Facilities Study Report

For

Physical Interconnection of

PJM Generation Interconnection Request

Project IDs AE2-321 / AF1-048

Belvidere-Marengo 138 kV

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 Commonwealth Edison

A. Transmission Owner Facilities Study Summary

1. PROJECT DESCRIPTION

The Project Developer (PD) has proposed a Solar Generating Facility located in, McHenry County, Illinois with a designated PJM Project ID of AE2-321. The installed facilities will have a total Maximum Facility Output (MFO) of 100MW with 67MW of this output being recognized by PJM as Capacity.

The Project Developer (PD) has also proposed a Storage uprate to a planned/existing Storage Generating Facility located in, McHenry County, IL with a designated PJM Project ID of AF1-048.

This project is an increase to the AE2-321 project, and will share the same Point of Change in Ownership.

The AF1-048 project is a 52.2MW uprate (31.32MW Capacity uprate) to the previous project. The total installed facilities will have a capability of 152.2MW with 98.32MW MW of this output being recognized by PJM as Capacity.

2. POINT OF INTERCONNECTION (POI)

The Generating Facility will interconnect with the Commonwealth Edison transmission system via a newly constructed 138kV kV breaker-and-a-half substation, TSS 901 Thorne Road, tapping the TSS 122 Belvidere - TSS 123 Marengo 138kV line, L.12205, approximately 11.2 miles from TSS 122 Belvidere and 1.4 miles from TSS 123 Marengo.

The construction of the new interconnection substation will result in the splitting of the existing TSS 122 Belvidere – TSS 123 Marengo 138kV, L.12205 into two lines on the transmission system. The new L.12205 will connect TSS 901 Thorne Road to TSS 122 Belvidere and L.90103 will connect TSS 901 Thorne Road to TSS 123 Marengo and TSS 151 Woodstock.

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 TSS 901 Thorne Road 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:

4.1. The PD is responsible for construction of the additional 100MW Solar generation. The PD is also responsible for one (1) 138kV circuit breaker, one (1) generator step-up transformer (GSU), two (2) 138kV motor operated disconnect switches, and a 138kV generation lead line with associated structures terminating at TSS 901 Thorne Road.

4.2. The PD is responsible for construction of the additional 52.2MW of storage. The Project Developer is also responsible for two (2) 34kV circuit breaker and four (4) 34kV disconnects. An additional metering CT will also be required. This CT will be owned by ComEd.

4.3. At AE2-321 / AF1-048 and Belvidere-Marengo 138 kV, in general, Project Developer relaying, etc. to follow section 6.2 (Design E) of latest version of ComEd interconnections guidelines (for Generators at Transmission Level) Rev2 Effective date 12/16/21 interconnection guidelines (for Generator at Transmission Level) Rev. 2 Effective 12/16/2021, with the following project specific notes (where applicable):

- New 138kV gas circuit breakers to auto trip and isolate for critical gas level
- New 138kV Tie Line terminal relay types to be the same as ComEd terminal relays. This includes relay 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 to model in a short circuit program.
- Project Developer to include over/under frequency and voltage protection at 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.
- Witness testing by ComEd or a Designated Authority will be required and must be pre-scheduled at least 90 days in advance.

4.4. Project Developer to provide transformer test reports for 138kV - 34.5kV step up transformers, for ComEd short circuit modeling. Test reports must include %Z impedance and load loss.

4.4. 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

4.5 The PD will be responsible to purchase real estate or obtain the necessary right-of-way easement to install the 138kV transmission line to TSS 901 Thorne Road substation.

4.6 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 SF6 circuit breaker, when SF6 gas drops to the critical level, the close circuit of breaker shall be opened, and motor operated disconnects on both sides of CB 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 motor operated disconnects on both sides of CB shall be opened and the close of the circuit breaker shall be opened.

4.7 All changes to topology, including generation, must be modeled during the Phase 1 study for PRC-027 compliance. A protection system coordination study is required for new BES buses or when there is a 15% (or greater) change in the fault current for an existing BES bus. Settings changes may be required per the outcome of this coordination study.

4.8 The PD is to provide two, physically diverse, Single Mode Fiber paths between TSS 901 Thorne Road Interconnection Substation and TSS 914 McHenry Co Solar.

4.9 PD will be responsible for Line L.90101 Single Mode Fiber from Project Developer's Substation to ComEd's Substation TSS 901 Thorne Road. This will be used for Primary Relay scheme using Direct-on-Fiber connections per the Relay Notes. The minimum Fiber count is 48 Fibers and construction will be in adherence with ComEd Transmission Line standards. The PD will own and maintain this Fiber cable up to the fiber distribution panel in TSS 901 Thorne Road.

