Facilities Study Report

For

Physical Interconnection of

PJM Generation Interconnection Request

Project ID AE1-172

LORETTO-WILTON CENTER 345KV

December 2024

Introduction

This Facilities Study has been prepared in accordance with the PJM Open Access Transmission Tariff, as well as the Application and Studies Agreement between the Project Developer and PJM Interconnection, LLC (PJM or Transmission Provider (TP)). The Transmission Owner (TO) is ComEd.

A. Transmission Owner Facilities Study Summary

1. PROJECT DESCRIPTION

The Project Developer proposed a Wind Generating Facility located in, Livingston County, Illinois with a designated PJM Project ID of AE1-172. The installed facilities will have a total Maximum Facility Output (MFO) of 255 MW with 44.88 MW of this output being recognized by PJM as Capacity.

2. POINT OF INTERCONNECTION (POI)

The Generating Facility will interconnect with the ComEd transmission system via a newly constructed 345kV breaker and a half substation, TSS 907 Fivemile Creek, tapping the TSS 905 Essex – TSS 93 Loretto 345kV line, L.90506, approximately 33 miles from TSS 905 Essex and 6.5 miles from TSS 93 Loretto.

The construction of the new interconnection substation will result in the splitting of the existing TSS 905 Essex - TSS 93 Loretto, 345kV L.90506 into two lines on the transmission system. The new 345kV L90703 will connect TSS 907 Fivemile Creek to TSS 93 Loretto and 345kV L.90506 will connect TSS 907 Fivemile Creek to TSS 905 Essex.

The proposed generation interconnection is shown on the single line diagram in Attachment #1.

3. POINT OF CHANGE IN OWNERSHIP

The Point in Change of Ownership will be located at the first dead-end structure inside the TSS 907 Fivemile Creek interconnection substation fence line.

4. SCOPE OF PROJECT DEVELOPER INTERCONNECTION FACILITIES

Project Developer will design, build, own, operate and maintain the Project Developer Interconnection Facilities on Project Developer's side of the Point of Change in Ownership (PCO). This includes, but is not limited to:

- Two (2) 3-Phase Main Power Transformers (MPT #1 & MPT #2) - 100/133/167 MVA, 345kV Y-grounded, 34.5kV Y-grounded with a 13.8kV Delta tertiary. The Z% = 9% on a 100 MVA base.
- Two (2) 345kV Circuit Breakers.
- Two (2) 345kV disconnect switches
- One (1) 345kV generator lead line, 345kV L.90701, from the Generating Facility to the Point of Interconnection.
- Relaying at the project developer to send a Transfer Trip to TSS 907 Fivemile Creek for TR 345kV Breaker Failure. Ability to isolate 87L and DTT functions is required. Examples scheme/settings can be provided by ComEd.
- Install three (3) 3000:1 CCVTs on 345kV side of transformer to be used for System 1 and

System 2 relay protection.

- For new dead tank 345kV gas circuit breaker, install CB motor operated disconnects on both sides. All new 345kV current transformers are to be rated 3000 overall ratio with at least 1.5 RF for a minimum 3000A continuous thermal rating. New dead tank breakers to have 2 sets of 3000:5 overall ratio bushing CTs on each side. CTs to be multi-ratio with standard taps and C800 class. All new CBs will have CB monitoring and Breaker Failure scheme. New gas circuit breaker control for loss of SF6 gas condition should be as follows (See Engineering Practice EP-5206E and relay specifications):
    - For an open circuit breaker, when SF6 gas drops to the critical level, the close circuit of breaker shall be opened and line and both CB motor operated disconnects shall be opened.
    - For a closed SF6 gas circuit breaker, when SF6 gas drops to the critical level, the circuit breaker shall be opened and both CB motor operated disconnects shall be opened.
- Project Developer to provide transformer test reports for 345kV-34.5kV step up transformers, for ComEd short circuit modeling. Test reports to include %Z Impedance and load loss.
- In general, Project Developer relaying, etc. to follow per section 6.1 (Design F) of latest version of Comed interconnection guidelines (for Generator Greater than 20MW) Rev 2: Effective 12/16/21, with the following project specific notes:
    - New 345kV gas circuit breakers to auto trip and isolate for critical gas level.
    - New 345kV Tie Line terminal relay types to be the same as ComEd terminal relays. This includes firmware versions.
    - ComEd Protection and Control Engineering must review all Project Developer relay protection design drawings and relay settings.
    - Project Developer equipment impedance and/or test data must be provided to ComEd Protection and Control Engineering for all lines, transformers, and wind turbines in order to model in a short circuit program.
    - Project Developer to include Over/Under frequency and voltage protection at wind/solar farm collector bus. Suggested settings will be provided by ComEd. Under-frequency settings are to comply with MAIN Guide 1B.
    - Dual bus protection for 34.5kV bus.
    - Dual TRFM protection and site protection must be compliant with NERC & PJM requirements.
    - Metering is required to be installed per ComEd & PJM standards.
    - SCADA interface to ComEd will be required, which will most likely require a 3rd party TelCo or wireless connection (to be determined by UCOMM during detailed Engineering phase)
    - Witness testing by ComEd or a Designated Authority will be required and must be pre-scheduled at least 90 days in advance
    - Project Developer to provide final lead length of 345kV L.90701, electrical characteristics, construction configuration, size of conductors, and impedance

