oil-fired furnace that had been heating the station for years, and that Ecobee thermostat does record the set temperature, the outside temperature, the inside temperature, and the on/off cycles of the back-up oil furnace (but NOT of the four heat pumps) required to maintain the desired temperature in the station in case the heat pumps are not adequate to the demand.

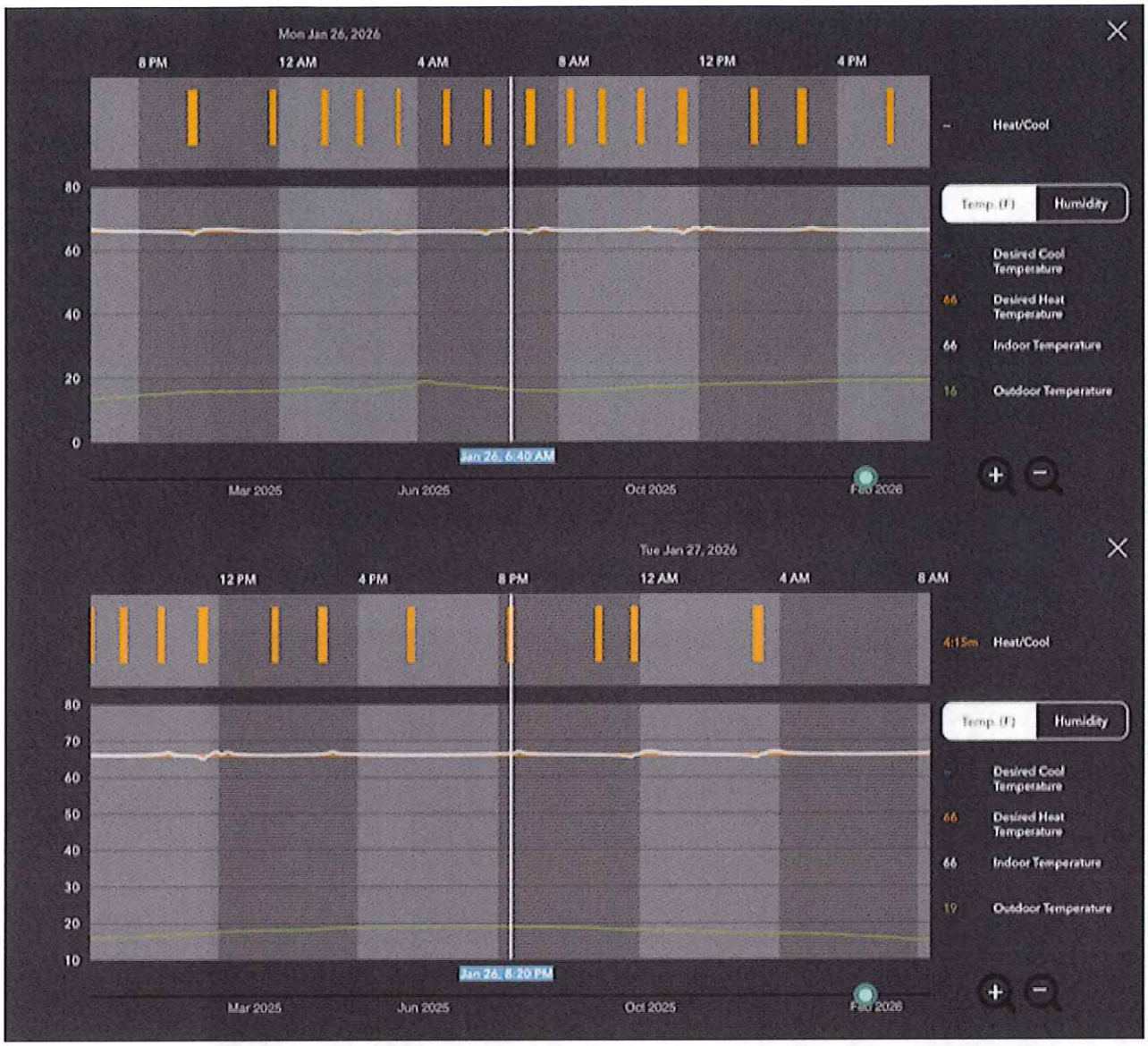
I went back over the continuous record from that thermostat since January 1 of this year, and below are screen shots of the only occasions, shown in sequence, when the back-up oil furnace came on at all during that period.

A vertical orange bar in the upper of the two horizonal sections shows when the oil furnace is on. The width of the bar indicates for how long the furnace is on. For example, the furnace came on twice on January 28th (4th level image below). On the first occasion, at 11:15 am, the furnace was on about twice as long as on the second occasion, around noon.

