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#### Con Edison

- 1. Does Con Ed require to be notified via Project center case file when we are installing a solar project? Do we, as the Electrical Contractor, need to open a case file?
  - a) PowerClerk is the program used to create applications for any DER asset (solar included). Coordinate with your CPM for project specific questions after the application is accepted.

#### 2. What is DERMS?

- a) DERMS stands for Distributed Energy Resource Management System. The purpose of a DERMS is to manage diverse DERs, understand the unique status and capabilities of each, and present these capabilities to supporting applications to facilitate enhanced monitoring and control of the system.
- 3. Are there any specific customer incentives currently available in the Water St. zone?
  - a) Con Edison's Water St Non-Wires Solution (NWS) is no longer an active program as of the end of 2021, and therefore no longer offering NWS-specific incentives for load reduction. Current incentives available to Con Edison customers can be found on the following website: <a href="https://www.coned.com/en/save-money/rebates-incentives-tax-credits">https://www.coned.com/en/save-money/rebates-incentives-tax-credits</a> Please check <a href="https://www.coned.com/nonwires">www.coned.com/nonwires</a> for future NWS areas and opportunities.

- 4. Is there a relationship between demand response programs and VDER value stack?
  - a) Customers in Rider AC (Term and Auto-DLM) will not be eligible to receive DRV and/or LSRV compensation for the duration of their contract.
- 5. As an electrical contractor in NYC, where does our responsibility lie when coordinating our project with Con Ed? What requirements do we have as the Electrical Contractor as opposed to the customer, regarding coordinating any information for required work or interconnection with ConEd?
  - a) The application process in the NYSIR defines the requirements of an applicant who in most cases is the developer. The electrical contractor hired by the developer (if not they are not the developer themselves) will need to coordinate with their developer and CPM to provide any required documentation that will be uploaded via the PowerClerk portal.
- 6. What are the requirements for remote crediting to apartments in the same small building? Any additional considerations or restrictions we should be aware of?
  - a) Requirements relevant to this situation include:
    - Up to 10 customers having different account names can participate
    - The Host account, behind which the generator is interconnected, must be a non-residential account (e.g., SC 2)
    - Please see Con Edison's Electric Tariff, Rider R Section F.2 for all other requirements
- 7. Can you define a satellite in the context of remote crediting?
  - A satellite is a Con Edison electric account that is allocated credit by a Remote Crediting host.
- 8. For Remote crediting, is there a minimum or maximum number of satellites for a customer?
  - a) One or more satellite accounts in a common name constitute a "Customer" for Remote Crediting. There is no maximum, as long as the satellite accounts are established in the same name.

- 9. With Remote Crediting, does the satellite have to match the Host in any way? A February 2022 email from DGExpert stated: "Submit the required RC paperwork to allocate the export – again, all accounts participating in RC must be in the same name." Is this still accurate?
  - a) Satellite accounts must be in the same name to count as one customer, but up to 10 customers can participate within a single project. Please email cdgdevelopers@coned.com with your allocation and we can help with a specific request.
- 10. Can remote crediting installations interconnect behind the host account's meter if an additional dedicated Con Ed meter is installed to monitor production of the PV system?
  - a) Dedicated Con Edison electric metering will not be installed behind an existing meter. During your interconnection and new service request, your CPM will work with our engineering department on metering requirements.
- 11. Can a solar installation be installed behind an existing ConEd meter and still participate in remote crediting? Would there be a requirement to have an additional revenue grade meter?
  - a) A Remote Crediting host may choose to locate their generation behind an existing Con Edison account, and in many cases no additional metering is required (determined during SIR). By locating the generator behind an existing account, generation first serves on-site load before it is exported. Please note that the Value Stack compensation for Remote Crediting projects is based only on energy that is exported to the Con Edison grid.
- 12. For CDG Net Crediting you mention the CDG Sponsor providing ACH to receive payment; wouldn't wire transfer details work? Or is ACH the only option for fund receipt?
  - a) ACH payment is the only option at this time.
- 13. Does ConEd and the PSC allow shared solar projects between adjacent buildings/tax lots? Is there a limit to the linked properties?

a) CDG and Remote Crediting programs are a way to share Solar PV credits between Con Edison customers located on different properties. The limits are generally not based on adjacency, and are described in Con Edison's Electric Tariff, Rider R. There is an exception if a CDG project may serve fewer than 10 satellites if all the satellites are located on the same property as the Host account. A CDG project that serves more than 10 satellites may include satellites located anywhere in Con Edison's service territory. If this question is referring to whether generating equipment can span multiple tax lots, please refer to the applicable building codes.

