

**REQUEST NO. ENG 2.8**

*Please provide a copy of the “Transmission Planning Criteria” mentioned in Ms. Sterling’s testimony on line 114.*

(Response provided by Zafar Choudhry, Senior Engineer, Transmission Planning)

**RESPONSE:**

The ComEd Transmission Planning Criteria is shown in Attachments ENG 2.8 Part 1.pdf, and ENG 2.8 Part 2.pdf. These comprise a single document, split into two files.



## **TRANSMISSION PLANNING**

### **CRITERIA**

**Transmission Planning**

**Department**

**March 29, 2004**

**REQUEST NO. ENG 3.4**

*Describe any alternative substation layouts or construction techniques considered that would minimize or eliminate the need for the parcel of land for which ComEd seeks condemnation rights. Indicate any and all reasons why those alternatives were rejected.*

(Response provided by Gene Ransom and Wayne Hasegawa, Transmission Engineering, and Jennifer Sterling and Paul Mills, Transmission Planning)

**RESPONSE:**

ComEd considered three potential layouts that would minimize or eliminate the need to put substation facilities on the parcel adjacent to the Crawford 345 kV substation. Although these potential layouts would reduce the footprint of the expanded Crawford 345 kV bus, they would not eliminate the need to overhang the adjacent parcel with transmission lines, requiring some property rights from the landowner.

The three alternative substation layouts considered are as follows:

Option 1

The Option 1 layout (depicted in the attached diagram labeled EXHIBIT-CRAWFORD 3-4-1) reduces the amount of additional property needed for expanding the existing 345 kV straight bus to the proposed 345 kV ring bus. The proposed bus arrangement uses underground cable to connect existing 345 kV L1311 and L1312 to new bus locations, and for the proposed 345 kV L1309 terminal. Option 1 was rejected for the following reasons:

- The bus layout restricts maintenance work by not allowing construction trucks access to all bus sections and breaker locations.
- The underground cable forms part of the bus. A cable fault would cause a bus outage for up to 10 days until the cable could be repaired, resulting in extended operations with an open ring.

- The cable sections would have to consist of 2 cables per phase to match the rating of the overhead conductors, resulting in twice as many cable terminations. The design does not include space for the additional cable terminations.
- The design does not include space for line inductors on the proposed 345 kV L1309 and future L1310. Additional property would still need to be obtained for installing this equipment.

### Option 2

The Option 2 layout (depicted in the attached diagram labeled EXHIBIT-CRAWFORD 3-4-2) reduces the amount of additional property needed for expanding the existing 345 kV straight bus to the proposed 345 kV ring bus, but was rejected for the following reasons:

- The bus layout restricts maintenance work by not allowing construction trucks access to all bus sections and breaker locations.
- The design does not include space for line inductors on the proposed 345 kV L1309 and future L1310. Additional property would still need to be obtained for installing this equipment.
- The layout would require multiple instances of 345 kV overhead lines crossing over 345 kV bus sections. For reliability reasons, ComEd avoids routing 345 kV lines in this manner to avoid the possibility of a single line failure causing multiple bus outages.

### Option 3

The Option 3 layout (depicted in the attached diagram labeled EXHIBIT-CRAWFORD 3-4-3) does not require additional property for expanding the existing 345 kV straight bus to the proposed 345 kV ring bus, but was rejected for the following reasons:

- The bus layout restricts maintenance work by not allowing construction trucks access to all bus sections and breaker locations.
- The design does not include space for line inductors on the proposed 345 kV L1309 and future L1310. Additional property would still need to be obtained for installing this equipment.
- The layout requires multiple instances of 345 kV overhead lines crossing over 345 kV bus sections. For reliability reasons, ComEd avoids routing 345 kV lines in this manner to avoid the possibility of a single line failure causing multiple bus outages.

ENG 4.1 *Provide the addresses, cross street references, map, and size for each of the six parcels mentioned in Mr. Jones' direct testimony that ComEd is attempting to purchase for this project:*

(Response provided by Robert M. Jones, Sr.)

**RESPONSE:** The location of each parcel is indicated on the attached map, Attachment

ENG 4.1. These are described in the following chart:

PROPERTY OWNER	LOCATION	ESTIMATED SIZE OF ENCUMBRANCE	CURRENT NEGOTIATION STATUS
Alvarez / Brackett	Crawford Yard – SW corner of 35 <sup>th</sup> and Pulaski	Approximately 8 acres	This is the procurement of rights over property north of our existing substation. Both owner and tenant still seeking \$ above FMV. Continuing to talk with tenant.
Peoples Gas	Adjacent and west of Crawford Yard – SW corner of 35 <sup>th</sup> and Pulaski	Approximately 0.25 acres	This is a re-confirmation of an existing easement. Spoke with owner. Early indication was receptive.
Department of Corrections	East of Lawndale Ave. & West of Kedzie – North of 34 <sup>th</sup> Street	Approximately 1.5 acres	This is a renewal of an expired easement. Spoke with owner. Early indication was receptive.
MWRD	NW corner of Kedzie and I55	Approximately 1.25 acres	This is a realignment of an existing easement. Spoke with owner. Early indication was receptive.
Throop Realty	East of Throop St. at the South Branch of the Chicago River	Minimal / overhang – Initial design proposes approximately .5 acres	This is the procurement of new rights for overhang. Spoke with owner. Early indication was receptive.
DeRose	NE corner of Elston & Cortez	Initial design requires approximately 1 acre	This is the procurement of new rights for tunnel. Spoke with owner. Early indication was receptive.
Midwest Bank & Trust	East & West of Lawndale Ave. – North of 34 <sup>th</sup> Street	Approximately 4.25 acres	This is a re-confirmation of an existing easement and additional rights procurement. Spoke with owner. No indication either way just yet.

ENG 4.5      *For each of the five parcels, did ComEd consider any other alternatives? Describe the alternates ComEd considered and why they were not selected.*

(Response provided by Robert M. Jones, Sr.)

**RESPONSE:** ComEd has presented detailed testimony describing the various routes it has considered and the reasons why the proposed route is the best and least cost. When determining a proposed route, ComEd does take into account, along with engineering requirements, whether potential parcels are on the market, so that does affect ComEd's route choice. ComEd does not negotiate with every landowner in the vicinity of the proposed route. Consistent with the Commission's rules, Part 300, ComEd selects a route, notifies the Commission and the landowners, and enters good faith negotiations with those landowners. If ComEd's proposed route is approved by the Commission, that route will include each of the parcels listed in the response to Data Request ENG 4.1.

ENG 4.4 *For each of the five parcels that voluntary negotiations are underway (Jones direct testimony lines 149-153), if a procurement agreement with the property owner is not reached and eminent domain authority is not granted, could ComEd complete the project? If so, describe how ComEd would complete the project. If not, describe why no alternative exist.*

(Response provided by Robert M. Jones, Sr.)

**RESPONSE:** ComEd will complete the project in accordance with the Certificate of Public Convenience and Necessity issued to it by the Commission. ComEd has presented detailed testimony describing the various routes it has considered and the reasons why the proposed route is the best and least cost. If the Commission agrees with ComEd as to the proposed route, and orders ComEd, pursuant to Section 8-503, to construct the line on that route, ComEd will purchase the necessary property rights to complete the project in accordance with the Commission's order. If ComEd has not been able to obtain those rights voluntarily, pursuant to its good faith negotiations under Commission Rule 300, ComEd would use the power of eminent domain, as conferred on ComEd as provided in Section 8-509, to complete the project as ordered.

If the Commission grants ComEd a Certificate of Public Convenience and Necessity, but does not issue ComEd an order pursuant to Section 8-503, ComEd would only be able to complete the project if all landowners sell the necessary property rights to ComEd voluntarily.