Level 4 Application – High Level Process Review

CMP Interconnection Services

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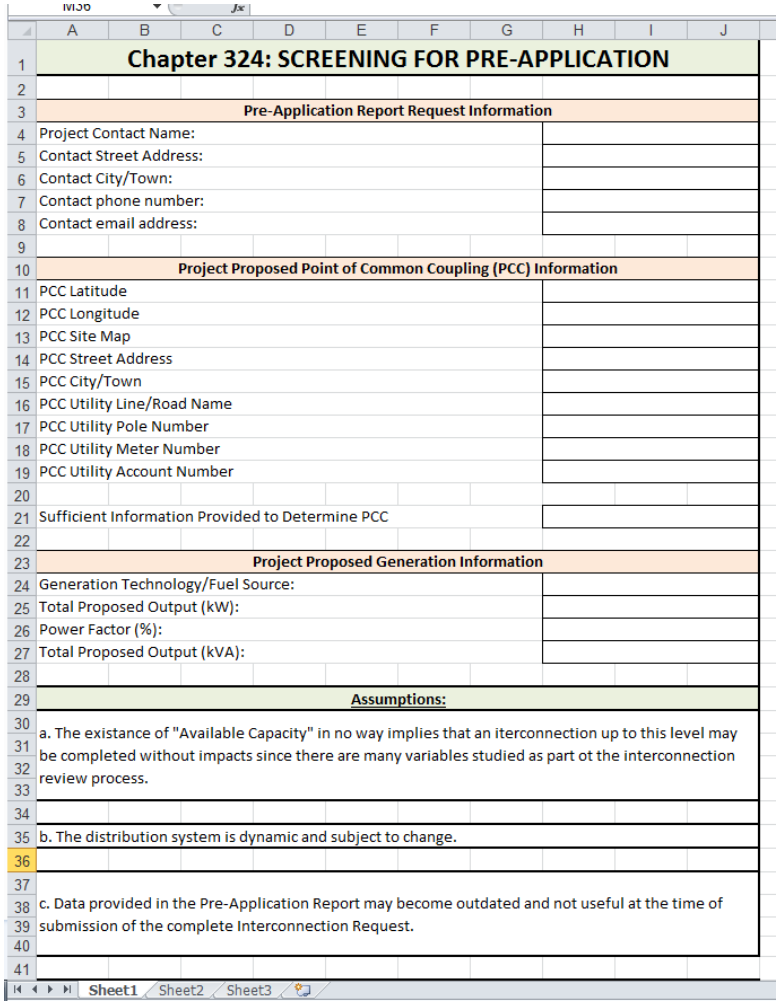
Pre – App Process

Pre-Application Report (PAR) – Strongly suggested; not required

- Fee: $300
- Once application **and** fee received, Pre-app report (PAR) issued within 15 Business Days (BD)
- PAR - includes the 13 listed points of information in Ch. 324:
  - Total Capacity (MW) of substation (SS)/area bus or bank and circuit
  - Allocated Capacity (MW) of SS/area bus or bank and circuit
  - Queued Capacity (MW) of SS/rea bus or bank and circuit
  - Available Capacity (MW) of SS/area bus or bank and circuit
  - Proposed Generating Facility location: on area, spot, or radial network
  - SS nominal distribution voltage or transmission nominal voltage (if applicable)
  - Nominal distribution circuit voltage at the proposed site
  - Approximate circuit distance between the proposed site and the SS
  - Relevant Line Section(s) peak load estimate, and minimum load data, (when available)
  - Number of protective devices and voltage regulating devices between the proposed site and the SS.
  - Availability of three-phase power at the site or distance from three-phase service
  - Limiting conductor rating from proposed Point of Common Coupling to distribution SS
  - Based on proposed Point of Common Coupling, existing or known constraints such as, but not limited to, electrical dependencies at that location, short circuit interrupting capacity issues, power quality or stability issues on the circuit, capacity constraints, or secondary networks.
- Also includes FERC/Non-FERC determination
- Based on existing info; No seminal work performed