characteristics.

  - Project Developer shall provide shunt reactive compensation as required by the PJM Interconnection studies.

- Relay and protective equipment, and Supervisory Control and Data Acquisition (SCADA) and telecommunications equipment to comply with the ComEd's Applicable Technical Requirements and Standards. 345V L.90701 will require two Single Mode Fiber paths from TSS 907 Fivemile Creek to the developer substation control building (TSS 930 Livingston Wind Farm), approximately 7 miles. One fiber path will be dedicated for System 1 Relay/schemes, and the other will be dedicated for System 2 Relays/schemes. These Fiber paths will need to be physically diverse from each other, and each should contain a minimum of 48 Single Mode Fibers. Both of these Fiber cables will be owned and maintained by the Project Developer, and the demarcation of ownership will be in an FDP within the TSS907 Fivemile Creek control building.

-

- For any new equipment connected to the BES (Bulk Electric System rated at 100kV or above) the associated primary/System 1 and secondary/System 2 protective schemes to have a minimum redundant:
  - Connected CTs (where available)
  - PT secondary (where available)
  - DC control circuits
  - Auxiliary trip relays
  - Circuit breaker trip coils (where available)
  - Communication circuitry.

B. Transmission Owner Facilities Study Results

The following is a description of the planned Transmission Owner facilities for the physical interconnection of the proposed AE1-172 project to ComEd transmission system. These facilities shall be designed according to ComEd Applicable Technical Requirements and Standards. Once built, ComEd will own, operate, and maintain these Facilities.

1. TRANSMISSION OWNER INTERCONNECTION FACILITIES:

The ComEd Interconnection Facilities will include, but not be limited to, the following:

- A 345kV dead-end structure and foundation within the fence of the Interconnection Substation, to terminate the Project Developer's generator lead line.
- Line conductor from the dead-end structure to the bus position in the switchyard of the interconnection substation.
- One (1) Motor Operated Disconnect (MOD) switch. Disconnect switch shall have a minimum nameplate capability of 2810/3444/3816A (1679/2058/2280MVA) SN/SLTE/SLD.
- Three (3) metering CTs, three (3) metering PTs, or a combination unit, meters, and associated

equipment to meter L.90701.

  - Install equipment necessary to provide bi-directional revenue metering (kWH, kVARH) and real time data (kW, kVAR, and circuit breaker status and 345kV voltage) for 345kV L.90701, on the ComEd side of the POI per ComEd applicable standards.

- Three (3) surge arrestors.
- Foundations and structures.
- For 345kV line L.90701, install System 1 87L-1/SEL-411L-1 and a System 2 87L-2/SEL-411L-1 current differential scheme. Utilize full 3000:5 CT ratio for both systems of line relaying. In addition, install load rejection logic such that transfer trip is initiated on both System 1 and System 2 relaying to Project Developer site if both BT 1-3 and BT2-3 at TSS907 are opened (referred to GDD 4003 for load rejection design).