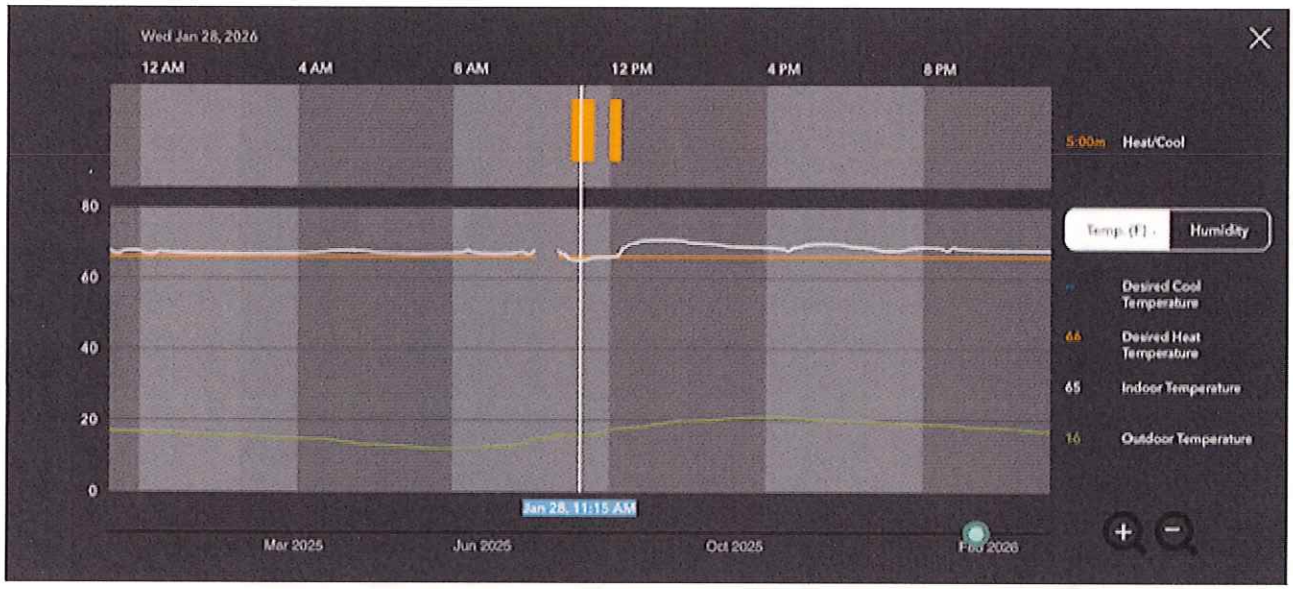


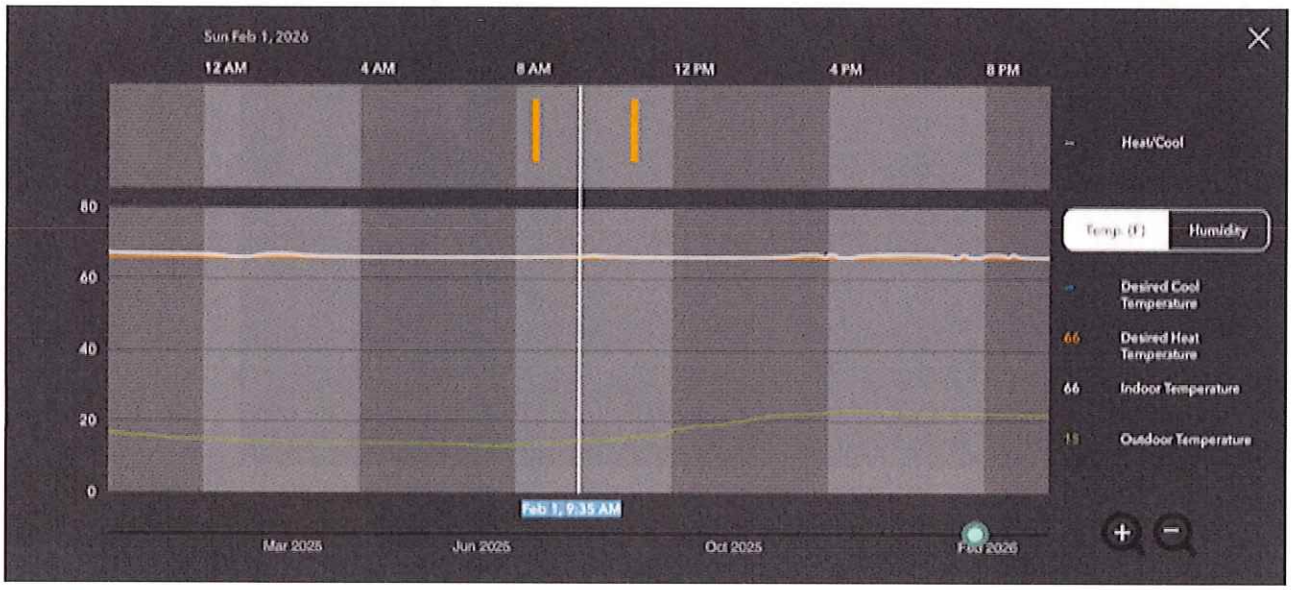


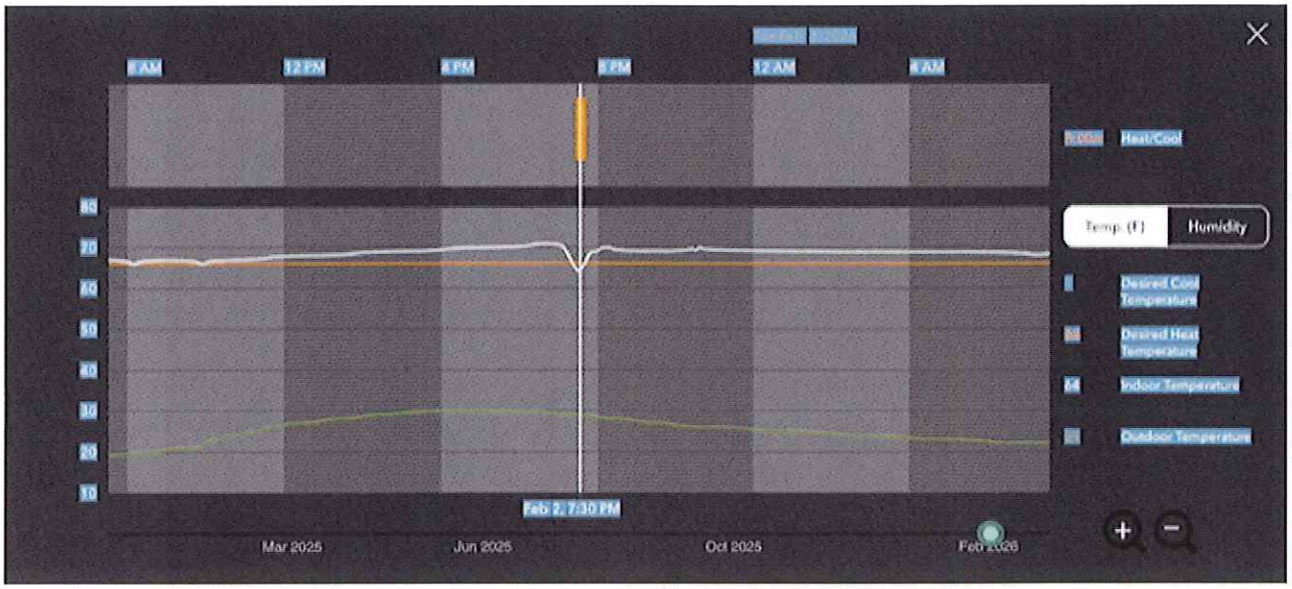
Please note that these next two screen shots overlap from about 8 am to about 6 pm

