

APPENDIX C: EXISTING CHP SITE INTERVIEWS

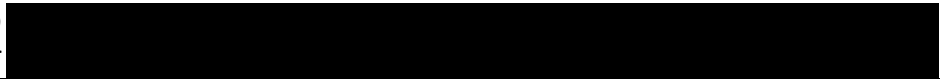
STATE OF VERMONT
COMBINED HEAT AND POWER SURVEY

COMPANY CALLED
POINT OF CONTACT

DESCRIPTION OF THE FACILITY	18 months ago a consortium of organizations installed a new steam turbine at XXXXXX. Since then it has become frozen and no one will step forward for the repairs. XXXXX also has a Skinner generator from the 30s that they may reactivate within the next 90 days.
IS THE FACILITY STILL BEING USED?	No.
HOW MUCH TIME PER DAY (?) WEEK (?) MONTH (?) IS THE FACILITY USED?	0%
WHY IS THE PLANT IN LIMITED OPERATION?	See answer above.
WHY IS THE PLANT NOT IN OPERATION?	The new generator froze up and no one will step forward to repair it.
WHAT WOULD NEED TO BE DONE TO MAKE THE PLANT OPERATIONAL?	The XXXXX Board of Directors is contemplating restarting the Skinner.
IS THE PLANT COST EFFECTIVE?	No.
WHAT ARE THE DISADVANTAGES OF THE PLANT?	It doesn't work and no one will fix it.
WHAT ARE THE BENEFITS OF THE PLANT?	None.
ARE THERE ANY OTHER ISSUES THAT WOULD BE HELPFUL TO SHARE WITH SOMEONE CONSIDERING A CHP?	If anyone considers collaborating with others on a project, be sure to establish roles and responsibilities before work begins.

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DESCRIPTION OF THE FACILITY	XXXXX currently has oil and bio-mass steam boilers to generate electricity and heat buildings.
IS THE FACILITY STILL BEING USED?	Yes. It is important part of the campus infrastructure.
HOW MUCH TIME PER DAY (?) WEEK (?) MONTH (?) IS THE FACILITY USED?	Either the bio-mass or oil fired boilers are running constantly. XXXXX relies on the bio-mass first and supplements as necessary with the oil fired.
WHY IS THE PLANT IN LIMITED OPERATION?	
WHY IS THE PLANT NOT IN OPERATION?	
WHAT WOULD NEED TO BE DONE TO MAKE THE PLANT OPERATIONAL?	
IS THE PLANT COST EFFECTIVE?	The bio-mass pays for itself in oil cost savings.
WHAT ARE THE DISADVANTAGES OF THE PLANT?	
WHAT ARE THE BENEFITS OF THE PLANT?	Reduces dependence on oil, provides steam for heat and electric power generation and the residual ash is sold to farmers for use as livestock bedding.
ARE THERE ANY OTHER ISSUES THAT WOULD BE HELPFUL TO SHARE WITH SOMEONE CONSIDERING A CHP?	

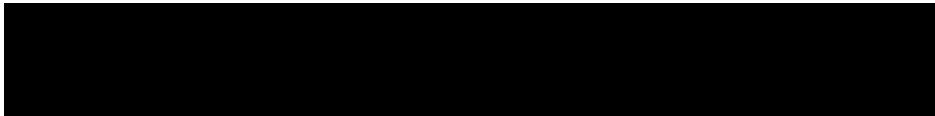
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[REDACTED]	[REDACTED]
DESCRIPTION OF THE FACILITY	XXXXX+B35 has both boilers and a back pressure generator on site.
IS THE FACILITY STILL BEING USED?	The boilers are being used to support the ovens and for generating heat, but the generator is not in use because it has been deemed as not being economical.
HOW MUCH TIME PER DAY (?) WEEK (?) MONTH (?) IS THE FACILITY USED?	None.
WHY IS THE PLANT IN LIMITED OPERATION?	It is not in limited operation.
WHY IS THE PLANT NOT IN OPERATION?	Due to economic considerations.
WHAT WOULD NEED TO BE DONE TO MAKE THE PLANT OPERATIONAL?	The question of economic feasibility is visited on a regular basis but there is no indication that the power generation will start up soon.
IS THE PLANT COST EFFECTIVE?	No.
WHAT ARE THE DISADVANTAGES OF THE PLANT?	Too expensive to generate electricity.
WHAT ARE THE BENEFITS OF THE PLANT?	None currently.
ARE THERE ANY OTHER ISSUES THAT WOULD BE HELPFUL TO SHARE WITH SOMEONE CONSIDERING A CHP?	No.

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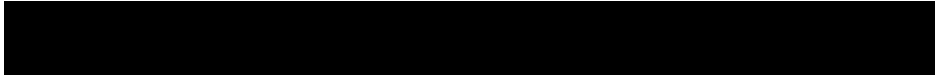


DESCRIPTION OF THE FACILITY	
IS THE FACILITY STILL BEING USED?	
HOW MUCH TIME PER DAY (?) WEEK (?) MONTH (?) IS THE FACILITY USED?	
WHY IS THE PLANT IN LIMITED OPERATION?	
WHY IS THE PLANT NOT IN OPERATION?	
WHAT WOULD NEED TO BE DONE TO MAKE THE PLANT OPERATIONAL?	
IS THE PLANT COST EFFECTIVE?	
WHAT ARE THE DISADVANTAGES OF THE PLANT?	
WHAT ARE THE BENEFITS OF THE PLANT?	
ARE THERE ANY OTHER ISSUES THAT WOULD BE HELPFUL TO SHARE WITH SOMEONE CONSIDERING A CHP?	