2. STAND ALONE NETWORK UPGRADES

TSS 907 Fivemile Creek Interconnection Substation

A new breaker and a half substation, 345kV TSS 907 Fivemile Creek, will be constructed along the 345kV L.90506 transmission line to interconnect the project with the ComEd transmission system.

- Two (2) 345kV transmission line dead-end structures with testing to check proper phase and identification is correct.
- Install new Fiber MUX equipment for L.90703 and L.90506 System 2 relaying to provide nx64 channels.
- Six (6) 345kV station class surge arrestors.
- Three (3) 345kV IPO circuit breakers with a minimum nameplate capability 3282/3534/4224/5046 A (1961/2112/2524/3015MVA) SN/SLTE/SSTE/SLD continuous, and interrupting capability of 63kA at -40°F. Circuit breaker to be equipped with a motor operated disconnect switch (MOD) on both sides of the breaker. All equipment associated with the breaker termination should meet or exceed the thermal capability of the breaker including CB disconnects, leads, CTs, metering, relays, etc. Nameplates to reflect actual maximum capability of equipment (NOT minimum requirements specified).
- Eight (8) 345kV motor operated breaker disconnect switches: one (1) on each side of the 345kV circuit breakers and one (1) for each 345kV transmission line (L.90703, L.90506). These disconnect switches shall have the same minimum thermal capability as the circuit breakers above.
- Nine (9) 345kV CCVT's, 3000:1, without carrier accessories used for System 1 and System 2 relay protection.
- Foundations and structures for all new equipment.
- A 345kV control building to ComEd specifications to accommodate System 1 and System 2 batteries, battery chargers, AC/DC panels, protective relaying, communication, SCADA, metering equipment, etc. 125 VDC battery system, DC distribution panels, System 1 and System 2 relay panels, marshalling cabinet, aux AC power panels, building HVAC system, fire/security system, SCADA, metering equipment, and battery monitoring. Building will be

masonry or precast.

- All 345kV circuit breakers are required to have a SEL-2411 relay inside of the breaker control cabinet for monitoring. Multimode fiber from the yard to the control building is required.
- The substation relaying will employ IEC 61850 “Generation 2” design using GOOSE tripping (all ComEd schemes) but no Sample Values schemes. During detailed engineering, consult Relay Engineer for latest standards, reference work at ESS E535 Microsoft and TSS181 Compass.
- For all new outdoor 345kV GCBs, for SCADA controls and 50BF/79/25 functions, use SEL-451 relays for S1 and SEL-401 or a SEL-451 for S2. Hardwire Bus pots to SEL-451 for synch closing and to SEL401/451 for Bus pot monitoring. Both relays will be in a relay cabinet to be located near the breaker with MB connection between relays and wired to trip and close the CB, reference ESS E535 work. The relays can also be located inside the control building depending on the station layout.
- SF6 critical will automatically trip the CB and open MODs on either side of the CB.
- Install a control cabinet in the yard located adjacent to the line MODs. Cabinet to contain SEL-2411 relay for Remote Trip, Close, “89a”, “89af”, “89b”, & “89bf’ statuses to be sent to SCADA. Include local FDP in the cabinet with redundant single mode fibers.
- Fiber, All Network devices to be installed with provisions for the future devices.
    - Only Station Bus Fiber to be used.
    - All Station Bus fiber will be run in Panduit covered fiber through and will be OM3 50mm MM Fiber, 12 count jumper.
    - Jumpers will be spliced in a Main FDP Cabinet. One Main FDP for each A & B Network. Main FDP will have LC Connected jumpers to the SDN Switches.
    - Remote end of OM3 fiber jumpers will be spliced into a Corning DIN Rail Mount FDP.
    - Local LC Connectors will be used to go between the Local A or Local B FDP to the S1 and S2 5A & 5B ports respectively.

SCADA network will be based on 61850 design at ESS E535 Microsoft.

