

## THERMAL ENERGY TRANSFER SPECIALIST/HVACR

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Sherri L. Golden, RMC Secretary of the Board 44 South Clinton Ave., 1st Floor PO Box 350

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Email: board.secretary@bpu.nj.gov Reference: Docket No. GO23020099

Dear Secretary Golden:

At the conclusion of our organization's thorough review of the straw proposal we wish to respectfully submit our comments and concerns. The proposal, as we interpret may seriously affect our more than 32,000 New Jersey family members who have family members employed in the HVAC industry, and more directly the 11,000 Licensed HVACR Contractors ability to deliver the EE/BD programs, not to mention our ability to serve the best interests of our customers, NJ Ratepayers.

As you know, the HVACR Industry's participation is instrumental in ensuring the success of the EE programs. Additionally, it is the robust contractor network that raises business and homeowner's awareness of the State/Utility program offerings, acting as ambassadors and educators for the consumer.

After reviewing the Straw Proposal, my team has developed a list of comments. Our comments we believe, if accepted, would lead to a successful transition of the proposed EE/BD plans. As a company we are fully aware, if the plan is adopted as is that a failed transition would be tremendously detrimental to the New Jersey's rate payer's ability to afford the initial project cost of BD, as well as the long-term cost of operating the suggested systems. We also have technical and logistical concerns for our customers.

While we understand the long-term goal of "electrification" is not a viable solution for everyone at this time, we don't want to see lost opportunities for ratepayers to save energy and upgrade to higher efficiency gas/propane equipment.

Please consider the following points and accept the following suggestions which address concerns we have in the Straw Proposal, and the delivery of the Program(s) in general:

There is a reference to a premise that "The replacement heat pump operates for cooling and heating and must be sized to meet the full heating demand load." For both hybrid and full Heat Pump Conversions.

Heating capacity needs in NJ are significantly higher than AC requirements.

This is in direct conflict with both NJ and International Mechanical Code requirements which states heat pumps need to be sized to cooling load requirements.

This is also in direct conflict with ACCA Manual J & Manual S, which are ANSI approved standards.

The reasons for this are many and we would be happy to facilitate a discussion as to the many points, but first and foremost is comfort, humidity control (a health and safety concern) as well as that larger capacity equipment is less efficient.

Sizing of heat pumps should follow Manual J & S protocols and International Mechanical Code.

Larger capacity heat pumps largely do not meet current EER2/SEER2/HSPF2 Program requirements.

(Heat pumps in general are hard to qualify for incentives, this should be considered and addressed as well)

This sizing requirement would also require electrical system upgrades in many cases.

Despite incentives this would still add additional cost to our customers.

A large percentage of system replacements are performed on an emergency basis where there would not be time to perform said upgrades leaving NJ residents without heating or cooling for an extended period.

Covering the entire heat load with a heat pump would also be more expensive to operate in heating season than high efficiency natural gas once the economic balance point was met.

Homes that do not have air conditioning now may not have room outside for condensers causing zoning issues. Structural & safety issues if units must be placed on rooftops.

A strong alternative (especially as a transitionary step) would be to incentivize "Hybrid Gas/Electric Systems" with the heat pump sized according to code/industry standards to AC load.

This can be done for a minimal increase in installation cost if incentivized appropriately.

There is reference to this as an alternative with an existing furnace, but not a new high efficiency furnace hybrid system.

The most efficient cold climate heat pumps generally cannot be paired to just any existing furnace, it must be a fully matched system.

This idea of converting existing furnaces into hybrid systems will lead to the unintended consequence of both lower efficiency heat pumps being installed as well as people retaining older, lower efficiency furnaces instead of upgrading to the most efficient heat pumps and higher efficiency furnaces.

We are also unaware of any heat pump that would qualify for current program efficiency standards on an unmatched existing furnace.

Midstream Incentives/General EE Program Structure:

The Straw Proposal states, "Utilities should also include mid-stream incentives in both EE and BD programs for contractors to encourage adoption. Further, incentive structures should be designed to be as simple as practicable to support program accessibility and uptake."

There are "mid-stream" programs in PSEG Territory.

It is a good program in general, except for the "mid-stream" component. It has the exact opposite effects of encouraging contractor participation or making things simpler and is also less attractive to consumers and convolutes marketing messaging.

Many distributors don't want to get involved as it is an additional administrative burden on them.

Multiple distributors have told us they don't even understand why they are involved in this.

Many contractors refuse to participate in the program as the additional parties involved cause paperwork going from contractor to utility, utility to distributor, distributor back to utility, and then utility back to distributor, then payment from distributor to contractor. And this all holds up the financing payment from utility to contractor, creating a large financial burden on contractors.

This process creates a lot of failure points and adds tremendously to contractor payment timelines.

Contractors need timely payment of incentives to pay their bills, or they will not participate.

Incentives to consumer are less because of the extra administrative costs, which makes the programs less desirable.

There are a lot of times where multiple vendors are used on the same project and this creates even more confusion and hardship.

More consistency across utility programs is critical, and work should be done to coordinate better alignment across territories. Most of our members service multiple utility territories (and a lot of our customers have multiple utilities)

From an administrative standpoint, it is burdensome to have multiple rebate/financing processes and discourages contractor participation.

From a marketing perspective, most media outlets also cross utility territories so creating a compelling offer is confusing to the consumer at best and nearly impossible because of the small differences in the programs.

On Bill Repayment Programs

Are a great resource for the ratepayer and have helped tremendously in incentivizing high efficiency upgrades. But payment timelines and streamlining of paperwork has to be improved to get more contractors to participate.

Administrative burden and open receivables discourage contractor engagement.

Heat Pump Water Heaters

While a great solution in certain applications, they cannot be installed in every home.

They require electrical upgrades.

They are supposed to be installed in wide open spaces to operate properly, and in areas where the output of cold air they produce would not have a negative effect to comfort.

So basically, unfinished basements.

They can also be more expensive to operate than high efficiency gas water heaters.

Gas appliance incentives

While we understand that the state's long-term goal is BD/Electrification, but the need to incentivize upgrading to high efficiency gas equipment is still important.

There are significant efficiency savings to be gained.

It would be counterproductive to leave those savings unachieved if people opted to keep repairing older inefficient systems, or just replacing them with base efficiency because of the added costs of BD.

Affordability

Financial Burden even with incentives may be unaffordable to many. Will they be able to afford the operating costs? They will be making health & safety decisions. Will they be forced to operate unsafe equipment? Will they be forced to forego heat, use space heaters, ovens etc. or make life altering changes. As an example, California saw a decrease in permit applications when new, more difficult standards were introduced. Bureaucracy and application challenges will force more off the record installations without permits-Health & safety. This may be a larger problem in underserved communities where municipal budgets are stretched and focus is on other issues. In addition:

BD projects will cost considerably more upfront even with federal/local incentives due to:

**Equipment Costs** 

**Installation Costs** 

**Electrical Upgrade Costs** 

Operating Costs are significantly higher for electric equipment as well.

This is particularly concerning for LMI ratepayers.

Joseph R. Shauger

We would like to thank you for taking the time to read our comments.

We would be more than happy to discuss our comments further as well as review the practical implications of contractors delivering the Programs to ratepayers with all interested parties. As well as facilitate with ACCA Nationals Standards Development team to discuss the importance of proper sizing to Manual J & S standards.

Respectfully,

Joseph R. Shauger

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