Pre Application Report Form



	A	B	C	D	E	F	G	H	I	J
1	**Chapter 324: SCREENING FOR PRE-APPLICATION**									
2										
3	**Pre-Application Report Request Information**									
4	Project Contact Name:									
5	Contact Street Address:									
6	Contact City/Town:									
7	Contact phone number:									
8	Contact email address:									
9										
10	**Project Proposed Point of Common Coupling (PCC) Information**									
11	PCC Latitude									
12	PCC Longitude									
13	PCC Site Map									
14	PCC Street Address									
15	PCC City/Town									
16	PCC Utility Line/Road Name									
17	PCC Utility Pole Number									
18	PCC Utility Meter Number									
19	PCC Utility Account Number									
20										
21	Sufficient Information Provided to Determine PCC									
22										
23	**Project Proposed Generation Information**									
24	Generation Technology/Fuel Source:									
25	Total Proposed Output (kW):									
26	Power Factor (%):									
27	Total Proposed Output (kVA):									
28										
29	**Assumptions:**									
30	a. The existance of "Available Capacity" in no way implies that an iterconnection up to this level may									
31	be completed without impacts since there are many variables studied as part ot the interconnection									
32	review process.									
33										
34										
35	b. The distribution system is dynamic and subject to change.									
36										
37										
38	c. Data provided in the Pre-Application Report may become outdated and not useful at the time of									
39	submission of the complete Interconnection Request.									
40										
41										

Sheet1 Sheet2 Sheet3

Level 4 Application Process

Application Submission

- Application fee of $3,000 (non-refundable)
- Standard application (MPUC Forms and Agreements Form 4)
  - Must have unique CMP account number (contact Customer Service to establish one)
  - Latitude and Longitude of Point of Interconnection
  - Must be signed and dated by owner of CMP account number
  - ME PE stamped One Line Diagram
  - Site map
  - Inverter, battery, and panel manufacturer spec sheets
  - Evidence of Site Control as defined in the Rule
- CMP acknowledges receipt of application within 5 Business Days (BD)
- CMP notifies applicant of completeness within 10 BD of receipt
  - If incomplete, applicant has 10 BD to submit required info for completeness
  - Inverter PSCAD models requested with notification of completeness
- Scoping meeting scheduled within 10 BD of completeness notification unless otherwise agreed to by the parties (but no more than 20 BD)

Level 4 Application Process

Queue Entry

- Once application is considered complete.
- Queue information shall include:
  - Queue position
  - Any dependencies
  - Contingent upgrades
  - Municipality where Facility is located
  - Substation name
  - Fuel type
  - Project status
  - Circuit name
  - Date application request submitted
  - Estimated commercial operations date
  - Facility capacity
  - Feasibility Study – start and completion dates
  - Impact Study – start and completion dates
  - Facility Study – start and completion dates
  - Interconnection Agreement – completion date
  - 25% payment completion date
- T&D Utility shall publish a report on its website at least twice each calendar month

Scoping Meeting

- Conference call/MS Teams meeting with the Developer & CMP team
- Following meeting, CMP sends email with:
  - Scoping meeting notes
  - T&C 55 (rates for schedule D & L and queue info)
  - CMP bluebook generation guidelines (Schedule B)
- Applicant has 10 BD to determine study type and submit deficiencies identified at meeting

Level 4 Application Process (cont'd)

Study Selection

- Agreement issued and request for additional info within 5 BD of study selection
- Utility has 15 BD from study selection to provide estimate for study selected
- Applicant has 10 BD from receipt of both agreement and estimate to return the agreement, deposit, and additional info
  - Inverter PSCAD models required before the start of any study
- Two Developer options for Study:
  1) Sequential Study (Feasibility followed by System Impact)
     - 25 BD for Feasibility Study (FS)
       - Preliminary review of short circuit currents and coordination/potential overloading of distribution circuit devices
       - $1,000 deposit, reconciled at end of the study
     - 30 BD for Impact Study (IS)
       - Load flow study, short circuit study, circuit protection and coordination study, impact of system operations, stability study, voltage collapse study, etc.
       - $3,000 deposit, reconciled at end of the study
  2) Combined Study
     - 45 BD for combined FS/IS
       - $3,000 deposit, reconciled at end of the study
- Risk of Islanding screening
  - Performed during study phase
  - Projects failing screening will undergo a Time Domain Study as part of the SIS process

Level 4 Application Process (cont'd)

