

Session #1, March 15, 2021 – Residential Applications

Submitted Q/A Responses

Q1. Why are we using the NEEP list for design F and not the manufacture submittal?

- The program guidance for contractors is to use maximum heating capacity at the 99% dry bulb heating design temperature for the most relevant ACCA location. Contractors may refer to NEEP capacity data, which is provided to NEEP by manufacturers, or to other manufacturer engineering resources or software. The program has developed a BTU calculator tool to extrapolate capacity from NEEP or manufacturer reference temperatures to the local heating design temperature (for instance, using NEEP 5°F and 17°F capacity values to extrapolate to a 12°F local design temperature).

Q2. When calculating Sizing Ratio how do you account for capacity above and beyond the AHRI Rating? For example, the WFI 7 Series or GeoStar Sycamore, which is rated on Speed 9 in cooling & speed 10 in heating yet is capable of running on a Max speed of 12, which results in 10-12% more heating capacity & 30% more cooling capacity above and beyond the AHRI Rating.

- *Answered in WebEx: We use the max capacity on the AHRI certificate. If the manufacturer has a capacity that goes beyond what is listed in AHRI, we'd have to look at it, as well as the performance metrics.*

Q3. For desuperheater Tank Volume, is that preheat tank only or both the preheat & final tank?

- *Answered in WebEx: Preheat*

Q4. Where do you get the zonal load calculator?

- *Answered in WebEx: The zonal load calculator can be obtained from ICF*

Q5. Will you all provide technical assistance to contractors? The application seems fairly complicated for smaller contractors doing residential projects (we're concerned this will make contractors move away from the program)

- *Answered in WebEx: Agreed that this is an area for development and improvement. Needs to be more familiarity with sizing calculations to overcome this challenge. Will take this back, consider collaboration with NYSERDA training efforts. ICF currently helps with but does not complete sizing calcs.*

Q6. What are the photo requirements for the heat pump water heater?

- *Answered in WebEx: Photo of the nameplate and zoomed out photo of installation*

Q7. Can we create a block load for multiple rooms on a common system?

- *Answered in WebEx: Yes, we can accept block load calculations.*

Q8. What is "decommissioned" (as opposed to "removed") by contractor?

- *Answered in WebEx: Decommissioning is when it is no longer be used as back up, removed is when the system is fully taken off the premises. There is an implication for decommissioned systems that there would be for example an oil tank sitting on site. Also decommissioned systems could potentially be re-activated. The program has interest in these implications.*

Q9. In a commercial application, if a company decides to build their new addition with ASHPs, do they have to use the whole building in the load calcs to get full load rebates?

- Yes, category 1 is designed for situations just like this, additions/small spaces not currently being served by the existing building heating system.

Q10. If we are using variable speed equipment why is oversizing a cooling load an issue if the system will run at lower capacities automatically?

- We use the lowest speed capacity for determining the cooling ratio, per the alternative guidance from ACCA cited in the Clean Heat Program Manual, section 3.2.1. The oversizing issue emerges when the lowest speed capacity is more than 115% of the building cooling load (BCL).

Q11: How can we obtain our account managers info for National Grid and NYSEG?

- National Grid contact is Ari Tatko, email ATatko@riseengineering.com or NGridHeatPumpNY@RISEEngineering.com
- To obtain your account managers information for NYSEG/RGE please email info@nysegrgecleanheat.com

Q12: I may have missed it, but are the incentive eligibilities based on equipment capacity at 5°F, or equipment capacity at design temp?

- Incentives are calculated at equipment capacity at 5°F. Equipment should be sized based on the capacity at design temp.

Q13. If it's a two-level house with two separate systems for each floor and the customer is going to replace only one system, is that consider partially load? Also, for replacing existing old heat pump system air source is it qualified for full load rebate?

- If only replacing one central system in a home with multiple central systems, then it is a partial load project. Projects replacing older heat pump systems are eligible for rebates so long as they satisfy the criteria for a partial or full load project.

Q14. For the \$250/ project incentive "Simultaneous Installation of Space Heating & Water Heating" - is that only applicable for ASHP or do GSHP projects also qualify?

- GSHPs also qualify for the \$250 kicker for Full Heating Load installations combining with Heat Pump Water Heaters.

Q15. Has the program decided to Include Centrally Ducted Air Source Heat Pumps for the Partial rebate?

- Yes, we will accept centrally ducted air source heat pumps for the partial load rebate.

Q16: Also, a small commercial project is treated the same as a residential?

- If equipment eligibility falls into prescriptive incentive Categories 1, 2 or 3, all incentives are calculated the same regardless of building type.
- However, equipment sizing methodology is different for commercial buildings than for residential buildings, per the 2020 Energy Conservation Construction Code of New York State (ECCCNYS 2020).
 - Residential heating equipment must be sized in accordance with ACCA Manual S, or other approved methodologies, and should be based on heating/cooling loads calculated in accordance with ACCA Manual J, or other code-approved calculations. The program is developing a code compliance tool to facilitate code approval of systems sized for heating, as an alternative to standard ACCA Manual S sizing based on nominal cooling capacity ratings.
 - Commercial heating equipment sizing must be sized based on heating/cooling loads calculated in accordance with ANSI/ASHRAE.ACCA Standard 183-2007 or other code-approved methodology.