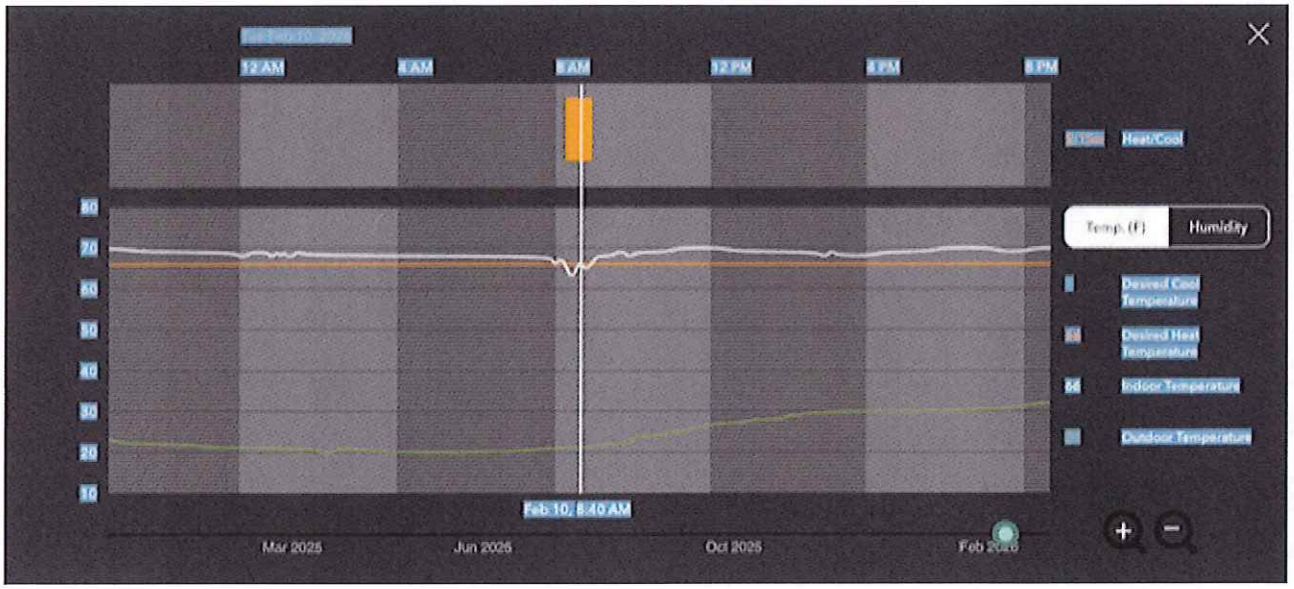


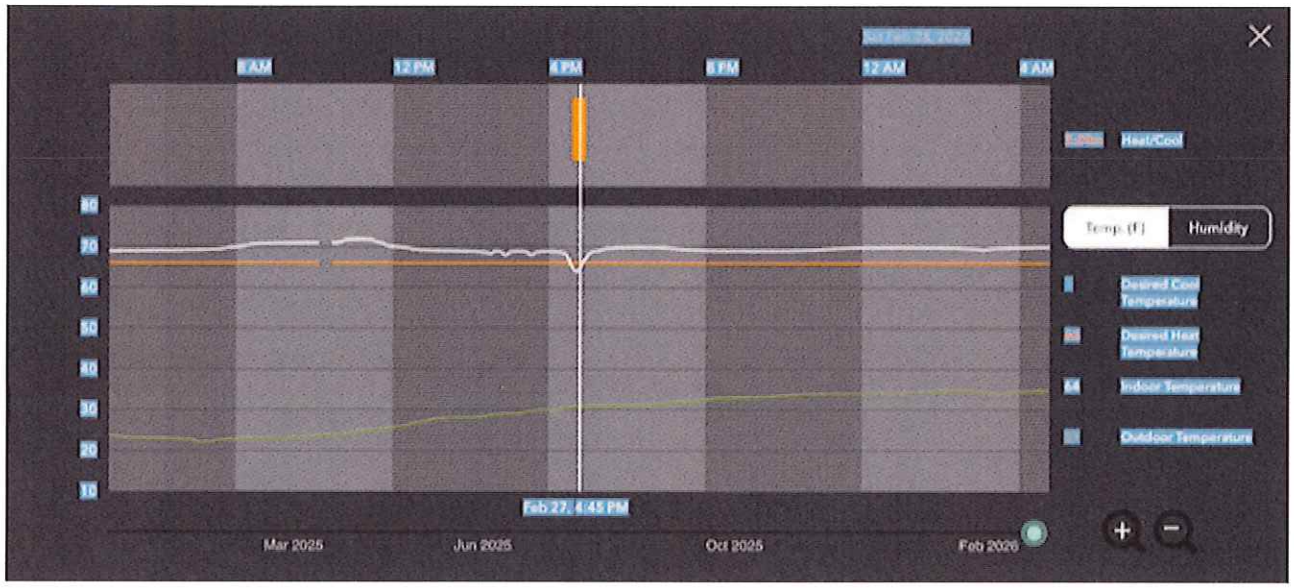
The Jan 28 record referenced above

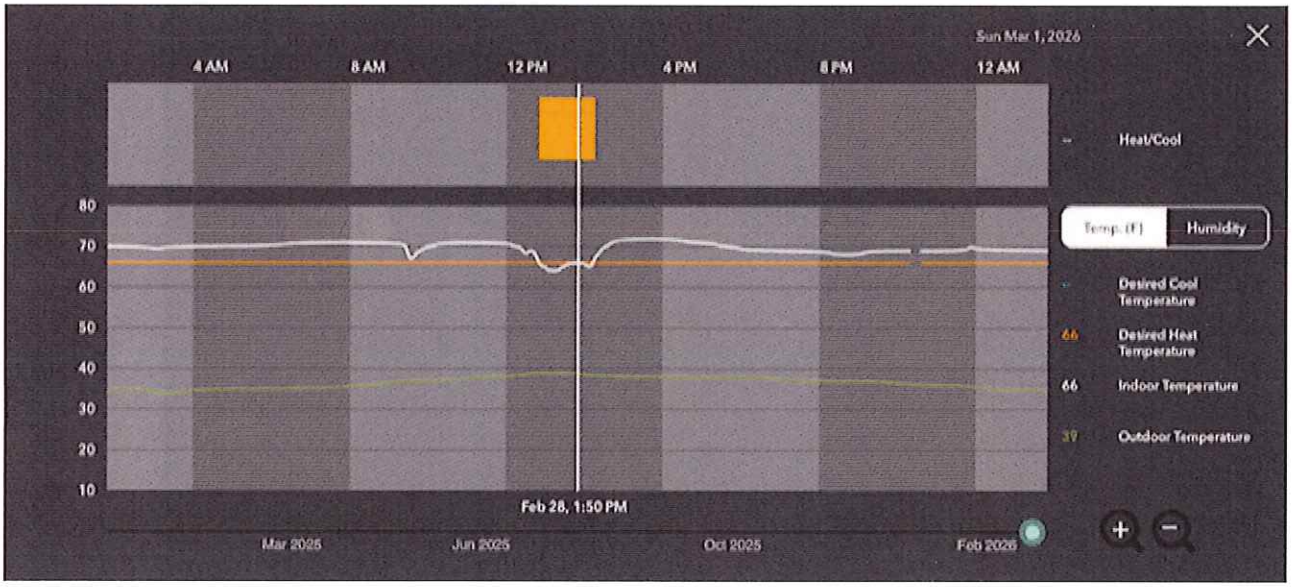

Wed Jan 28, 2026
12 AM
4 AM
8 AM
12 PM
4 PM
8 PM
80
60
40
20
0
Jan 28, 11:15 AM
Mar 2025
Jun 2025
Oct 2025
Feb 2026
5:00m Heat/Cool
Temp. (F)
Humidity
Desired Cool Temperature
66 Desired Heat Temperature
65 Indoor Temperature
16 Outdoor Temperature


Sun Feb 1, 2026
12 AM
4 AM
8 AM
12 PM
4 PM
8 PM
80
60
40
20
0
Feb 1, 9:35 AM
Mar 2025
Jun 2025
Oct 2025
Feb 2026
Heat/Cool
Temp. (F)
Humidity
Desired Cool Temperature
66 Desired Heat Temperature
66 Indoor Temperature
15 Outdoor Temperature


8 AM
12 PM
4 PM
8 PM
12 AM
8 AM
Heat/Cool
Temp. (F)
Humidity
Desired Cool Temperature
Desired Heat Temperature
Indoor Temperature
Outdoor Temperature
Feb 2, 7:30 PM
Mar 2025
Jun 2025
Oct 2025


12 AM
4 AM
8 AM
12 PM
4 PM
8 PM
Heat/Cool
Temp. (F)
Humidity
Desired Cool Temperature
Desired Heat Temperature
Indoor Temperature
Outdoor Temperature
Feb 10, 8:40 AM
Mar 2025
Jun 2025
Oct 2025





The first point that I would make about these records is that the white tracing shows that the indoor temperature remained for the most part quite constant. This is equally true throughout the many hours since January 1 not show.

I need to add a caveat here. The Ecobee is installed near the door leading into the station from the training room. It monitors the temperature at only one point in the garage at some distance from the garage doors. As a result, the temperature shown in white cannot be taken as representative of every location in the garage.

The second point to note is that the oil furnace came on infrequently and for only brief periods.

Thirdly, the infrequent activation of the oil furnace can be attributed mostly to quite low outside temperatures. On January 26, January 28 and Feb 1 the recorded outside temperature was 15-16 degrees. On January 25 the outside temperature was 5 degrees.

Fourthly, some of the times when the oil furnace came on are associated with temperatures above 20 degrees (Jan 23, Feb 2, Feb 10, Feb 27 and Feb 28). These events are associated with abrupt, relatively brief drops in the interior temperature during periods of stability. Such drops in interior temperature are characteristically associated with opening of the garage doors. I have not checked to see if the drops in temperature in question did coincide with garage door openings, but since each event is time-stamped, such a correlation could be verified.

Taken together, these results indicate that the heat pumps maintain the interior temperature for a great percentage of the time without help, and the back-up furnace functions effectively on the rare occasions when supplemental heat is required.

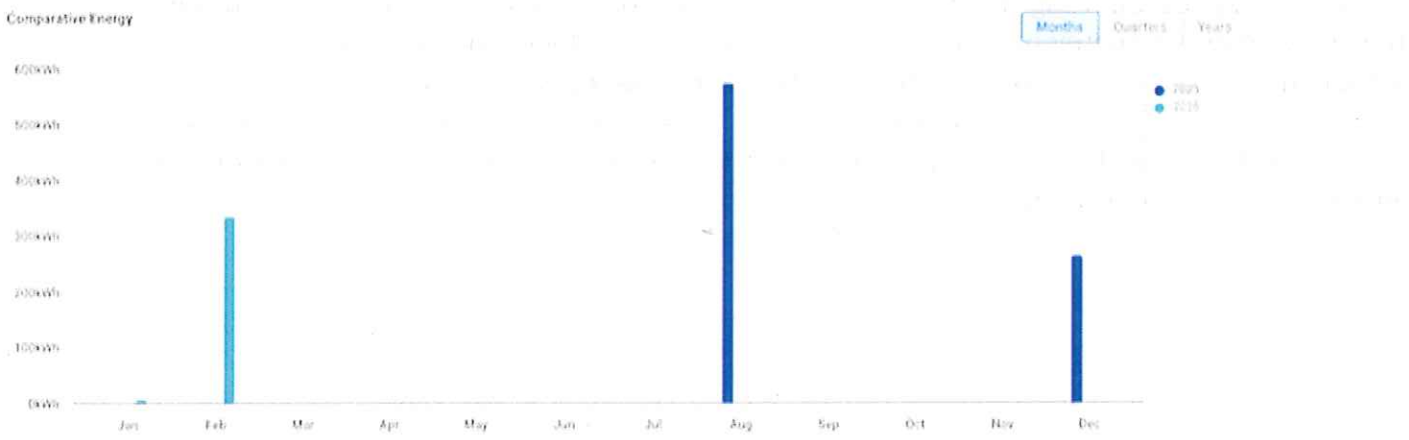
Bill

Carrie Reed

From: Bill Thomas <bthomas@mcttelecom.com>
Sent: Friday, March 6, 2026 5:51 PM
To: Harriet Hoder/Bering; Cressica Brazier; Holly Fields; Monica M; Janis; Kathleen Kerr; Ava Schlottman; Trevor Blackford; Peter Rothschild
Cc: Carrie Reed
Subject: library array

Hello, everyone.

