

March 27, 2024

Secretary of the Board
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Trenton, NJ 08625-0350
Posted via <https://publicaccess.bpu.state.nj.us/>
CC: board.secretary@bpu.nj.gov

**Re: FY24 Compliance Filing
New Construction Energy Efficiency Program Updates**

Dear Secretary Golden,

Thank you for this opportunity to comment on the proposed New Construction Program updates contained within the TRC FY24 Compliance Filing dated March 6, 2024.

These comments are respectfully submitted by ReVireo specifically regarding non-residential projects. ReVireo submitted separate comments jointly with MaGrann and EAM regarding residential projects.

ReVireo has been a partner in the Pay for Performance New Construction Program since 2019 and works with non-residential building developers to implement energy efficiency objectives.

In general, we are supportive of the proposed New Construction Program (NCP) for non-residential buildings and offer the following feedback on some specific elements of the filing:

1. Site Energy

In several sections of the proposed NCP, site energy was selected as the metric for comparison to the baseline. It is unclear why this metric would be selected. The goal of the program should be to reduce greenhouse gas emissions. Selecting site energy savings as the metric does not achieve this goal as it disproportionately favors electric resistance heat over much more efficient condensing boilers/furnaces. On a site basis, electric resistance heat is 99% efficient. While on a source or GHG basis, electric resistance is about 3 times less efficient. Please note that many baselines (Appendix G and the UDRH) use gas. So, on a site basis, by using electric resistance heat you would see more savings than using a 97% efficient condensing gas furnace or boiler. It is unclear why NJCEP would want to favor less efficient equipment. Instead, we would propose using the metric for which you are trying to save, which is GHG. It is very easy to convert from site energy to GHG and we think this should be done.

2. Prevailing Wage



We feel the biggest obstacle to participation in NJCEP is the applicable prevailing wage requirement for all non-residential buildings. As stated in the filing, all non-residential projects participating in NJCEP programs are subject to prevailing wage requirements. From our perspective, this drastically reduces participation by non-residential projects, particularly those of smaller scale. The non-residential building projects that we observe meeting prevailing wage requirements are primarily those with public financing that also carries the same requirement. As a result, the prevailing wage requirements present a significant obstacle to participation by non-residential buildings financed by other mechanisms. This is because meeting such requirements for a non-residential building, for example, may reportedly increase *total project cost* by an estimated 30-50% or more, far outweighing the incentives offered by the program.

We conjecture that the intent of the applicable law was to ensure compliance of large buildings with prevailing wage requirements. But the law has the unintended consequence of prohibiting participation by any type or size of non-residential building, including those for which compliance with prevailing wage requirements is practically infeasible. While the BPU, NJCEP and program partners do not administer this law directly, we strongly request that exemptions be made for smaller scale non-residential buildings.

High Performance Pathway LEED v4.1

We think the language should be clarified to explicitly specify actual LEED v4.1 certification for eligibility, which we believe is the intent. The compliance filing language says: “must submit documentation establishing that they have satisfied the requirements for LEED certification,” which could be misinterpreted to mean that self-attesting equivalency /conformance with LEED v4.1 requirements is enough to be eligible for rebates.

We would also suggest including a Pre-Design Bonus, as the current Pay for Performance program does. We think the simplified modeling tool would be better used for this than for a separate pathway (see below).

High Performance Pathway Non-Proxy

The compliance filing doesn't say if ENERGY STAR/DLC lighting certification will be required to claim energy savings for lighting, as it is for the current Pay for Performance program that is the predecessor to High Performance Pathway Non-Proxy. We suggest it shouldn't be, especially it because the EPA is in the process of [phasing out ENERGY STAR lighting by the end of 2024](#). Additionally, the DLC website is incredibly hard to navigate, and the number of fixtures is very limited. This is a significant burden on both the project team and the partner to continuously verify whether fixtures are complying or not, especially because light fixtures change all the time on projects. We suggest not including this lighting requirement in the High Performance Pathway Non-Proxy in order to increase participation.



We applaud that the base rebate of \$1/sf is more than the combined Tier 1 rebate for Stage 1 and Stage 2 of the current Pay for Performance program. We would suggest including a rebate for achieving ENERGY STAR Commercial Building certification based on benchmarking, as the current Pay for Performance program does.

We would also suggest including a Pre-Design Bonus, as the current Pay for Performance program does. We think the simplified modeling tool would be better used for this than for a separate pathway (see below).