Q17. One concern is how long it takes to process applications. We have 4 applications from December still pending with no update on status.

- It is likely that there is missing documentation, please identify the utility and projects for follow-up.

Q18. Hi, thank you for sharing. Will this presentation be sent out to us? I need to digest it more and prepare submission for these updates. I am glad value of integrated control is recognized!

- We will be emailing participants as to where the presentation and Q&A are posted.
- We are posting the Q&A and presentation on the NYS Clean Heat Website:
<https://saveenergy.ny.gov/NYScleanheat/>

Q19.Why wouldn't the state just green light Hybrid systems and cut their time tables in half ultimately allowing the home owner to switch based on utility rate?

- The January 16, 2020 *Order Authorizing Utility Energy Efficiency and Building Electrification Portfolios through 2025* is specifically aimed at reducing carbon dioxide and other pollutants through electrification, with heat pumps replacing delivered fuels as well as natural gas.¹

¹ Case 18-M-0084, Comprehensive Energy Efficiency Initiative, Order Adopting Accelerated Energy Efficiency Targets (issued December 13, 2018) (Accelerated Efficiency Order). The utilities are Central Hudson Gas & Electric Corporation (Central Hudson), Consolidated Edison Company of New York, Inc. (Con Edison), KeySpan Gas East Corporation d/b/a National Grid (KEDLI), The Brooklyn Union Gas Company d/b/a National Grid NY (KEDNY), Niagara Mohawk Power Corporation d/b/a National Grid (Niagara Mohawk), National Fuel Gas Distribution Corporation (NFG), New York State Electric & Gas Corporation (NYSEG), Orange and Rockland utilities, Inc. (Orange & Rockland), and Rochester Gas and Electric Corporation (RG&E). The utilities with electric operations are referred to as the Electric Utilities.

Q20. Where can we find the info regarding different incentives in dollar amount for each utility company, please? ConEd partial load is \$250, what about other utility, please? Also, for Full load, ConEd is \$2000 per 10000 BTU, what about other utility companies, please. Thank you very much!

- Incentives by Category per Utility are listed in the NYS Clean Heat Program Manual². The Program Manual can be found on the NYS Clean Heat landing page, <https://saveenergy.ny.gov/NYScleanheat/>
 - Equipment incentives can be found in Table 2: Total Incentives
 - Participating Contractor rewards can be found in Table 3: Participating Contractor Reward
 - Incentives listed in this table are included in the total incentives.
 - The Electric Utilities reserve the right to change the incentive offering at any time. If changing the incentive structure becomes necessary, the Electric Utilities will give a minimum of 30 days of notice to Participating Contractors via email.

Q21. In a commercial application, if a company decides to build their new addition with ASHPs, do they have to use the whole building in the load calcs to get full load rebates?

- Yes, for a category 2 rebate the full heating load of the building/metered area must be met. Category 1 is designed for additions/small spaces not currently being served by the existing building heating system.

Q22. How should a detached structure be treated with regard to Manual J? Should it be part of a block load or should one be performed? This refers to Category 2.

- We have been treating separate detached structures on the same property as their own unique projects, with their own separate load calculations for Category 2.

Q23. Is decommission required?

- No

Q24. If the systems are installed at the same address at different times, do we use the same Manual J report?

- Unless load calculations have changed, it would be the same data and the original Manual J should be fine.

Q25. Have you added the dedicated WWHP for DHW to the online application? When applying previously we had to use ASHP.

- We do have this measure, which falls under incentive Category 8, in the OITs for Con Edison, O&R, NYSEG and RGE territories. We plan to have this added to the Central Hudson OIT the 2nd week of April.
 - ICF does have a workaround in place for Central Hudson, if anyone has questions on how to use this workaround please contact Matt Siano directly.

Q26. The points brought up were other points brought up during our contractor focus group.

- In reference to earlier discussion. Mike L'Ecuyer following up.

² NE: NY Proceeding, NYS Clean Heat: Statewide Heat Pump Program Manual ("Program Manual"), (initially filed on March 16, 2020 and refiled May 29, 2020).

Q27. The tool you all shared with us today is designed for larger commercial and MF, perhaps you all should consider a simple one for SF?

- The Zonal Load Calculator can be used for single-family houses that contain up to 11 unique Heat Pump systems. We have separate versions for large commercial, custom MF, where there may be dozens of units. The questions remain the same, the only added complexity between the two are having more units to enter.

Q28. Let's say the customer installed one unit in JAN, then installed 3 units in Mar. Should I use the report I used in January or make a new one?

- Unless load calculations have changed, it would be the same data and the original Manual J should be fine.
- If equipment sizing is different based on the space it is covering an application would require a new Manual S.

Q29. To summarize, Mitsubishi's rating used to be "delivered" btu's. Now, it's "created" btu's. They are capable of delivering far less capacity than what's on their submittal (and used on the NEEP sheet). Look at the specs for identical model numbers from two years ago and you'll see minimum outputs are MUCH less.

- Mike L./ICF following up.

Q30. Previous contractor is correct, we have to calculate for Heat load. It is frustrating when the stated cooling is too high for your criteria. The Mitsubishi ASHP are capable of modulating the cooling.

- In reference to earlier discussion. Mike L./ICF following up.