## **FDNY**

- 1. For the filing of the FDNY storage application, is the Emergency Response Plan optional?
  - a) For the TM-2 application (Certificate of approval process for equipment) depending on the technology the manufacturer might not have or have yet to develop an emergency response plan that's why it is listed as optional.
- 2. Can you clarify which battery systems can be indoors? Especially with regards to R-3 properties.
  - a) In the New York City Fire Code 2022 lead-acid battery systems (all types), nickel-based battery systems, flow battery systems, and all types of lithium-ion battery systems given that those systems have received a COA.
- 3. What is the COA permit? Do the COA requirements change if the property/site where the ESS is located is not an occupied building?
  - a) The Certificate of Approval (COA) is the approval given to a battery energy storage system that has been tested and listed and is in accordance with the New York City Fire Code 2022 and 3 RCNY 608-01. No, the COA requirements do not change because it is not site specific.
- 4. At what location is the toxicity percentage measured at the property line or at the minimum approach distance?
  - a) That would be determination that would be made by the Fire Protection Engineer (FPE) that is hired by the manufacturer to review the results of the

9540A results and generate a hazard mitigation analysis (HMA) or failure modes and effects analysis (FMEA).

- 5. Is there a list of BESS systems that have the COA?
  - a) There is no published list, but we are working on making a list of approved Battery Energy Storage Systems (BESS) as more manufacturers apply for the COA process for their systems, that will be posted online and available to the public soon.
- 6. Can you clarify if the TM-2 is the same as the COA?
  - a) The Certificate of Approval (COA) is given to a piece of equipment that has gone through the certificate of approval process by filing a TM-2 application with FDNY, so they are not the same thing.
- 7. What are typical turnaround times for TM-1 and TM-2 approvals?
  - a) It is hard to say since each plan examiner reviewing the TM-1 or TM-2 application has a different workload. There might be some back and forth between the plan examiner and applicant.
- 8. Do Tesla batteries have an approval (COA) from the FDNY for Installations in NYC?
  - a) Tesla Megapack 1 has received a COA for FDNY, which is currently not being produced. TM-2 applications have been filed by Tesla for the Powerwall 2 and Megapack 2 are currently under review by FDNY.
- 9. Is there a common source to determine if an ESS system is already approved via TM-2? For example, if a Tesla Powerwall is already approved is there a way for a contractor/design professional to know?
  - a) No there is no public list of ESS systems that are already approved. We are working to make a list as more manufacturers go through the certificate of approval process and receive a COA. This list will be made public very soon.

- 10. Can you clarify whether any lithium-ion ESS are allowed indoors?
  - a) Any ESS that is based on lithium Ion is allowed indoors if the ESS has received a COA. There are energy capacity limits for lithium Ion based ESS, as stated in section 608 of 2022 Fire Code.
- 11. What are approved sample locations indoors for lithium-ion batteries?
  - a) There are no locations yet since the previous fire code prohibited lithium ion indoors. This has changed with the new addition of the fire code that became active April 15, 2022.

# **NYC Department of Buildings**

- 1. We have experienced DOB electrical inspectors asking for the DOB approved electrical drawings. Are they aware that these drawings are not required as part of the DOB filings? How is this being communicated internally?
  - a) DOB does not approve electrical drawings. DOB-approved electrical drawings are not required for a construction permit. However, per Article 690.01 of the NYC electrical amendment, a detailed diagram of the photovoltaic system is required "upon request" during inspection. They are requested by the inspector to review the diagram.
- 2. What is the actual NYC electrical code that is being used now for solar installations above 600V?
  - a) The current adopted code is 2011 NYCEC based on the 2008 NEC. Note: A practical difficulty of complying with Article 690 of the 2011 NYC EC is that Part IX of Article 690 of the 2011 NYC EC requires compliance with Article 490, which was not explicitly written for PV systems and does not provide proper requirements on how to install PV systems. Applicants working with solar installations above 600V, shall request a CCD1 to use the 2014 NEC for solar installation and inspection.
- 3. Are DOB Electrical Inspectors trained and updated on the current NEC codes and NYC amendments with regards to solar in NYC? Installers are finding that each borough has different requirements for grounding, connections, and if they

define solar as a separate service, some inspectors are even failing jobs for no access to the pitched roof.