- Install BSC/IT UCOMM router and firewall
- One SCADA cabinet:
    - Three SEL-3555 RTACs for RTU, SysLog/SEL protocol concentrator, and Synchrophaser data concentrator.
    - Two SEL-3555 as redundant HMI, with each tied to its own mouse, keyboard, and monitor on the operator desk. The DPAC RTAC will have a large wall mounted monitor in an area where people can gather.
    - One SEL-2730M Ethernet switch as SCADA Master Switch.
    - One Omicron RBX1 Station Scout
    - One SEL-3350 RTAC for Project Developer data. Install one pair of serial fiber connections for each Project Developer RTU data exchange.
    - SEL-2440 DPACs for all local alarms include failure contacts for RTAC’s & Switches
    - 43 Cut out switch mapped to a DPAC.
    - TCE access ports to set up on-site.

- Two Station Bus network cabinets (A and B):
    - One master SEL-2741 switch
    - Install SEL2741 as needed to accommodate all protective relaying
    - One SEL-2440 DPAC
    - Install Network A & Network B PTP Clocks. SEL2488 PTP Clocks.
    - One SEL-3350 Blueframe Flow Controller
    - One Ruggedcom RST2228 Ethernet Switch
    - One Ruggedcom RSG910C Switch with two 1000BASE-SX SFPs

- Connect metering group-provided revenue meter to station IP architecture.
- Witness testing by ComEd is required.
- Install normal and emergency sources to provide three (3) phase 208/120 VAC auxiliary power through local service request process. The normal and emergency sources shall be supplied from diverse 12kV or 34kV sources and approved by local utilities planning group.
- For any new equipment connected to the Bulk Electric System, rated at 100kV or above, ComEd requires the associated System 1 and System 2 protective schemes to have a minimum redundancy; connected CTs, PTs, DC control circuits, auxiliary trip relays, circuit breaker trip coils, and communication circuitry.
- AE1-172 Livingston Wind Farm switchyard ground grid shall not be tied to TSS 907 Fivemile Creek Substation ground grid.
- Dedicated site drainage pond shall be provided for the new TSS 907 Fivemile Creek substation in addition to the substation footprint and to be exclusively used by ComEd.
- Drainage pond property and storm water piping system shall be conveyed to ComEd.
- The Project Developer will be responsible for the cost of security system design and installation. Substation security level and requirements shall be assigned/determined by Exelon Security Operations. All fencing and security design shall be coordinated with and approved by Exelon Security team
- All relaying is to be in accordance with PJM Protection Standards.
- All new or upgraded facilities are to be in accordance with the PJM Transmission 7 Substation Design Subcommittee Technical Requirements.
- It's the responsibility of the Project Developer to obtain any permitting required for this project. See environmental section for details.
- Bus, insulators, supports, and equipment leads are to follow ComEd standards

3. NETWORK UPGRADES

Transmission Line Tie-in for new interconnection substation:

The Essex-Loretto 345kV line will be cut and looped into the new interconnection substation. The new conductor type will be 2-1277 kcmil ACAR and the new shield wire type will be 7#6 Alumoweld. Approximately 0.28 circuit miles of conductor and shield wire will be installed to facilitate the cut-in.

The following structure replacements and installations are required for the cut-in to TSS 907 Fivemile Creek substation:

Structure Number	Line Number	Existing Structure Type	Comments
490	90506	LSV+5	Install new single-circuit horizontal configuration deadend steel pole
489F	90506	N/A	Install new single-circuit horizontal configuration deadend steel pole
489D, 489E	90703	N/A	Install new single-circuit horizontal configuration deadend steel pole

TSS 93 Loretto

- Update L.90506 (now L.90703) relay setting for new remote end.
- Relabel 345kV L.90506 to L.90703 (physical labels and station prints).
- Install new Fiber MUX equipment for L.90703 System 2 relaying to provide nx64 channels.

TSS 905 Essex

- Update L.90506 relay setting for new remote end.
- Install new Fiber MUX equipment for L.90506 System 2 relaying to provide nx64 channels.
- Build new Fiber path (~8 miles) from TSS 907 Five mile Creek to existing Fiber to TSS 905 Essex possibly near Campus MW, and use for L90506 System 1 relays and for one Fiber MUX connection. Single Mode Fiber, minimum count of 48, path between TSS 907 and TSS 905 shall be physically diverse from path to TSS 93 and will be owned and maintained by ComEd.
- Build new Fiber path (~8 miles) from TSS 907 Five mile Creek to existing Fiber to TSS 93 Loretto, and use for L90703 System 1 relays and for one Fiber MUX connection. Single Mode Fiber, minimum count of 48, path between TSS 907 and TSS 93 shall be physically diverse from path to TSS 905 and will be owned and maintained by ComEd.