4.10 PD will be responsible for Line L.90101 Single Mode Fiber from Project Developer's Substation ComEd's Substation TSS 901 Thorne Road. This will be used for Secondary Relay scheme using Direct-on-Fiber connections per the Relay Notes. This Fiber must be built in a physically diverse path from the Fiber path used for the Primary Relay scheme. The minimum Fiber count is 48 Fibers. The PD will own and maintain this Fiber cable up to the fiber distribution panel in TSS 901 Thorne Road.

4.11 PD to provide limiting Transmission Facility ratings for their portion of 138kV L90101, in accordance with NERC FAC-008, FERC Order 881 and PJM Operational requirements for normal and emergency ratings from -55F to 130F in 5F increments. The metering should have a continuous capability of at least 500A per branch.

4.12 The demarcation of ownership for these Fiber cables will be in the Fiber Distribution Panel (FDP) in the ComEd Substation TSS 901 Thorne Road. The Project Developer will own and maintain both Fiber cables from ComEd's TSS 901 Thorne Road FDP all the way to their generator substation.

4.13 The PD will be responsible to request and bear the cost of any outages required on existing transmission or distribution lines that may be required for the transport of any large equipment, i.e. turbines, rotors, turbine structures, etc.

4.14 Option to Build

- If the PD selects the Option to Build, the PD shall construct TSS 901 Thorne Road.
- The PD shall construct TSS 901 Thorne Road and transfer ownership to ComEd prior to commercial operation of AE2-321 / AF1-048. The PD shall transfer ownership of the real estate in fee to ComEd.
- Substation requirements are described below in section B.

B. Transmission Owner Facilities Study Results

The following is a description of the planned Transmission Owner facilities for the physical interconnection of the proposed AE2-321 / AF1-048 project to Commonwealth Edison transmission system. These facilities shall be designed according to Commonwealth Edison Applicable Technical Requirements and Standards. Once built, Commonwealth Edison will own, operate, and maintain these Facilities.

1. TRANSMISSION OWNER INTERCONNECTION FACILITIES:

The TO Interconnection Facilities will include, but not be limited to, the following.

- A 138kV dead-end structure and foundation within the fence of the Interconnection Substation, to terminate the Project Developer's generator lead line.
- One (1) new 138kV motor-operated disconnect switches, rated for 3000A, to be installed at each new breaker
- Three (3) line disconnect switches, rated for 3000A, to be installed at each line
- Three (3) new 138kV 1200:1 CCVTs to be installed at Busses 1, 2, and 3
- Three (3) metering CT/PTs
- Two (2), physically diverse, Single Mode Fiber paths between TSS 978 Miller Road Interconnection Substation and Kendall County Solar.
- Three (3) Surge Arrestors
- Foundations and structures

2. STAND ALONE NETWORK UPGRADES

The Stand Alone Network Upgrades will include, but not be limited to, the following.

For new interconnection substation:

TSS 901 Thorne Road Interconnection Substation

A new breaker and a half substation, TSS 901 Thorne Road 138kV, will be constructed along the L.12205 138kV transmission line to interconnect the AE2-321 project with the Commonwealth Edison transmission system.

The greenfield new substation will include

- Three (3) new gas SF6 138kV circuit breakers BT 1-2, BT 2-3, and BT 1-3, with accommodation for future breakers BT 4-5, BT 5-6, and BT 1-6 rated for 3000A
- Breakers to be rated for 3000A

- One (1) new 138kV motor-operated disconnect switches, rated for 3000A, to be installed at each new breaker
- Six (6) new 138kV 1200:1 CCVTs to be installed at Busses 1, 2, and 3
- Two (2) new 2000A wave trap
- Two (2) new CCVTs with Carrier Accessories and Line Tuners
- Six (6) Surge Arrestors

Two (2) new 12kV-208/120V AC auxiliary transformer to be installed. These will be fed via a nearby 12kV distribution line to be determined during detailed design; new 12kV UG cable will be run to allow access to TSS 901 Thorne Road. The distribution line connection will require construction of new 12kV overhead lines and poles from an existing distribution line to TSS 901 Thorne Road. Connection details and length will be determined during detailed engineering and may exceed the assumptions in this study. If a lower cost option is found during engineering, the cost estimate would be reduced. It is assumed that no new ROW for the new distribution line will be required, but this will be determined during detailed engineering.

