

Improving Building Performance Webinar

Questions Log

Note: The following log contains answers to only those questions that were not answered during the webinar. Answers to the other questions can be accessed on the video of the webinar.

Q1: Danbury CT or MA?

A1: [written by ERG during webinar] Danbury, CT.

Q2: Can you talk about the duration that a property can be "islanded" with a CHP system and the implications for emergency response? If the CHP is on gas, how resilient is that?

A2: [Answered by panelist during webinar]

Q3: Where can we obtain the presentation slides?

A3: [written by ERG during webinar] A recording of the webinar and each set of slides will be available on EPA's CHPP website: <http://epa.gov/chp/events/past.html>.

Q4: What advantage does an owner have by certifying his building with the LEED standard?

A4: [Answered by panelist during webinar]

Q5: In slide 11, does maintenance cost include fuel? Microturbine cost looks high relative to recip.

A5: "Maintenance cost" does not include fuel. Fuel cost is accounted for separately.

Q6: What is a dump radiator? Is it where the heat can be captured from a reciprocating engine?

A6: A dump radiator is a big fan that blows air across a coil from a glycol loop connected to the reciprocating engine. Because reciprocating engines are water-cooled, the radiator is required to remove heat from the engine using this glycol loop in the event that heat cannot be used in the building. Without a way to remove the heat from the engine, the system would overheat and cease to function. Microturbines are air cooled, and so are able to reject heat directly to the atmosphere, which is why they have a very high ventilation requirement relative to reciprocating engines.

Q7: Backup Power Question: It was mentioned that Capstone can eliminate the need for a diesel or oil backup generator. Does this include the fire pumps? With a capstone, you can use it for fire pumps, but not with a recip engine? This is VERY important.

A7: [Answered by panelist during webinar]

Q8: Has anyone calculated the avoided costs that can be added to the payback for a black start capable system which typically costs more to purchase/install?

A8: [Answered by panelist during webinar]

Q9: None of the presenters have addressed the issue of ground level pollution levels. Granted that CHP units are more efficient than central generation of electricity and/or steam, the exhaust for a CHP unit is

so much closer to the ground and may have adverse impacts to the local populations. Have the speakers addressed this in any of their installations?

A9: New York City and New York State regulate air emissions through the Departments of Environmental Protection and Environmental Conservation, respectively. New York City Department of Buildings regulates the location of exhaust flues, which, in cogeneration systems, are the point source of air emissions. All installations must comport with the requirements imposed by these agencies.