4. OTHER SCOPE OF WORK

- This section is not applicable.

5. MILESTONE SCHEDULE FOR COMPLETION OF COMED WORK

Facilities outlined in this report are estimated to take 60 months to construct, from the time the Generation Interconnection Agreement is fully executed. This schedule may be impacted by the timeline for procurement and installation of long lead items, the ability to obtain outages to construct and test the proposed facilities.

Description	Start month	Finish month
Detailed Design	1	21
Permitting	21	50
Construction	50	60

6. ASSUMPTIONS IN DEVELOPING SCOPE/COST/SCHEDULE

- ComEd estimate does not include costs of design and construction of AE1-172 TSS 930 Livingston Wind Farm substation, and transmission as described in Project Developer scope of work. ComEd estimated schedule is based on GIA contract being executed by all parties.
- ComEd estimate assumes that TSS 907 Fivemile Creek is low impact site (low security requirements). Chain linked fencing, non-motorized gate, and no cameras.
- This cost estimates assume that work will be performed during normal weekdays and with no overtime. Transmission line outages for construction have not been identified, but generally are available from September to May. These outages are controlled by PJM.
- Costs are based on 2024 rates and do not reflect a potential increase in Labor or Material costs.
- Foundation design assumes typical soil conditions at locations and will be subject to change after soil boring tests.
- The Project Developer will be responsible to request and bear the cost for relocation of existing transmission or distribution lines (including structures and other facilities) that may be required for transmission line crossings, the transport of any large equipment, such as turbines, rotors, turbine structures, cranes, etc. Formal submittal of this request to ComEd's TSO for ultimate review by PJM can be made 7 months prior to back feed request date.
- It is assumed no underground conflicts exist in the area of the new substation. Survey of the property will be acquired. Project Developer will be responsible for the cost of this survey.
- All upgrades to facilities included in this document will be required to meet latest ComEd standards.
- ComEd cost estimate is valid for six (6) months after Facilities Study release by PJM.
- Upgrades are subject to change based on detailed design development.

- It is assumed that ComEd facilities included in this document will not require a sound study
- TSS 907 Fivemile Creek shall be designed for a 100 yr bfe + 3ft at minimum. A flood study should be done early on to determine if any flood mitigations are needed such as elevating foundations.
- ComEd will complete pre-design and post construction survey for the transmission and substation upgrades, as required. This includes, but is not limited to, the LIDAR survey and video imaging for transmission lines. Costs associated with this are at the expense of the Project Developer. Pre-design survey must be completed prior to detailed engineering.
- ComEd will complete geotechnical soil borings, resistivity study, and analysis for substation and transmission upgrades. Costs associated with this are at the expense of the Project Developer.
- This study assumes that any additional right-of-way and/or easement work required will be at the expense of the Project Developer.
- This study assumes the Project Developer will remove any trees and mitigate any wetlands present in the property that would restrict the cut-in to new TSS 907.
- Project Developer to upload as-built drawings to ComEd drawing system (Meridian).
- This Facilities Study is time dependent. If the project is not into construction within one year of the issuance, the study will be void and the project re-studied, requiring the completion of a new Facilities Study.
- This document assumes that Project Developer has completed, tested, and conveyed to ComEd the new TSS 907 substation (per ComEd guidelines) and transmission line tie-in up to the existing ComEd right of way to allow for the 345kV line energization and back feed.
- It is assumed that all associated network upgrades, as listed in the System Impact study, are complete prior to this queue being placed in service.
- All real property conveyed in fee to ComEd must be remediated to and all real property to which real property rights are transferred to ComEd (as determined in ComEd's discretion) must be remediated to IEPA's Tiered Approach to Corrective Action.

7. REVENUE METERING REQUIREMENTS

All revenue metering needed for this interconnection project must meet the metering requirements stated in Appendix 2, section 8 of the AE1-172 GIA, and in PJM Manuals M01 and M14D. The details of applicable revenue metering requirements are given in the 'ComEd Interconnection Guidelines' posted on PJM website.

The revenue metering will be installed on the Transmission Owner side of the Point of Change in Ownership will be installed, owned and maintained by ComEd.

- REVENUE METERING FOR PJM AND COMED
    - The revenue meter measures the wholesale energy output (Hourly compensated net MWH and Hourly compensated net MVARH) of the Generating Facility.

The metering equipment, including revenue meter and CT/PT shall be installed, at Project Developer's expense, at the interconnection substation on ComEd side of the Point of Interconnection.

  - ComEd shall own, operate, maintain, inspect, and test all the metering equipment as set forth in 'Testing of Metering Equipment' section of this Interconnection Service Agreement, at the Project Developer's expense.

- REAL-TIME METERING FOR PJM
  - The Project Developer shall install, own, operate, maintain, inspect, and test real-time metering equipment to measure and transmit directly to PJM the real time MW, MVAR, voltage and status of electrical equipment such as circuit breakers and Motor Operated Disconnect switches, in conformance with the requirements listed in PJM Manuals M-01 and M-14D.
- RETAIL METERING FOR COMED
  - The AMI Meter measures the energy consumption by the Project Developer at transmission level and hence shall be designed to measure low MW flow.
  - The metering equipment including AMI Meter and CT/PT shall be installed at the interconnection substation on ComEd side of POI, at the Project Developer's expense.
  - ComEd shall own, operate, maintain, inspect, and test all the metering equipment as set forth in the 'ComEd Interconnection Guidelines'.

8. LAND REQUIREMENTS FOR INTERCONNECTION SUBSTATION

Land requirements for the Interconnection Substation needed for this interconnection project must meet the requirements in the 'ComEd Interconnection Guidelines' posted on PJM website.

- For a 345kV substation bisecting one transmission line, the site should be at least 784' x 513' excluding the drainage pond. The site should be expandable to 784' x 914' without any restriction.
- The site should be accessible from at least two sides to bring in future transmission lines. This means that there should be no river, another transmission line, hills, forest, or wetland on at least two sides of the site.
- There should be no legal agreements or other impediment to interconnect additional generator tie lines to this site from other generators in the future.
- The site should not encroach into ComEd transmission or distribution corridors.
- If the Project Developer owns the land surrounding the substation site, the Project Developer must provide open easement to ComEd to bring in future transmission lines into the substation.
- The Project Developer is responsible to build an access road meeting ComEd requirements to the substation site from the nearest public road.
- The Project Developer is responsible to acquire land to install tie-lines integrating the substation with the ComEd transmission system.

- The Project Developer is responsible to acquire land to build a drainage pond meeting ComEd requirements for the storm water. Drainage pond cannot be underneath any transmission lines.

Upon completion of the construction and installation of the interconnection substation, the tie-line, access road, drainage pond and related improvements and facilities, and the satisfactory completion of testing of the interconnection substation acceptable to ComEd, the Project Developer shall transfer all the Property Rights and Permits to ComEd, at no cost or expense to ComEd, pursuant to documentation that is acceptable to ComEd, including (without limitation) the Property Transfer Documents in fee simple.

All real property conveyed in fee to ComEd must be remediated to and all real property to which real property rights are transferred to ComEd (as determined in ComEd's discretion) must be remediated to IEPA's Tiered Approach to Corrective Action Objectives (TACO) Tier 1 residential remediation standards.