NO RESPONSE

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DESCRIPTION OF THE FACILITY	
IS THE FACILITY STILL BEING USED?	
HOW MUCH TIME PER DAY (?) WEEK (?) MONTH (?) IS THE FACILITY USED?	
WHY IS THE PLANT IN LIMITED OPERATION?	
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WHAT WOULD NEED TO BE DONE TO MAKE THE PLANT OPERATIONAL?	
IS THE PLANT COST EFFECTIVE?	
WHAT ARE THE DISADVANTAGES OF THE PLANT?	
WHAT ARE THE BENEFITS OF THE PLANT?	
ARE THERE ANY OTHER ISSUES THAT WOULD BE HELPFUL TO SHARE WITH SOMEONE CONSIDERING A CHP?	

NO RESPONSE

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DESCRIPTION OF THE FACILITY	The plant has a ChipTec Gasifier, a Hurst Boiler and 250 Kw Elliot turbine generator. The hospital uses this equipment to generate steam for heat and electric generation and for chilled water.
IS THE FACILITY STILL BEING USED?	Yes. It was installed in 2006 and has been in constant operation since then.
HOW MUCH TIME PER DAY (?) WEEK (?) MONTH (?) IS THE FACILITY USED?	Operation is pretty much 24 / 7, except once a week the operation is interrupted to clean out the ash, conduct a surveillance of the equipment and perform any maintenance required.
WHY IS THE PLANT IN LIMITED OPERATION?	It is not.
WHY IS THE PLANT NOT IN OPERATION?	It is in operation.
WHAT WOULD NEED TO BE DONE TO MAKE THE PLANT OPERATIONAL?	Nothing. In fact the hospital is exploring extending the heating and chilled water to other buildings on the campus.
IS THE PLANT COST EFFECTIVE?	Yes, very. Before the system was installed they burned 400,000 gallons of number 2 fuel oil. Now they consume about 30,000 gallons as back up and during maintenance periods. The ash is disposed of to an organic farmer who uses it as a soil supplement.
WHAT ARE THE DISADVANTAGES OF THE PLANT?	None.
WHAT ARE THE BENEFITS OF THE PLANT?	It has met or exceeded original expectations.
ARE THERE ANY OTHER ISSUES THAT WOULD BE HELPFUL TO SHARE WITH SOMEONE CONSIDERING A CHP?	Be sure to explore vendor support reliability and availability before buying equipment. Also try to purchase a more integrated system rather than taking the cafeteria approach to selecting equipment. It will reduce your integration and operation headaches.

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[REDACTED]	
DESCRIPTION OF THE FACILITY	Technically the operation could have heat and power, but the mill has been closed and there is no requirement for steam for the mill, therefore electricity is not being generated by steam. Electricity is, however, being generated through their hydro operation.
IS THE FACILITY STILL BEING USED?	No. Because there is not a dual use need for steam, it is considered not economically feasible to generate power alone. The bio-mass may be restarted to generate power sometime in the future, but not likely before 2013.
HOW MUCH TIME PER DAY (?) WEEK (?) MONTH (?) IS THE FACILITY USED?	
WHY IS THE PLANT IN LIMITED OPERATION?	
WHY IS THE PLANT NOT IN OPERATION?	Again, because there is not a dual use need, generating electricity using steam is not considered economically viable, at this time.
WHAT WOULD NEED TO BE DONE TO MAKE THE PLANT OPERATIONAL?	
IS THE PLANT COST EFFECTIVE?	
WHAT ARE THE DISADVANTAGES OF THE PLANT?	
WHAT ARE THE BENEFITS OF THE PLANT?	
ARE THERE ANY OTHER ISSUES THAT WOULD BE HELPFUL TO SHARE WITH SOMEONE CONSIDERING A CHP?	

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DESCRIPTION OF THE FACILITY	Had 2 heat capture systems . Heat process for water taken off CHP unit. Ran exhaust stack into heat exchanger for low temperature water for heat in building. Had 2 units totalling 370 kw. Used propane as fuel source
IS THE FACILITY STILL BEING USED?	No. Took out when GMP did reliability improvements in area and due to economic reasons
HOW MUCH TIME PER DAY (?) WEEK (?) MONTH (?) IS THE FACILITY USED?	When it was running used 20 hours per day for roast process
WHY IS THE PLANT IN LIMITED OPERATION?	Not in Use
WHY IS THE PLANT NOT IN OPERATION?	Not economic and reliability need gone due to utility work
WHAT WOULD NEED TO BE DONE TO MAKE THE PLANT OPERATIONAL?	
IS THE PLANT COST EFFECTIVE?	No. Too expensive and also increased companies carbon foot print. They were buying offsetting RECs on the secondary market which also caused costs to be higher
WHAT ARE THE DISADVANTAGES OF THE PLANT?	Ran out space for equipment. Needed space for other things. Replacement parts big issue as the equipment not supported anymore. Fossil fuel increased carbon footprint which company measures.
WHAT ARE THE BENEFITS OF THE PLANT?	Helped initially for reliability needs fo the company. Had unreliable power from local utility. Brown outs caused problems with manufacturing process, fire issues were a concern from the process work and the CHP unit took care of that issue.
ARE THERE ANY OTHER ISSUES THAT WOULD BE HELPFUL TO SHARE WITH SOMEONE CONSIDERING A CHP?	Would consider if locating in area with Natural gas and if payback < 5 years.