New control building to be installed to accommodate new relaying and relaying for future breaker-and-a-half bus expansion. Control enclosure shall meet latest ComEd standards. If NERC Low Impact, install BSC/IT UCOMM router and firewall. If Medium Impact, use serial communication. The new control building will contain:

- One (1) 125VDC battery systems
- DC distribution panels
- Relay panels
- Marshalling cabinets
- Auxiliary AC power panels
- Building HVAC system
- Fire/security system
- SCADA
- Metering equipment.
- Additionally, auxiliary data communications will be installed to communicate with PD remote end for SCADA and metering purposes.
- Install SEL-3350 RTAC with redundant RST-2228 Switch Architecture (Master, Master Aux A/B, and Aux A/B switches).
- Install SEL-3620 Port Servers as needed for IED relays that must be connected serially over the available 3350 RTAC ports. Preference is to connect relays IP to the switch architecture.
- Install SEL-3555 HMI.
- Install SEL-2488 GPS Clock.
- Install SEL-3555 PDC cabinet per GDD
- Install SEL-2440 devices for any hardwire I/O
- For each Project Developer RTU, install a pair of fiber serial connections to the RTAC for data exchange.

- Connect metering group-provided revenue meter to station IP architecture.
- Confirm latest device model numbers and GDD with the assigned SCADA engineer.

Relay Installs at TSS 901 Thorne Road.

- Install a 50BF/35/79 SEL-451 for all new CBs. All 138kV Bus Ties must have sync check for manual close, SCADA close, and automatic reclosing.
- Install a 79-2/SEL-351A for a second reclosing mode on all new CBs.
- For 138kV lines L.90103 install a 11-1/DCB SEL-421-5 and 11-2/STEP SEL-311C-1 line protection per GDD1936. Utilize 2000:5 ratio for both systems of line relaying. New Carrier relays, UPLC II for DCB and GARDPRO for DTT transmit and receive.
- At TSS901, for 138kV line L.12205 install a 11-1/DCB SEL-2421-5 and 11-2/STEP SEL-311C-1 line protection per GDD1936. Utilize 2000:5 ratio for both systems of line relaying. New Carrier relays, UPLC II for DCB and GARDPRO for DTT transmit and receive.
- In addition, install load rejection logic such that the transfer trip is initiated on both primary and secondary relaying to Project Developer site if 138kV L.90101 breaker at TSS901 is opened (Refer to GDD 4003 for load rejection design).

Yard cable trench to be installed from control building to breakers and line terminal structures. Cable Trough to have a drainage system installed below the trough per ComEd standards. A lift station may be needed.

New substation to require installation of new fence and (2) sliding vehicular gates that are positioned no less than one half of the yard diagonal apart, as well as site development and grading. Preliminary security classification for the proposed substation indicates that fencing will be 7’ with 1’ barbed wire; fencing must adhere to all ComEd specifications and requirements. Security requirements including fencing may change. New station grounding, lightning protection, and lighting to be evaluated by studies, designed, and installed.

The developer ground grid shall not be tied to the TSS 901 Thorne Road ground grid. New property will need to be purchased.

The access road to the main public road should be a minimum of 28 feet and have an asphalt or concrete approach. The radius transition to the main road to be in accordance with the requirements of the government having jurisdiction of the public road.

- Minimum width of road is 20’-0”
- Minimum turning radius (horizontal curve) of road to be 40’-0” to the center of the road.
- Maximum slope of road is to be 4.5%

Stormwater detention and any other required stormwater management features to be constructed outside of the substation fence. These must satisfy all local, county, state, and federal requirements for stormwater management.

Security system will need to be installed to meet ComEd standards.

If any utilities are routed under the substation these will need to be re-routed outside of the substation.

Fiber cable circuits

Project Developer to provide two, physically diverse, Single Mode Fiber paths between TSS 901 Thorne Road Interconnection Substation and McHenry Solar.

System 1 Relays will use the “System 1” Fiber cable for a Current Differential Relay Scheme, which will also provide Direct Transfer Trip (DTT). This Fiber cable will be owned and maintained by the Project Developer and should have minimum of 48 Fibers. The demarcation for the Fibers in this cable will be in a Fiber Distribution Panel (FDP) inside of the TSS 901 Substation. ComEd will own and maintain the FDP.