9. ENVIRONMENTAL AND PERMITING

- The Project Developer will be responsible to obtain all environmental approvals and permitting required for the construction of TSS 907 Fivemile Creek, TSS 930 Livingston Farms Wind Farm, and 345kV L.90701.
- ComEd will be responsible to obtain all environmental approvals and permitting required for L.90506 and L.90703 work. This includes any endangered species studies and monitoring, as required. Costs associated with this permitting are at the expense of the Project Developer.
- The Project Developer will be responsible for site restoration required for substation and transmission upgrades. This includes, but is not limited to road restoration/improvements, wetland restoration, and farm field restoration/crop damage. Costs associated with this are at the expense of the Project Developer.
- The Project Developer will be responsible for the cost to purchase real estate or obtain the necessary right-of-way easement for all upgrades associated with this project. These associated upgrades are not included in the costs listed in this study.
- The Project Developer will be responsible for remediation costs for locations found to have environmental contaminations and remediation. This may require contaminated soil disposal as well as lead paint removal for existing structure work.
- It is assumed that all necessary permits will be obtained in a timely manner to allow engineering and construction to proceed according to the Milestone Schedule.
- It is assumed that conveyance of property and rights will be obtained to support the PJM Transmission Outage Schedule.
- It is assumed that the required Environmental Study will yield no impediments to the development of the site.

