

CHP Partnership Webinar Q&A log - NYSERDA CHP Catalog

Questions directed to NYSERDA:

Q1: Will these slides be made available to attendees?

A1: [written by ERG during webinar] Yes. Slides and a complete Q&A document will be posted on the EPA CHP website in about one week. When the documents are available, all attendees will be notified via email with a link to the files.

Q2: Are the rebates available to third party owners of chp systems (e.g PPA, operating leases)?

A2: The NYSERDA program is intended to place the vendor of the integrated CHP package in a long-term relationship with the building and to hold them responsible for the quality of the package, the quality of the installation process, and the quality of the on-going maintenance regardless of whether they performed these actions themselves or whether they directed their subcontractors to perform – the vendor is responsible for all of the workmanship. To reinforce this arrangement, the vendor is the only entity that can submit an application, and NYSERDA will contract only with the vendor, and as such, NYSERDA will make payments only to the vendor. The vendor is allowed to establish whatever business relationships they want with the building or with some other third party, and the building owner or that third party are informed of the magnitude of the NYSERDA award to the vendor and hence can negotiate proper value.

Q3: Bonus payment... is that 10% of total project cost? Can you put some context around that number?

A3: There are two possible bonuses, each at magnitude ten-percent. There is a “critical infrastructure” bonus, and there is a “Con Edison targeted zone” bonus. As an example, consider a package that gets a base award of \$200,000 -- if the project qualifies for one bonus it would receive \$220,000 and if it qualifies for both bonuses it would receive \$240,000. In no case would the bonus be allowed to cause the award to exceed \$1.5 million.

Q4: what documentation is required for a targeted zone

A4: The street address and geocode (longitude, latitude) location where the CHP package would be installed should be compared to the Con Edison targeted zone maps and indicated on the PON 2568 application form. During review of the application, NYSERDA will compare the street address and geocode to the Con Edison targeted zone map, and if the site is within the targeted zone, NYSERDA will put the bonus funds in an escrow account and will release those funds to the vendor if and only if the project is commissioned prior to May of the triggering year specified on the targeted zone map for that specific targeted zone. NYSERDA will consult with Con Edison to make definitive determinations for projects that are right on the border of a targeted zone map.

Q5: Would the CHP Acceleration Catalog Program be eligible to customers who do not pay into the electrical SBC but are firm gas customers paying the NG SBC?

A5: If they are located in the “Downstate (New York City and Westchester County)” territory – yes.

Q6: As I understand it, the vendor makes the application, provides and installs the system, and receives the rebate, right?

A6: Yes. The vendor can perform the installation themselves, or they can subcontract that (or any other) portion of the work to their chosen team member, but the vendor remains responsible for all of the workmanship, and as such, NYSERDA's payment is made to the vendor.

Q7: Are there any fuel cell systems in the catalog?

A7: The PON 2568 catalog does not include fuel cells -- but there is a separate catalog exclusively for fuel cells which has incentives that are generally more-lucrative on a dollars-per-kW basis. The fuel cell catalog program does have a smaller pool of funds (\$3.6 million per year for calendar years 2013-2015 = \$10.8 million pool), but it is exclusively to fund fuel cells, and supports those fuel cells on our PON 2157 list of pre-approved equipment (based on vendors opting-in and showing that their product is ANSI FC1 certified, etc.) and this fuel cell program does not mandate that the equipment be installed in "CHP" configuration and thus is supportive of a variety of products including the Bloom Energy product (please see

<http://www.nysderda.ny.gov/Funding-Opportunities/Current-Funding-Opportunities/PON-2157-Renewable-Portfolio-Standard-Customer-Sited-Tier-Fuel-Cell-Program-large.aspx> and please see <http://www.nysderda.ny.gov/Funding-Opportunities/Current-Funding-Opportunities/PON-2157-Renewable-Portfolio-Standard-Customer-Sited-Tier-Fuel-Cell-Program-small.aspx>). The fuel cell program provides a much more lucrative dollar-per-kW incentive than the CHP program -- in the PON 2568 CHP program a "black box" that produces 300 kW can get an incentive of \$510,000 while in the PON 2157 fuel cell program a "black box" that similarly produces 300 kW can get an incentive of \$1 million.

Q8: The additional \$40MM in funding for the CHP Acceleration Program is allocated for downstate region projects, correct?

A8: The additional \$40 million is only for projects in the Con Edison territory.

Q9: Does the CHP incentive application require utility interconnection approval prior to the grant being issued?

A9: The PON 2568 application submitted to NYSEDA must demonstrate that an electric interconnect application regarding the project has been submitted to the electric utility, and that a Preliminary Determination and Cost Estimate for the Coordinated Electric System Interconnection Review (CESIR) has then been provided by the electric utility. Additionally, the PON 2568 application submitted to NYSEDA must demonstrate that the natural gas utility has issued a preliminary determination indicating that sufficient volume and pressure of natural gas is available to serve the project.