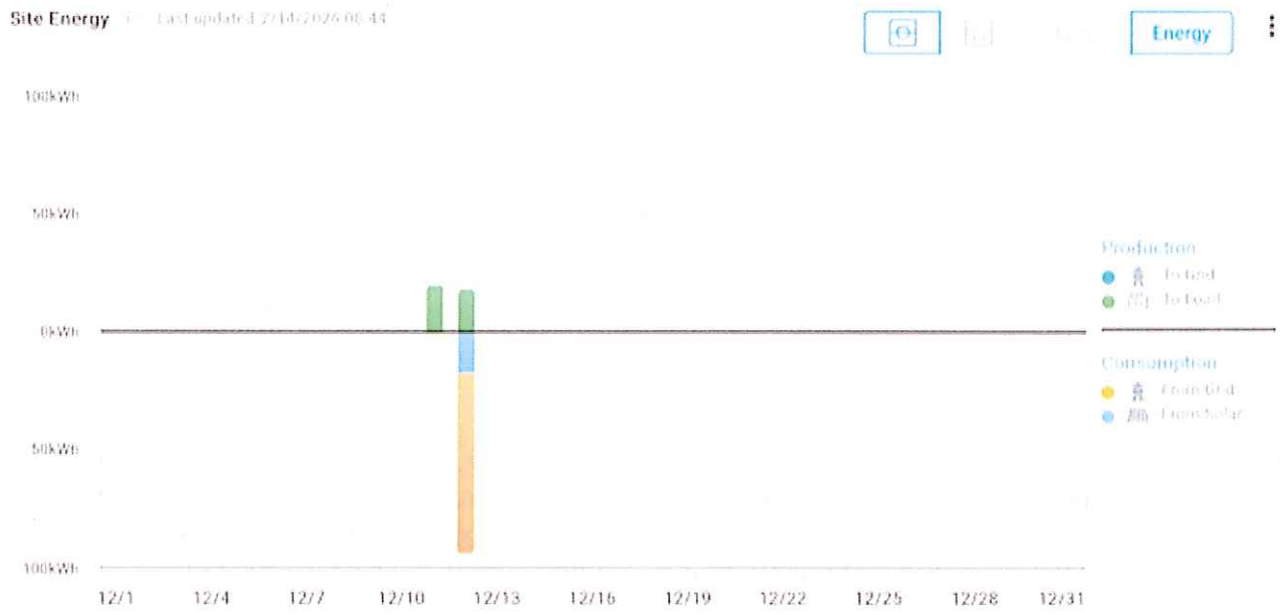
This report concerns the library array, which was installed last summer by SolarLogix and which came on line 8/14/2025. The graph below shows the history of the array's production to date as reported by the Solar Edge website, the access portal for the array. Note that production from 2025 is shown in dark blue (counterintuitively after, rather than before) production from 2026, which is shown in teal blue.



Looking at the dark blue line for August, you will note robust production, as expected, even though this was for only the second half of the month.

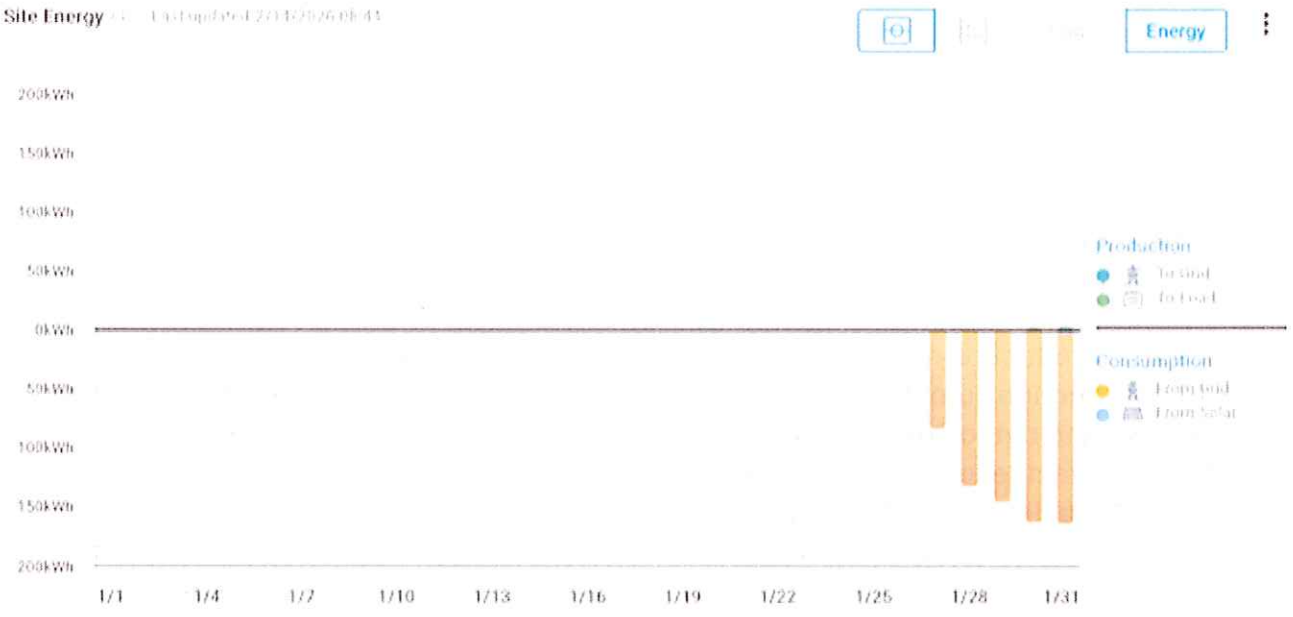
You may also notice zero production registered for the months of September-November. The absence of production came to my attention sometime in September/October (I check the web site aperiodically), and soon afterward I reached out to SolarLogix to inquire about the status of the array and see what could be done. I have no exact record of those events, since the inquiries were done by telephone, but I was told that there would be delays in getting a technician to the island to respond to the problem. I was out of the country until mid-November, but upon my return I saw that the problem still had not been corrected and so reinitiated my telephone inquiry (11/17 and again 11/21). I called again on 12/1, and by 12/2 a technician had visited the library and corrected the problem.

