

**Answers to Wards Island RFEI Questions**  
*Updated - Posted 1/7/11*

- 1. Is there any current sense as to what other loads may be added to the new District Energy System (DES) outside of what is in the current DES?**  
*On the heat side, customers from the NYC Parks Department, RISA, and TBTA have expressed interest.*
- 2. In response to the RFEI question, “Would aggregating multiple facilities into one energy project increase the attractiveness of developing each? If so, why?” what, if any, other energy projects might there be planned?**  
*The City has set a broad goal of significantly increasing clean distributed generation in PlaNYC, and there are other facilities in the City, including DEP’s, where waste-to-energy concepts are being looked at.*
- 3. Can you confirm the planned shutdown date of the MPC boiler plant?**  
*The planned shutdown date is November 1, 2012.*
- 4. Can you confirm that all existing thermal energy supply contracts between the MPC and additional facilities (other than the WWTP) on Wards Island will be terminated upon closing of the MPC boiler plant?**  
*Yes, all existing thermal energy supply contracts will be terminated.*
- 5. Will current DES system users be contractually obliged to participate in the new DES, if an economically viable solution is brought to the table?**  
*No, the system users are not contractually obliged to participate in the new DES. However, if the overall project is desirable, then the City could consider being an anchor customer for the heat.*
- 6. The Feasibility Study does not recommend CHP, while the RFEI is looking for CHP as the desired solution. Has something changed in between the issuing of the FS and the RFEI?**  
*The feasibility study only looked at CHP in terms of the WWTP and its operation by in-house staff. The feasibility study did not consider a model that involved other off-takers or third party operators, and it did not look at larger scale cogeneration.*
- 7. Is it possible to obtain the scope from the recent electrical upgrade to the WWTP?**  
*The scope of the recent electrical upgrade to the WWTP included installation of a new fifth feeder to WI. Other primary substation upgrades include: 12 new breakers, a new transformer for one breaker, a new bus duct from transformer, three new breakers for emergency generator switchgear, modifying emergency feeders and connections, and providing new breaker interlock scheme.*
- 8. Is it possible to verify the loads for the two oil-fired boilers at the WWTP?**  
*There are four boilers at the Wards Island WWTP that all use #2 heating fuel oil only and each has 400 horsepower. There are 2 hot water boilers for dewatering; one high*

*pressure steam boiler for the administration building; and one steam boiler for the marine building. The administration and marine building boilers only operate when the WWTP does not receive steam from the hospital, otherwise they are exercised periodically. The dewatering building boilers are the main source of heat and are operated when weather conditions require it.*

**9. Is there any current intention to grant an extension to the Jan 14, 2011 RFEI deadline?**

*Yes, the deadline is extended until Friday, February 4, 2011, 4:00pm.*

**10. How much has the WWTP paid for its power by month?**

*The monthly costs vary with the level of consumption. For Fiscal Year 2010, approximately 8.5 million kWh were used each month (14,516 kW). The average monthly energy cost during the same period was \$728,800.*

**11. Does NYPA charge differently for peak and non-peak usage?**

*Yes, NYPA has different rates for on-peak and off-peak hours. The DEP WWTPs are subject to the NYPA Service Tariff 100, Service Classification 98.*

**12. Does the \$0.09/kwh NYPA fee get adjusted for inflation?**

*No, the fee does not get adjusted for inflation, but there are yearly adjustments based on fixed and variable costs associated with power supply procurement. NYPA is also in the process of decoupling cross subsidization between NYC Governmental customers. This will result in an increased cost per kWh for the DEP that is closer to what other city agencies pay.*

**13. When does the NYPA contract expire?**

*The contract expires in 2017.*

**14. Are the current DES buildings all hydronic buildings (heating and DHW via steam to HW Heat Exchanger)? If the answer is "yes," what is the peak supply temperature on the secondary side of the HX? If the answer is "no," what is the max steam pressure required to the inlet side of the PRV's?**

*For the DHS building, 30 psi of steam is supplied to the building, which is then dropped to 5 to 10 psi at their exchangers to provide 180 degree Fahrenheit heating and 115 degree Fahrenheit domestic hot water.*

**15. Is there any direct steam humidification in these buildings?**

*There is no steam humidification in the buildings.*

**16. Per the provided documentation, OMH has already installed (or is in the process of installing) independent facilities to replace the MPC plant. Can the OMH be considered a potential end user of the proposed district heating plant? What is the current construction status of the OMH independent heating facilities?**

*OMH has plans to install independent facilities. They have not yet been constructed. For the purpose of the RFEI, OMH may be considered a potential*

*client. However, please indicate in your submission whether or not OMH as a client is critical to the development.*

**17. What is the monthly biosolids production (wet/dry tons) for 2009 and 2010?**

*Wards Island WWTP only produces wet cake for biosolids and the volume varies throughout the year. For Fiscal Year 2010, approximately 10,096 wet tons of biosolids were produced each month.*

**18. What is the percent solids achieved post biosolids dewatering for the same period?**

*After the dewatering process, 27% of the remaining volume is solid.*

**19. Cost for biosolids disposition (total and unit - per wet or dry ton) and method (Synagro drying facility)?**

*At Wards Island WWTP, DEP has contractors who receive, transport, and dispose the material. Some contractors use lime stabilization and then send the treated biosolids for use on farmland, mine reclamation projects, and/or landfill coverage, while other contractors use pelletization and often send the material to farmlands afterward. The total cost for Fiscal Year 2010 for this contracted work was about \$18.2 million and the unit cost per wet ton was \$150.64. For Fiscal Year 2011, DEP began landfilling a portion of the biosolids, instead of pelletization, reducing the unit cost for wet ton to about \$114.*