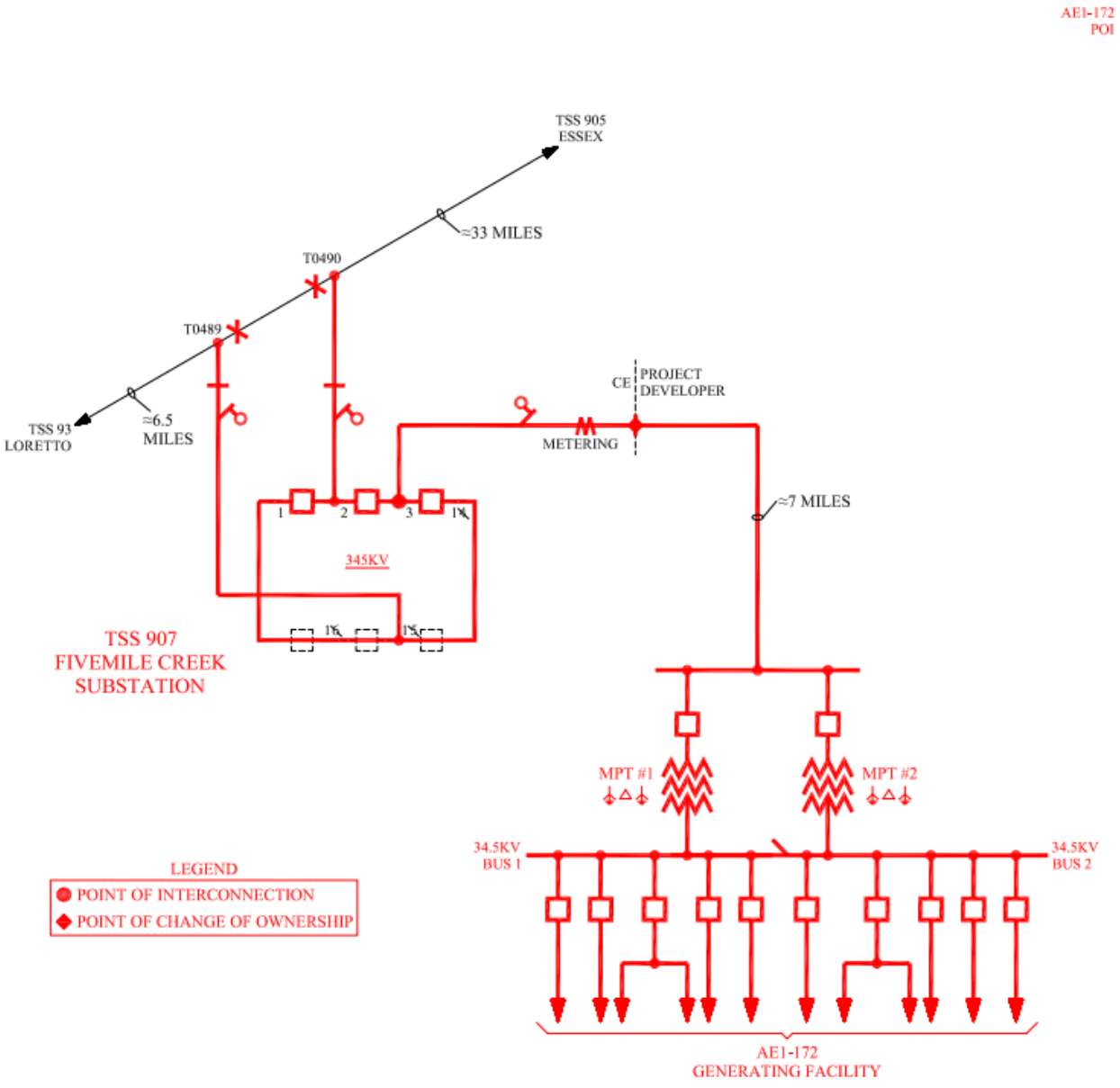
C. APPENDICES

Attachment #1: Single line Diagram for the Physical Interconnection

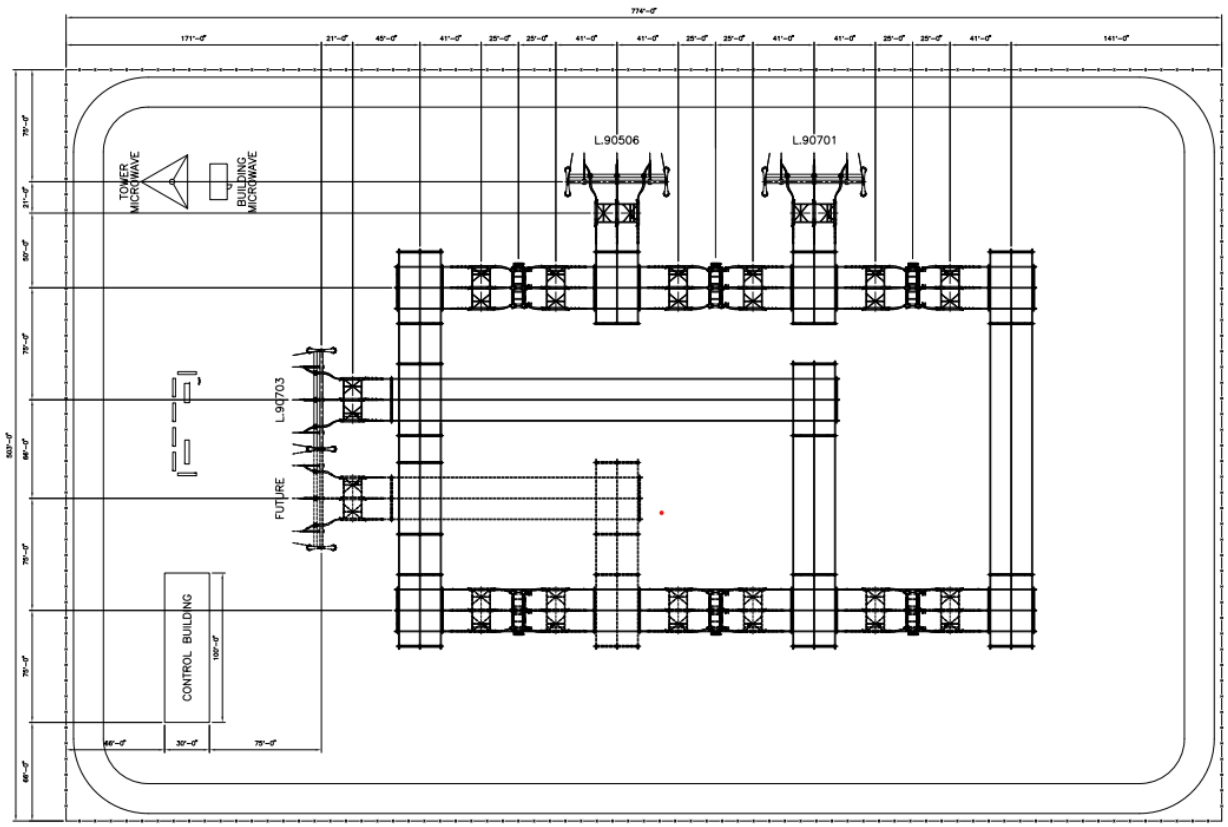
Attachment #2: Substation General Arrangement (attached separately)

Attachment #3: Plan and Profile (attached separately)

Attachment #1: Single line Diagram for the Physical Interconnection



Attachment #2: Substation General Arrangement



Attachment #3: Plan and Profile