System 2 Relays will use the “System 2” Fiber cable for a Current Differential Relay Scheme, which will also provide Direct Transfer Trip (DTT). This Fiber cable will be owned and maintained by the Project Developer and should have a minimum of 48 Fibers. The demarcation for the Fibers in this cable will be in a Fiber Distribution Panel (FDP) inside of the TSS 901 Substation. ComEd will own and maintain the FDP

The demarcation of ownership for these Fiber cables will be in the Fiber Distribution Panel (FDP) in the ComEd Substation TSS 901 Thorne Road. The Project Developer will own and maintain both Fiber cables from ComEd’s TSS 901 Thorne Road all of the way to their McHenry solar substation.

3. NETWORK UPGRADES

The Network Upgrades will include, but not be limited to, the following.

Transmission Line Tie-in for new interconnection substation:

Cut existing L12205 138kV transmission line between existing structure #79 and #80 to loop into new TSS 901 substation.

- ComEd will be performing the design, procurement, and construction of the new structures to cut over to the new TSS 923 White Eagle Rd. Substation.
- Install two new vertical 138kV deadend structures #79D and #80E on drilled shaft foundations. Both new structures will be EM10377 framings, each with an approximate height of 95'.
    - A vertical deadend structure similar to LS1710 framing with an approximate height of 80' is required to roll the phases correctly into and out of the proposed substation. The framing will be modified as follows:
        - Two shield wire attachments for spans facing the proposed substation.
        - Longer shield wire arms to account for 0-degree shielding angle.
- Approximately 0.38 circuit miles of newly installed conductor and shield wire are required.
    - New conductor and shield wire for the proposed cut-in area (between proposed structure #79D to TSS 901 and from TSS 901 to proposed structure #80E) is the 1113.0 kcmil 45/7 ACSR “Bluejay” and the 7#6 Alumoweld, respectively.

- Existing conductor and shield wire on L12205 is the 1113.0 kcmil 45/7 ACSR "Bluejay" and the 7#8 Alumoweld, respectively, and will be transferred to new cut-in structures #79D and #80E.
- Existing L12204 will remain unchanged.

- Existing tangent structure #79 and existing deadend structure #80 will remain.

Upgrades to neighboring facilities:

TSS 122 Belvedere

- L12205, reset relay settings only, pending on-going relay upgrades job.
- Replace existing SEL-3530 RTAC 1A with SEL-3350
- Connect new IP relays to existing dual switch architecture
- New 2000 Amp Trench Wavetrap
- Upgrade Comm. Equipment to UPLC II for DCB
- Upgrade Comm. Equipment to GARDPRO for DTT (May be already installed with project work in March of 2025).

TSS 123 Marengo

- L90103, upgrade relays to SEL421 and 311C per GDD1930
- Upgrade Comm. Equipment to UPLC II

TSS 151 Woodstock

- L90103, upgrade relays to SEL421 and 311C per GDD1930
- Upgrade Comm. Equipment to UPLC II

4. OTHER SCOPE OF WORK

ComEd to provide oversight to the Project Developer at the Project Developer's cost for the engineering and construction of the interconnect substation if the Project Developer elects Option to Build.

Metering will be required to be installed at the interconnection substation. Metering to be provided for revenue and AMI purposes.

An additional two (2) sets of CT/PTs will be needed on the 34kV bus at TSS 914 McHenry County Solar. This will be installed on the Project Developer 34kV bus but will be owned by ComEd. These will feed ComEd metering.

5. MILESTONE SCHEDULE FOR COMPLETION OF [TO] 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 is 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

6.1 This study is based on the Phase 2 System Study Report for PJM Generation Interconnection New Service Request Project AE2-321 Belvidere-Marengo 138 kV and AF1-048 Belividere-Marengo 138kV. The steady-state voltage study for stability analysis will be performed by PJM during the Facility Phase. The PJM study could identify upgrades to the ComEd system that would become part of this project's scope of work. It is assumed that all associated network upgrades, as listed in the above System Impact study, are complete prior to this New Service Request Project Position being placed in service.

6.2 The schedule is based on GIA contract being executed by all parties and the deposit received.

6.3 ComEd cost estimates assume that work will be performed during normal weekdays and with no overtime.

6.4 Transmission line outages for the tap construction have not been identified, but generally are available in spring (March to May) and fall (September to November). These outages are controlled by PJM.

6.5 The PD will be responsible to request and bearing the cost for relocation of existing transmission or distribution lines (including structures) that may be required for transmission line crossings, the transport of any large equipment, such as cranes, etc. The backfeed date identified in earlier sections is not yet approved. Formal submittal of this request to ComEd's TSO for ultimate review by PJM can be made 7 months prior to the back feed request date.