Q10: are the approved systems capable of parallel operation with emergency diesel generators and/or islanding?

A10: All of the approved systems are capable of utility-parallel operation on regular days, and islanded operation during utility grid outages, and must be installed and commissioned to show that these configurations work properly.

Q11: How many projects have been funded by the catalogue PON?

A11: A few additional applications have been received in the week since the webinar was held. As of November 8, 2013, twelve (12) applications have been received, four (4) of which have been approved by NYSEDA and had their contracts mailed to them, and the other eight (8) are at the stage where their paperwork is being processed by NYSEDA.

Q12: For pre-qualified systems, how many real world systems did you see data for in order to pre-qualify them? Ten? Five? Twenty-five? Was this data from utilities or manufacturers?

A12: No standard number has been chosen as the threshold so far. Approval will depend on previous experience with the individual components as well as previous experience with the fully-integrated system. It turns out that the packages which have received pre-qualification status so far have had field experience of the fully-integrated system with at least four (4) projects and other experience with over twelve (12) projects using the prime movers in non-packaged settings. In theory, a conditionally-qualified system could graduate to pre-qualified status if approximately four (4) of the fully-integrated systems demonstrate good in-field performance.

Q13: Are NYPA Governmental Customers in South East New York eligible for both PON's 2568 and 2701?

A13: Customers who do pay into the electrical SBC are eligible for both PON 2568 and PON 2701. Additionally, customers located in the "Downstate (New York City and Westchester County)" territory who do not pay into the electrical SBC but are firm gas customers paying the natural gas SBC, such as several NYPA customers and many buildings owned by the government of the City of New York, are eligible for both PON 2568 and PON 2701 (please note that PON 2701 does further extend this eligibility provision for gas-SBC-paying customers to customers in Nassau and Suffolk County, but PON 2568 does not provide for extension to such other customers).

Q14: Can a systems integrator using a listed vendor qualify under PON 2701?

A14: PON 2701 does not rely on a "pre-qualification" approach, but instead reviews each application on a case-by-case basis to ensure the proposed system will meet efficiency and cleanliness criteria as designed for use at the particular building.

Q15: All the example projects had an absorption chiller. Is this required?

A15: No. Please note that there are several packaged systems approved in PON 2568 which do not have absorption chillers.

Q16A: What is the likelihood of NYS allowing net metering?

A16A: For the CHP systems of the type and size addressed by PON 2568 to become eligible for net metering in New York State there would need to be new legislation passed and signed into law.

Q16B: What is the difference between pre-qualified and conditional qualified?

A16B: Conditionally-qualified status is designated for packaged systems where NYSERDA has observed the individual major components of the package operating successfully in the field, and based on engineering analysis, NYSERDA can envision that the integration of those individual items into the package appears to be well-matched (although an example of the actual integration has not yet been observed) -- NYSERDA will restrict to a limited few the number of awards to fund installation of a package which bears the conditionally-qualified status and then observe their performance in the field to assess whether to graduate that package to pre-qualified status (also thought of as "fully-qualified" status). Pre-qualified status refers to a packaged system where NYSERDA has observed sufficient examples of the as-is fully-integrated package operating successfully in the field -- NYSERDA will award funds for installation of an unlimited number of a package which bears the pre-qualified status.

Q16C: We have been having a hard time with the application for registering as a certified CHP vendor. Who can help us with this?

A16C: [written by ERG during webinar] Vendors of CHP systems with demonstrated performance may apply for pre-qualification/conditional-qualification/approval through RFI 2568 CHP Acceleration Program – CHP System Pre-Qualification. NYSERDA may fund, on a case-by-case basis, the demonstration of new CHP systems that would be likely to, but may not yet, meet the eligibility requirements for pre-qualification or conditional qualification under RFI 2568. Contact Edward Kear (518-862-1090 ext. 3269, ebk@nyserda.ny.gov) for more information. Comprehensive information about the program is available at <http://www.nyserda.ny.gov/PON2568>.

Q16D: where can we access the catalogue?

A16D: [written by ERG during webinar] Comprehensive information about NYSERDA's CHP Acceleration Program is available at: <http://www.nyserda.ny.gov/PON2568>

Q16E: Can we get a copy of these presentations?

A16E: [written by ERG during webinar] Slides and a complete Q&A document will be posted on the EPA CHP website in about one week. When the documents are available, all attendees will be notified via email with a link to the files.

Q16F: 8 applications received but have any been approved and funded?

A16F: A few additional applications have been received in the week since the webinar was held. As of November 8, 2013, twelve (12) applications have been received, four (4) of which have been approved by NYSERDA and had their contracts mailed to them, and the other eight (8) have their paperwork being processed by NYSERDA.