- a) Electrical Chiefs, Assistant Chiefs, Supervisors, and Inspectors are trained and updated on performing inspections on different types of electrical installations. The NYC electrical codes are applied as per their requirements throughout the five boroughs.
- 4. Has DOB considered having dedicated electrical inspectors who are specifically trained to inspect solar, or will there be more training resources provided to the DOB electrical borough offices so that all inspectors are familiar with the technology?
  - a) Currently, DOB does not have a dedicated electrical inspection team. All inspectors are trained to perform photovoltaic inspections as per the pertinent codes.
- 5. How do you calculate the maximum roof height in a non-contextual zoning district? For example, in an R8 district, would the allowable height of a solar system be according to the sky exposure plane? Or to some height limit?
  - a. For a non-contextual [residential] zoning district, the Applicant must determine if the structure supporting the panels has been designed per sky exposure plane or per Quality Housing bulk regulations. The maximum roof height is measured from the maximum height limit, or the finished level of the roof, whichever is higher. Applicants should refer to the New York City Zoning Resolution.
- 6. What would trigger the substantial improvement calculation?
  - a) Substantial improvement calculations are triggered when the construction cost of an installation exceeds the greater of \$40,000 or 25% of the market value of the structure as calculated according to 1RCNY 3606-01.
- 7. With regards to DFE: If the main disconnect switch is integrated with the solar combiner panel, can the entire panel be below the flood line?
  - a) Only the A/C Disconnect Switch may be located below the DFE.

- 8. With regards to DOB NOW: How can we see the BIS and all permits pulled and violations that have been issued for a property? Currently, I am only able to see the permits I pull, not all the permits, and do not know where to find the BIS to see if there are any violations onsite.
  - a) You can access the 'Buildings Information Search' (BIS) from the NYC Department of Buildings website. From there, you can search an address (or job number). If you search an address, you are directed to a page titled 'Property Profile Overview'. At the bottom left of the page you can access all jobs filed through BIS and search for violations.
- Are the Solar tax abatement applications made in DOB in the E-Filing BIS system or DOB NOW? The forms from the slide are only for BIS system filings.
  - a) All solar applications (both tax abatement and non-tax abatement) currently are submitted through the BIS e-filing system.
- 10. If we have a cluster project with multiple buildings on a single tax lot that includes several Con Edison meters (one interconnection per BIN), do we need to submit separate permit applications for each building, or could we submit a single application with the special language referencing all applicable BINs?
  - a) If there are multiple buildings on a single tax lot, each with an independent meter/Con Edison interconnection, each BIN requires a separate application.
- 11. If a building is located in the center of a large campus and not located directly on a street, thus set back over 100 feet from an actual street how do you determine where to start the sky exposure plane? Does it start from the actual curb, or from the parking lot or driveway near the building?
  - a) The street wall and sky exposure plane location vary according to the specific zoning district in which the building is located. Applicants should consult the New York City Zoning Resolution to determine specifics.
- 12. How many lithium-ion ESS projects have been fully signed off by DOB?
  - a) Unfortunately, the Department is not able to share this information.

- 13. What is the timeline for OTCR to publish a bulletin with ESS requirements? Once that is issued, will a standard plan examiner and inspector be able to review and approve ESS applications, provided that the design uses equipment with a COA from the FDNY?
  - a) We are currently drafting a Rule which will heavily rely on internal discussions which are just wrapping up. We do not have a firm schedule at this time. The Rule will still require site-specific review for larger sizes. We are discussing requirements for smaller sizes with FDNY.

### **Panel Discussion**

- 1. What solutions are there for when the demand cannot be met, especially in the winter where a power outage can have disastrous consequences?
  - a) Both the NYISO (Independent System Operator) and our local electric utilities take many actions to ensure that demand can be met and are continually working to address shifting peaks. The City engages in NYISO and PSC proceedings to ensure the resiliency of our electric grid. The City also supports the deployment of resilient energy storage systems, which can provide emergency backup power to communities and critical facilities in the event of a broader grid outage.
- 2. Where do you see the PV and ESS systems required for NYC electrification being sited?
  - a) There is limited space within New York City for large-scale solar, so we anticipate solar will remain relatively distributed across all areas of the City. Storage will likely be a combination of centralized large-scale batteries in primarily industrial areas as well as smaller-scale decentralized systems. There are also plans in place to increase transmission of clean energy into NYC, such as from offshore wind, that will support clean electrification efforts.