6.6 All upgrades to facilities included in this document will be required to meet the latest ComEd standards.

6.7 Upgrades are subject to change based on detailed design development

6.8 Costs are based on 2024 rates and do not reflect a potential increase in Labor or Material costs.

6.9 Project Developer to upload as-built drawings to ComEd drawing system (Meridian).

6.10 Single fiber routing has not been included in this study.

6.11 ComEd cost estimate is valid for six (6) months after Facilities Study release by PJM.

6.12 This study assumes that any additional right-of-way and/or easement work required is at the expense of the Project Developer.

6.13 This Facilities Study is time-dependent. If the project is not into construction within one year of the issuance, the FS will be void and the project re-studied, requiring the completion of a new FS.

6.14 Both (1) all real property conveyed in fee to ComEd must be remediated to and (2) 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.

6.15 This facilities study report (FSR) assumes that generator output and plant auxiliary power consumption can both be metered with revenue accuracy as described. The final revenue metering configuration and equipment will be confirmed, and may be revised, during detailed engineering following execution of the Generator Interconnection Agreement (GIA).

6.16 It is assumed that all associated network upgrades, as listed in the Phase 1 study, are complete prior to this New Service Request Project being placed in service.

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 AE2-321 / AF1-048 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.

- 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 Change in Ownership.
    - ComEd shall own, operate, maintain, inspect, and test all the metering equipment as set forth in 'Testing of Metering Equipment' section of the PJM Tariff, 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, at the Project Developer's expense.
- 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 the 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'.
- BATTERY TERMINAL AMI METERING FOR COMED

- FERC Order 841 designates inflow to charge battery storage facility as wholesale power. To separately measure the power inflow to charge the battery and bill it at wholesale rate, the Project Developer needs to install the following equipment.
    - Advanced Metering Infrastructure (AMI) equipment including AMI Meter and Current Transformer/Potential Transformer (CT/PT) at the output terminal of the battery storage facility to measure power flow from transmission system to charge the battery storage facility.
    - Fiber cable to provide communication link to transmit AMI meter data to the ComEd SCADA system.

8. LAND REQUIREMENTS FOR INTERCONNECTION SUBSTATION

1) For a 138kV substation bisecting one transmission line, the site shall be at least 500' x 400' excluding the stormwater detention. The site should be expandable to 500' x 800' without any restriction.

2) 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.

3) There should be no legal agreements or other impediment to interconnect additional generator lead lines to this site from other generators in the future.

4) The site should not encroach into ComEd transmission or distribution corridors.

5) If the PD owns the land surrounding the substation site, the PD must provide open easement to ComEd to bring in future transmission lines into the substation.

6) The PD is responsible to build an access road meeting ComEd requirements to the substation site from the nearest public road.

7) The PD is responsible to acquire land to install tie-lines integrating the substation with the ComEd transmission system.

8) The PD is responsible to acquire land for the stormwater detention facility meeting all applicable ComEd Environmental requirements and all applicable municipal, county, and state requirements for stormwater management.

Upon completion of the construction and installation of the interconnection substation, the tie-line, access road, stormwater detention facility and related improvements and facilities, and the satisfactory completion of testing of the interconnection substation acceptable to ComEd, the PD 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

