**EO88 Project Implementation Support- Panel Discussion**

1. Introduction to panel (total 10 minutes) – Chris, Nate and Jodi to present a brief overview of their agency and their services
2. Moderated Discussion (7-8 minutes per item- total 30 minutes)
3. Questions from Audience (10 minutes): Moderator to facilitate questions from audience.
4. Panel to leave behind reference materials for audience
5. Moderator: We have an aging infrastructure with many Air Handling Units that are beyond their useful life. We would like to upgrade the entire unit in a building(s) and maybe even redo the distribution network instead of just doing an energy project such as motor replacement with VFD controls. How can I fund the project? What assistance can you offer for project design and implementation? *How can a campus add these energy projects to the capital plan?*

DASNY: If this can be a planned capital project, DASNY can assist with design and construction oversight, and also explore opportunities that are offered when distribution systems are re-designed. We can also possibly use our energy performance term contracts.

The residence hall program and related master plan processes should be bringing clearer goals into the budget planning. So much can be done if we engage in a more robust thought process earlier, and the residence halls have an advantage of being revenue-based, so if the cost to run the hall is less than that return is much quicker. It’s probably the easier place to make that leap across the great divide of capital and operations budgets. DASNY would like to be more involved in master planning, in order to identify opportunities for RE on-site and work that will move residence halls to ZNE. Please contact me to improve that involvement. We can also now begin to discuss some PPA and community solar opportunities that may be tied to the res hall, but funded through NYPA initiatives. In this case the building would have to be prepped for future connection – again, it’s all in forward-thinking.

SUCF: The project could be funded as a SUCF capital project. As part of the normal capital project process SUCF would procure the services of Architectural or Engineering design firm to complete planning, design and construction administration of the project. SUCF’s professional staff includes personnel with a vast and wide range of experience in planning, design and construction that will assist and guide the project from start to finish.

NYPA: This is actually a common scenario that is presented to NYPA. The capital component can be incorporated as part of an energy project because without functioning infrastructure, the energy portion would not achieve the anticipated savings. NYPA can design and implement the measure. The project can be financed by NYPA, typically over a 10 or 15 year period at a very low financing rate.

*Jodi, Do the projects have to be in Residential buildings? Does DASNY assist private colleges and Universities? Could you explain the performance contracting model – how does that work with DASNY?*

*Chris, Can SUCF only work on a project if it is funded from capital $$ or can the campus use other sources of funding but request SUCF to manage the project?*

*Nate, does NYPA provide $$ directly to SUCF/DASNY/campus on a capital project to fund the incremental costs on a project not managed by NYPA?*

1. Moderator: We would like to incorporate high levels of energy efficiency in our new construction projects. Some of us are even interested in net zero energy buildings. However, the project budget is not able to support our goals and energy efficiency items often end up on the VE list. How can we keep the energy measures in our new projects?

DASNY: DASNY engages in integrative design which means we will do what we can to help you prioritize and make informed decisions with the design team to achieve EE goals along with program, budget and schedule parameters.  In some cases this may mean identifying any discreet and separate energy systems that could be prepped for, and purchased/contracted and installed later, such as PV arrays or water reclamation systems. If there is an opportunity to divvy up pieces of the project to obtain better funding (operational dollars) under a NYPA EE project framework, we would be interested in assisting with that approach as well. We can work to identify incentives & funding from NYPA & NYSERDA.

SUCF: If the project’s budget cannot support the energy measures SUCF would assist in obtaining additional financing from NYPA, incentivized funding from NYSERDA or other investor-owned utility programs in an effort to preserve or incorporate energy related components or systems into the project.

NYPA: NYPA would support the campus by financing the incremental cost of the energy measure at a very low financing rate. NYPA would work with the campus to compile all necessary documents are in place and that the funding was in place prior to construction. This process has recently been streamlined with a direct NYPA/SUNY contract that bypasses the OGS/OSC approval process that can take several months.

*Jodi and Chris, how do you engage NYSERDA in the project? Does the campus submit the application or does SUCF/DASNY submit? Do the NYSERDA rebates go back to the campus or to the project?*

At this point the DASNY process is different by project. Typically most of the NYSERDA info needed is from the owner, so often the Owner submits, and some campuses do this very early, which is wonderful. The earlier the better. Sometimes we submit. Campuses need to work with their DASNY PM on this if we will submit. We’d like to create a simple NYSERDA liaison process for all DASNY projects, and even with discussion on this over the last few years, it’s still a work in progress.