Unfortunately, the remedy lasted only until 12/12, when the array again ceased reporting production. This can be verified in the web record.



I was out of town and otherwise occupied for the month of December, but by mid-January I saw that the array was again not reporting. I reached out to SolarLogix on January 20, initiating a month-long string of e mail correspondence that brought Page Clason and Shawn Rowe, the SolarLogix service manager, into contact and led to the correction (1/25) and ultimate resolution of the problem.

Here are the web reports for January and February demonstrating the hiatus, the restart and continuation of the reporting.



The problem originated back in August because of the instability of the WiFi connection in the library through which the inverter was communicating. The first "repair" in early December did not recognize that instability and simply reconnected inverter as before; the positive result was short-lived. The solution was to hard wire the inverter using an ethernet cable (which, one could argue, should have been done originally), and this seemed to correct the problem.

That was the status of affairs late on 3/5 when I was compiling this report, convinced that the problem had been permanently resolved. That was not the case, however.

Looking again at the graph immediately above, I noticed that here was no record of productivity displayed after 2/14. I had thought that the blank section on the graph to the right now 2/14 simply fell outside the selected window of report. However upon further investigation, I saw that there was no reporting at all after 2/14. Communication had been interrupted yet again; the problem remained unresolved.

A flurry of communication on the morning of 3/6 determined that there had been a break in communication despite the hard wiring of the inverter. The switch into which the inverter had been plugged was powered down on 2/14, leading to the new break in communication. Here is the message from Page Clason explaining the problem:

> *"The switch was plugged into a port on a battery UPS that we will replace. For now, we plugged the switch into the surge protector. The switch powered up and is online. I can see the Solar Edge device on the network and it is passing data".*

It took some time for the newly connected inverter to repopulate the web page with all the stored data, but as of mid-day today (3/6) , the record had been fully updated (minus the data between 2/14 and 3/1 that appear to be lost).

We can only hope that the connection remains stable and that this is truly the end of a very long struggle to get this array reporting accurately.

I should add a few concluding details.

First, production data remain on the inverter typically for about a month, after which they are purged. There is no back-up long-term storage, so the missing data are indeed missing. That is unfortunate, because we lose the record of what the array is truly producing.

This does not mean that we have no record at all of productivity for those months. We have the CMP monthly invoices which record what goes out through their meter to the grid. However, CMP does not see the production used by the building before the excess is exported to the grid. If we are to compute savings based on array production, we need to know all the electricity for which we do not pay CMP, and that includes the use behind the meters. The web site provides that information.

Because this installation is new and the record so spotty, I do not know exactly what percentage of the total production CMP actually sees. In fact, that is one of the reasons it was important to have a consistent, accurate record of productivity and use from the beginning as we monitored the performance of the new VRF system. It is unfortunate that that complete record has eluded us. However, based on the results from the other arrays that I monitor, I can say that CMP reports typically between 60% and 80 % of the actual productivity. We will know better what that percentage is for the library array as the records accrue – without interruption, one can hope – in the coming months.

Let me know if anything in this report is unclear and/or if you have any questions.

Carrie Reed

From: Bill Thomas <bthomas@mcttelecom.com>
Sent: Friday, March 6, 2026 9:04 PM
To: Harriet Hoder/Bering; Cressica Brazier; Holly Fields; Monica M; Janis; Kathleen Kerr; Ava Schlottman; Trevor Blackford; Peter Rothschild
Cc: Carrie Reed
Subject: another update.

Hello, everyone.

I promise that this will be the last report for a while.

Here I want to explore the potential importance of not clearing a solar array of snow, and to do that I have used the result from the Town Office array during the month of January.