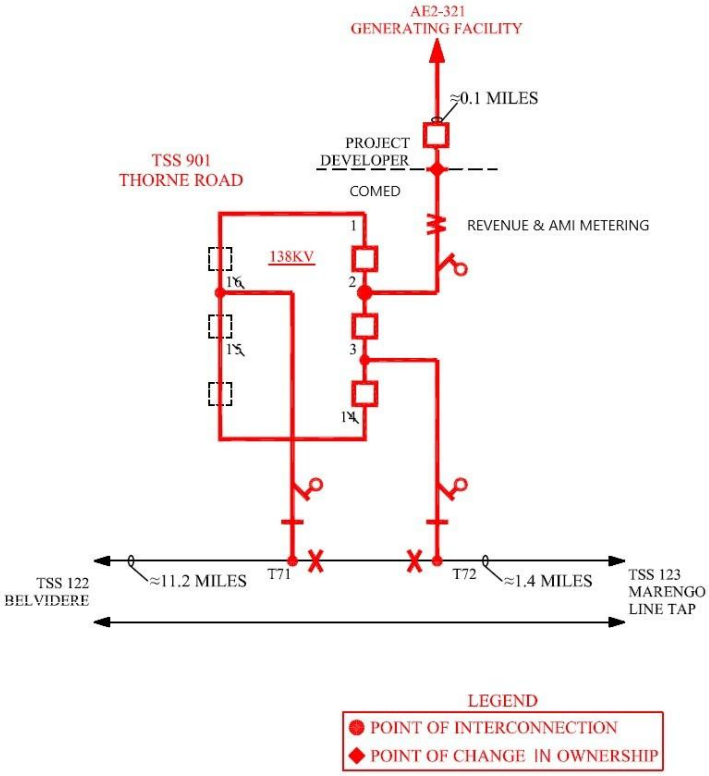
- Environmental approvals required for the construction of 138kV TSS 901 Thorne Road to be acquired at PD cost.
- The PD will be responsible for any remediation costs if greenfield and expansion locations are found to have environmental contaminations.
- PD will purchase the real estate to accommodate the new 138kV TSS 901 Thorne Road substation and transfer ownership to ComEd. A total of 200,000 square feet of real estate will need to be purchased (500' x 800') for the yard, plus additional real estate for stormwater management features outside of the yard. See Attachments #2.
- PD will be responsible for cost incurred if Army Corps of Engineers, county, and/or municipal permits are needed including storm water permitting.
- It is assumed that all necessary permits will be obtained in a timely manner so as 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.
- Both (1) all real property conveyed in fee to ComEd must be remediated to and (2) 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.

C. APPENDICES

1) Attachment #1: One Line
2) Attachment #2: General Arrangement for the Substation Equipment
3) Attachment #3: One Line Diagram
4) Attachment #4: Transmission Line Tie-In Plan
5) Attachment #5: Geographical Map Showing the Property Location

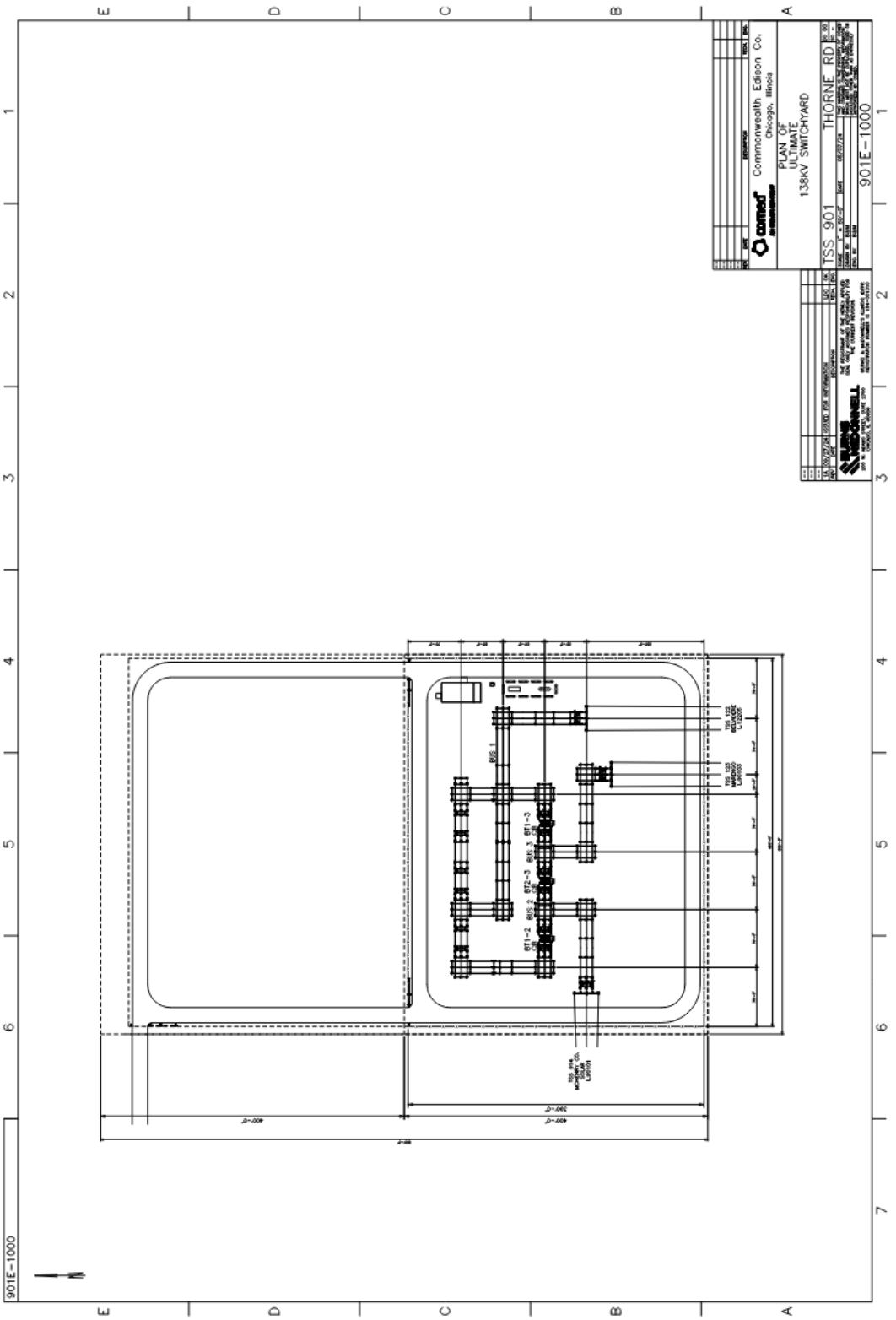
Attachment #1:

One Line Diagram



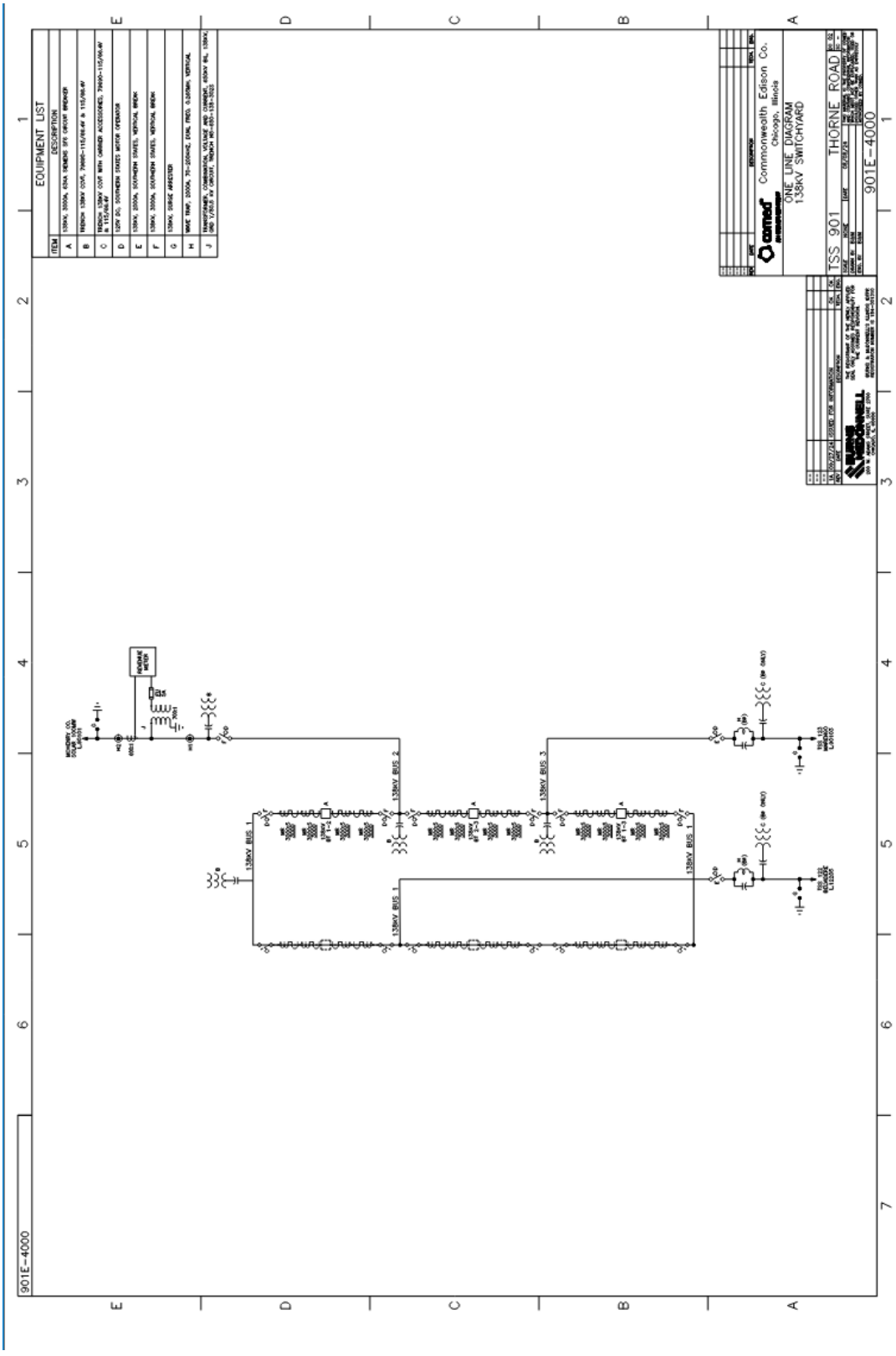
Attachment #2:

General Arrangement for the Substation Equipment



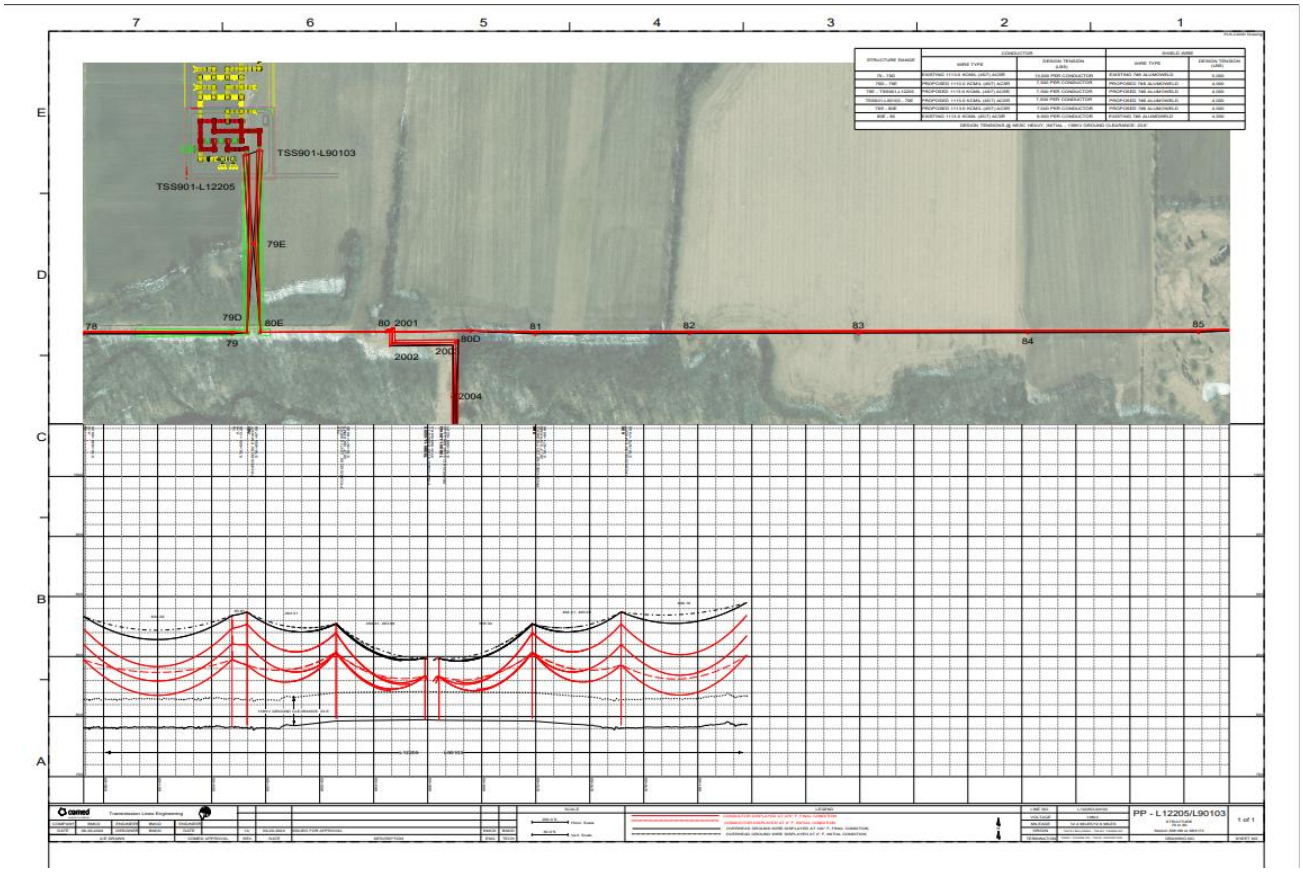
Attachment #3:

One Line Diagram



Attachment #4:

Transmission Line Tie-In Plan



Attachment #5:

Geographical Map Showing the Property Location