*Do you engage an energy modeler on all new construction projects? What about a commissioning agent? How are these contracts setup- who owns and manages the contracts? Would you recommend that campuses include these services on all new construction projects?*

DASNY has a strong all-green policy for projects and any new, addition or significant renovation would be immediately registered in a LEED rating system. Every one of these projects would require an energy modeling process, to provide information for design decisions. Most non-LEED projects that effect energy systems look for higher efficiency equipment and systems, but do not engage in a full energy model unless there are special circumstances.

*EO88 requires a life cycle cost analysis for energy projects. Does DASNY/SUCF require a LCCA before an energy item can be value-engineered so the decision is not purely based on first costs?*

This occurs on most of our EE projects but we don’t require it as it is already in EO88.. I would say that it would be better if we ensured LCC were done on every project, In addition, this would help NYPA with EO 88 aggregated reporting and in touting the successes to-date.

*Both Jodi and Chris mentioned NYPA financing. Nate, would be able to explain how this works? What are the requirements for getting NYPA financing on a new construction projects? When does NYPA pitch in the additional $$ required and how does the campus repay?*

1. Moderator: EO88 emphasizes operational efficiencies and recommends performing retro-cx and recommissioning on existing buildings. In order to be truly effective, this effort may require the involvement of a commissioning agent, MEP engineers, TAB contractors, BMS vendors and trained operational staff. The procurement process at most SUNY campuses turns a simple retro-cx project into a very complicated multi-vendor contract project. What support can your organization provide to not only conduct a comprehensive retro cx but also implement the measures that are identified in the process? Is there any support available for operational staff training?

DASNY: DASNY can certainly assist in hiring a rCx agent and we can provide excellent Cx guidelines for the use of any state entity. We have also developed scope and contract agreements for energy management services, aligned with EO #88 goals and reporting, in order to help some state agencies have the continual improvement management they need for good energy use controls.

*Could you elaborate on the energy management service contracts?*

SUCF: SUCF could procure the services of a Commissioning agent who would be responsible for hiring all necessary parties required to complete retro-commissioning (RCx). Any measures identified during the process of RCx could be incorporated into a capital project.

NYPA: NYPA has contracts in place with Implementation Contractors that can provide all RCx services. NYPA can also assist with the implementation of identified opportunities through funding that can be setup in a contract prior to the RCx study beginning. All identified opportunities will have source EUI calculations to help the campus with EO88 goals and reporting. At completion, the study and implemented measures can be financed through NYPA.

1. Moderator: There is a growing demand from students to install on-site renewable energy projects on campus. However, many of these projects are expensive and involve complicated contracts. What resources, tools and funding is available for campuses to install small and large scale renewable energy projects?

DASNY: There is a Solar Power Purchase Agreement framework in the works to guide all state entities.  This is being developed by OGS, NYPA and NYSERDA, with some involvement from DEC on the procurement development side.  I am not sure when the final framework will be available.

SUCF: SUCF would assist obtaining any funding available from NYSERDA’s programs for small wind turbine, photovoltaics programs and investor-owned utility programs.

NYPA: NYPA has recently developed several solar advisory offerings to help SUNY campuses identify the best path for incorporating renewable energy. NYPA has worked with stakeholders from NY and around the country on standardizing contract terms for Power Purchase Agreements. NYPA has recently partnered with OGS on a Solar RFP based around a Power Purchase Agreement framework which was issued in September of this year. The RFP will be to select and pre-qualify solar developers capable of installing multiple types of solar applications throughout all regions of the state. Responses are due in the first week of December. NYPA can act as the trusted energy advisor for all SUNYs under the framework of this program offering by administering project specific mini-bids to select the appropriate developer who can provide the most attractive pricing.

*If a University wanted to do a PPA for a renewable project, would DASNY/SUCF assist with the design, RFP and contract award process? Has DASNY/SUCF included renewable energy as part of a larger new construction/gut rehab project? Do you maintain a list of renewable energy installations that you have implemented across SUNY campuses? Would you be willing to connect personnel at various campuses you have worked on so we can share our experience with renewable energy and in fact, all advanced energy technologies?*