First, here in chronological order are the January production data from the array since 2019.

January year	Production Web kWh
2019	2750
2020	2430
2021	2990
2022	2290
2023	1870
2024	1560
2025	2140
2026	1570

Here are the same data sorted in descending order for kWh production.

January year	Production Web kWh
2021	2990
2019	2750
2020	2430
2022	2290
2025	2140
2023	1870
2026	1570
2024	1560

Note that this recent January 2026 is one of the two years showing the lowest productivity over the past 8 years. There are several ways in which we can we assess just how low that value is.

We could ask what percentage 1570 kWh is of the maximum possible output. Because the days get longer throughout the month, one would have to have an accurate measure of the maximum possible output for each day and add them all together. I found that challenging to estimate with the data set that I had, so I took a different approach.

I chose the day near the middle of the month that showed the closest fit to the ideal daily productivity curve (roughly a symmetrical bell curve) and assumed it to be representative for the month. That day was January 13, and the output for that day was 179.74 kWh (in fact, the highest output of any day in the month). There being 31 days in the month, I multiplied 179.74 by 31 to obtain 5563.57, which I rounded to 5560 kWh and took to be the estimated maximal – ideal - output for the month of January.

By that reckoning, the output for 2026 was **28%** of the output that the array could have produced in January.

That estimate is not realistic, because it does not consider the effect of winter clouds, which would surely drop the productivity, irrespective of any snow coverage. One can remove snow, but one cannot change the cloud cover.

With that in mind, I took a second approach. The highest January production over the past 8 years was 2990 kWh in 2021, and that was attained under the prevailing conditions that winter. The 2026 production was **53%** of that recorded in that best year. This approach figured in the effect of cloud cover, but it still measured this year's production against the best recorded to date, an outlier, if you will.

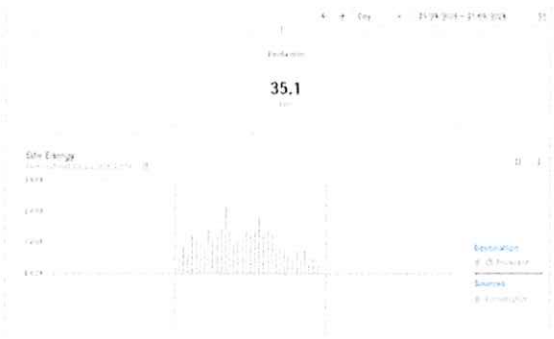
Trying for a more reasonable approach, a more even-handed comparison, I used the average production in January over the past 8 years, which is 2200 kWh. The production in 2026 is **71%** of that average.

Thus, by the most conservative approach used, the production in 2026 represents a **29% reduction** relative to the average seen over the past 8 years.

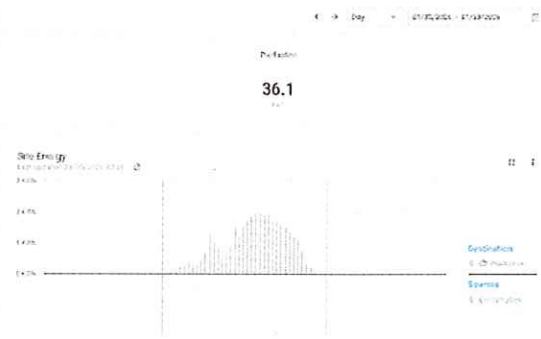
Now, it is not really possible (for me) to tell how much of that 29% was due to snow cover and how much was due to other factors, such as cloud frequency and density. However, a glance at the record of daily productivity does give us a hint. The graph shows us several days of relatively high productivity, so we know what output would look like on a "sunny" day. However, such days were rare this year.

If we look at days of low productivity, such as 1/9 or 1/30, we see a pattern characteristic of a cloudy day:

1/9/2026

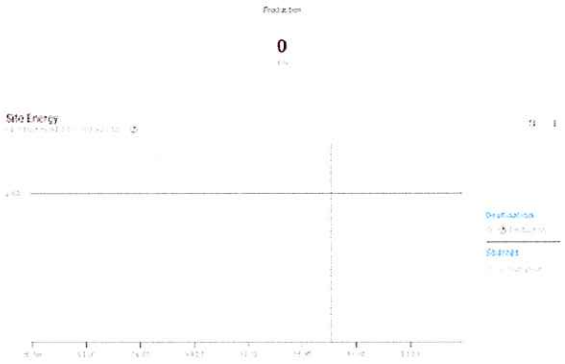


1/30/2026



peaks of low amplitude that shift during the day as cloud density varies.

However if we look at the truly low days, we see virtually no productivity at all, characteristic of days when the array is covered with a layer of highly reflective snow.



There is no photo of 1/26 where the productivity is zero, but below is a photo taken at 12:47 pm on 1/30, 4 days later. Much, but not all the array surface is still covered, making sense of the pattern of production seen in the graph for that day's production above.

It seems fair to assume that much of the lost productivity (29% by modest estimate) is due to partial or complete coverage of the array by snow. This is not an insignificant loss, and it is preventable.

Bill