Study Results Meeting

- Utility and Applicant **shall** meet within 10 BD of study completion
- Report includes
  - Results of study scope/analysis
  - Cost of required upgrades (+/- 25%)
    - Does not include any costs that may be required from i.3.9 process or other transmission studies that may be required
- Review results of study report
- Question and answer session for the customer
- Applicant has 15 BD from results meeting to state intent to proceed with subsequent study or Interconnection Agreement
- Modifications and cost sharing discussed on subsequent slides

Modifications

Modifications under §12.D.1.a-d*

a. Prior to the commencement of the Feasibility Study, a decrease** in the MW (AC) nameplate capacity of the Facility;

b. Prior to the commencement of the Impact Study, an Applicant may consolidate the capacity of multiple Interconnection Requests for multiple Facilities if the following conditions are met:
   (i) the Facilities share common ownership; and
   (ii) the Facilities have directly dependent Queue Positions;

c. At any time, an In-Kind Modification to the technical parameters associated with the ICGF's technology, that does not increase the AC export capability of the ICGF;

d. At or within fifteen (15) Business Days after the meeting between Applicant and T&D Utility to review results of either the Feasibility Study or the Impact Study, a ***one-time*** modification of the interconnection configuration as a result of the Feasibility Study or Impact Study results, including a decrease** in the MW (AC) nameplate capacity of the Facility.

*** $500 non-refundable fee for modifications**

**** An increase in the MW (AC) nameplate capacity of the Facility is not permitted in any situation.**

Cost Sharing

Cost Sharing under §12.G

- $200,000 triggering threshold (single component, not combined cost of all upgrades)
- Proration based on capacity/distance used by projects
- Cost sharing lasts until the earlier of:
  - 10 years from date of earliest affected interconnection customer's IA
  - Until capacity created by upgrade is used up
  - Prorated amount of cost sharing is $100,000 or less
- Cost sharing is mandatory unless generating capacity of facility is less than 250 kW
- Concurrent projects not yet at COD must all pay for the full amount of upgrade
  - Once COD is reached, prorated expense will be reconciled

Level 4 Application Process (cont'd)

GO or NO-GO determination follows

- If the developer decides to move forward with upgrades:
  - Executable interconnection agreement (IA) provided with 10 BD of intent to proceed
  - Applicant has 20 BD to sign
  - Utility has 10 BD to countersign and return
  - Per MPUC waiver, invoice generated and emailed to developer for payment upon I.3.9 approval from ISO-NE
    - 25% of total costs due within 90 BD. Remaining 75% due 90 BD after first payment.
    - Project costs exceeding $500,000 will receive a payment schedule
  - Field planner appointment established once invoice is paid (developer must attend)
- If developer decides not to proceed forward, CMP would invoice all costs up to that point with the developer

Interconnection Agreement (IA)

- Developer shall execute and return the IA within twenty (20) business days of receipt
- Project subject to:
  - Cancellation/forfeiture of queue position for:
    - Failure to execute IA within 20 business days
  - IA termination for:
    - Failure to make payment in accordance with Ch. 324 for required upgrades
- Per MPUC waiver, Utility good faith estimate of construction timelines required in the IA will be provided within 10 BD of I.3.9 approval from ISO-NE.

ISO-NE i.3.9 Process

ISO-NE i.3.9

- CMP performs a transmission assessment on all interconnection requests; i.3.9 review is a separate review process
  - Applies to all projects greater than 1MW
- ISO-NE is the final authority on what transmission study is required to receive the necessary i.3.9 approval
- Projects with completed studies are briefed at the NEPOOL Reliability Committee (RC)
  - Meets on a monthly basis; recommends approval or disapproval to ISO-NE
- Process culminates in ISO-NE I.3.9 approval letter
- Permission to commercially operate with CMP will not be authorized until the project has received ISO-NE approval letter

ISO-NE i.3.9 Assessment

- Varying levels of study based on size of the project:
  - Level 0: >1MW but <5MW individually or in aggregate with the projects before it
    - No adverse impact
  - Non-comprehensive Study: Projects exceeding 5 MW in aggregate with previous projects
    - Require some form of short circuit and steady state or transfer analysis
  - Level 3: Projects exceeding 5MW individually or 20 MW in aggregate with previous projects
    - Require stability analysis
- Electric density of the area of interconnection may impact level of study: Aggregated study areas

Questions?