Streamlined Pathway

We believe the simplified modeling software would be more appropriately used to qualify for a pre-design bonus under the High Performance Pathway (LEED v4.1 and Non-Proxy) and should not serve as the basis for its own pathway. We would suggest not introducing the Streamlined Pathway, which has no precedent in current NJCEP program offerings. We believe it will confuse the marketplace, disconnect participants from energy consultants, and cannibalize participation in the High Performance pathway that is most comparable to the current Pay for Performance program. Or, at least, there needs to be more of a difference in incentives for it versus the High Performance Pathway.

It is unclear if the intention of the Streamlined Pathway is for energy consultants in an open market to utilize Sketchbox or if the intention is to create a closed-market incentive tier with Slipstream interfacing/contracting directly with program participants. The former is less objectionable, but we don't think either is advisable. We have watched the 1-hour long demo on Sketchbox. It is a good tool for guiding early stage (concept/SD) decisions relating to things like mechanical systems, etc., and might eventually serve as a usable replacement to a simplified "Box model" in eQuest or similar software. We think it makes sense to integrate this tool into qualification for a Pre-Design Bonus in the High Performance Pathway.

Unlike a simplified "Box model" in eQuest, a Sketchbox model can never be turned into a fully detailed energy model. It doesn't seem logical or prudent to extend the use of this software beyond that and especially not to take the unprecedented step of creating an incentive tier entirely based around it. Slipstream itself says it's for concept phase design. There is no clear process to use it for verifying energy savings in the as-built stage, for training and accreditation by consultants, or for quality assurance of installed energy saving measures. This tool cannot be used for energy code compliance, nor for green building programs certification (e.g., LEED), nor for federal energy efficiency incentives of any kind. Its applications are really limited.

There's so much unnecessary complication introduced by this. The Streamlined Pathway would be dependent on one vendor, that is a venture-backed startup. We know the intent is to try to eliminate a market gap, but we don't think this does that.



For non-residential buildings, the 2021 NJ Energy Code that took effect in 2023 includes significant upgrades to prescriptive requirements that make the Performance pathway of the energy code, which uses whole-building modeling well worth the small incremental cost over COMcheck (a few thousand dollars in many cases) bearing given the savings on material and equipment costs. The idea of trying to steer people away from energy modeling, which is the basis for better energy code compliance and other above code certification programs, is the wrong direction to push the market in our opinion.

We reviewed the presentation from Pacific Northwest National Laboratory (PNNL) on the Simplified Performance Rating Method. The PNNL presentation is largely about the fact that few commercial building projects demonstrate compliance via the Performance pathway of the commercial energy code (which uses whole-building energy modeling). We completely agree with everything in the PNNL presentation, including the objective of getting more building projects to use the Performance pathway in the commercial energy code. The PNNL presentation seems to be advocating for allowing the use of simplified energy modeling tools to be used for commercial energy code compliance for certain building types, and that seems like a good idea to us if it were allowed by code. However, nothing in the PNNL presentation talks about using simplified energy modeling tools as the basis for awarding rebates for verified as-built energy savings. Is NJCEP sure the pilot that PNNL was exploring was to use this software as the basis for awarding rebates for verified as-built energy savings above code? As opposed to a pilot in which this software is used to show compliance with commercial energy code (via performance pathway) based on the design of the building when applying for a construction permit?

We do think it makes sense to incentivize the use of simplified energy modeling tools in the early design stage of commercial projects and we fully support the idea of a rebate to do that. We just don't think it makes sense to try to use simplified energy modeling tools to document verified as-built energy savings, which is not the intended purpose of the software that is explicitly designed to be used in concept/early schematic design stage to do quick, high-level energy efficient design analysis. Besides the fact that the simplified energy modeling tools are not intended by their developers to be used to document verified as-built energy savings post-construction, it would be an incredible amount of work for TRC to try to create an entire pathway through construction/as-built stage around the use of this simplified energy modeling software. It would be like creating a new Pay for Performance program from scratch except with worse tools. You'd have to create a whole new set of requirements/guidance and systems for credentialing, commissioning, quality assurance, and other processes to document verified as-built energy savings through construction/occupancy using a software that isn't meant to be used for that. Not to mention that there seemingly isn't any independent way to measure/correlate verified as-built savings achieved (compared to rebate dollars paid) in such a hypothetical streamlined pathway with those achieved in the high performance (or even bundled pathway). So, we don't know how rebate amounts could be independently justified to stakeholders and reported to BPU.



Thank you again for the opportunity to provide comments and to be engaged in the program update process. We look forward to continuing to support the evolution of a program that is critical to achieving New Jersey's energy goals, to our many developer clients, and most importantly to the construction of sustainable, affordable, high-performance buildings.

Sincerely,
Matthew Kaplan
ReVireo