Q16G: Is there a requirement for a minimum efficiency of the equipment? For example: You can install a vendor catalog system, but if the thermal loads do not line up, then the thermal output cannot be used. Are there any requirements for utilizing the entire thermal output?

A16G: NYSERDA seeks to support CHP systems that have a design basis to achieve 60% or greater annualized fuel use efficiency (as measured on a Higher Heating Value basis). A system which may perform at 80% efficiency during the Summer and during the Winter, but is only 50% efficient during the shoulder seasons, will have an annualized efficiency of about 65% and this would be sufficient to meet our 60% threshold. Projects in PON 2568 adhering to the streamlined sizing guidelines established by NYSERDA for a few end-use sectors will be presumed by NYSERDA to meet our 60% efficiency goal; projects in PON 2568 which may have unique thermal loads that could justify up-sizing above the guideline (or projects in PON 2568 at end-use-sector buildings for which a sizing guideline does not currently exist) are invited to convince NYSERDA on a case-by-case basis that the project is likely to meet the 60% efficiency goal. Specifically in PON 2568, the NYSERDA financial award is based on design-intent (not the actual as-measured performance) and therefore the full NYSERDA financial award will be provided to a project in PON 2568 that reasonably appears to NYSERDA to be likely to meet the 60% goal, even if, for whatever reason, after installation it is shown to not meet the 60% goal (that is to say, in PON 2568, NYSERDA will not reduce an award due to a project's low performance). NYSERDA will offer free technical advice to help a low-performing PON 2568 project identify opportunities for improvement. Please note, however, in PON 2701 incentive payments are performance based and projects that fail to meet the performance requirements of PON 2701 may have their award reduced.

Q16H: I'd like to see a webinar on PON 2701, case studies, vendors, etc.

A16H: The NYSERDA team that administers PON 2701 has been informed of, and will consider, this request.

Q16I: I understood to max efficiency on a CHP system you start with the heat load. How does heat load play into identifying a specific piece of equipment?

A16I: By design, a CHP system (packaged or otherwise) is capable of producing a maximum amount of electricity and useful thermal energy. The optimal selection of a particular CHP system for a facility is typically dependent on matching the thermal capacity of a CHP system with a facility's heat load/demand. General information about the design of CHP systems and prime mover technologies is available at: <http://epa.gov/chp/basic/index.html>, and more specific information about developing CHP systems is available at: <http://epa.gov/chp/project-development/index.html>. Consideration of typical heat loads was a key aspect used by NYSERDA to determine the streamlined sizing guidelines established for PON 2568. NYSERDA will pay particular attention to heat loads for a PON 2568 project that requests a case-by-case review by NYSERDA in the event they seek to up-size above the sizing guideline (or for an end-use-sector building for which a sizing guideline does not currently exist).

Q16J: The NYSERDA CHP PON focuses on CHP plants above 50kW. I wanted to know if resources will be made available for <50kW size CHP plants. For small buildings, or directly metered buildings - common area apartment load would be ideal for microCHP's <50kW. Many buildings in our portfolio have loads that are too small for 50kW units, but would like CHP.

A16J: PON 2568 size range of 50 kW to 1.3 MW is contemplated to persist throughout NYSERDA's current funding cycle as established for SBC Phase 4 (also known as the Technology & Market Development Program, which is scheduled to run through 12/31/2016). NYSERDA envisions that eventually, after prove-out of the "catalog" concept of PON 2568, it would seem logical to consider extending the size range to systems smaller than 50 kW.

Questions directed to Aegis:

Q17: [Can you expand on] The perspective of two CHP vendors including, the process undertaken to become a pre-qualified vendor, example projects implemented through this PON, and experience gained and lessons learned in the process.

A17: We believe that we answered this throughout our 20 minute presentation. Please review the presentation, especially the slide titled "Conclusions".

Q18: Aegis - what gas pressure is required?

A18: [Answered by panelist during webinar]

Q19: How many kWh el are being generated annually at the Birchwood project?

A19: 1,212,590 kWh annually.

Q20: How well did the case studies interconnection with the utility go?

A20: [Answered by panelist during webinar]

Q21: Could you provide more info on financials. (ROI, payback period)

A21: [Answered by panelist during webinar]

Q24: What project have they done under new PON2568? Can he talk about it?

A24: We highlighted Birchwood Towers and The Hamilton in the presentation as projects we completed using PON 2568.

Q25: Please put AEGIS contact info back on the screen.

A25: Dale Desmarais (Sales & Marketing Manager, Aegis Energy Services, Inc., 413-536-1156, DDesmarais@aegisenergyservices.com)

Questions directed to Tecogen:

Q26: Can your systems run on propane?

A26: [Answered by panelist during webinar]

Q27: [Can you expand on] The perspective of two CHP vendors including, the process undertaken to become a pre-qualified vendor, example projects implemented through this PON, and experience gained and lessons learned in the process.

A27:

Q28: Does Tecogen monitor real time performance of their systems?

A28: