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METRA Cross
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**Meeting Commonwealth
Edison's Distribution
Allocation Requirements
from Illinois Commerce
Commission Order 10-0467**

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ComEd has four categories of cost assignments in their distribution cost of service (COS) study: shared, secondary voltage distribution, secondary voltage transformer, and primary voltage transformer. Pole costs must be assigned to these categories within the COS study.

Shared costs within the COS study are associated with distribution equipment used at primary service level. All primary and secondary voltage customers are allocated a portion of shared cost in the COS study. The reason that secondary voltage customers are rightfully allocated a portion of shared costs is that their load first went through the primary voltage service level before being delivered to them at the secondary voltage service level. This handling of shared costs coincides with traditional utility practice.

For poles that carry both primary and secondary lines ("combination poles"), ComEd allocated 50 percent as secondary costs and 50 percent as primary, or shared costs. Staff asserted that direct observation could help refine this assumption. CA Energy Consulting has a different perspective, which is that direct observation can provide necessary information regarding the number of combination poles in ComEd's system, but it cannot provide information regarding how the costs of such poles ought to be allocated. CA Energy Consulting's recommendation is to remove the 50/50 split of combination pole costs across secondary and primary voltage services and instead allocate 100 percent of combination pole costs as shared costs (i.e., associated with primary voltage service).

The reasoning behind this recommendation is that the combination pole exists to accommodate primary lines first and foremost. The attachment of secondary lines is a convenience for secondary service. If, for example, secondary customers asked that their voltage level of service be changed from secondary voltage to primary voltage, the pole requirement would not change. However, the utility would not be able to transmit power efficiently if it did not have the primary service level at the pole's location (i.e. a utility cannot have secondary service without primary service).

In addition, the height and class of the pole is dictated by the primary service requirements, and not the secondary service requirements. To hang additional secondary lines from the pole generally does not require additional pole cost. The pole height is generally determined by clearances for primary voltage wire and space requirements for cable TV/telephone facilities. The project team confirmed this industry practice with ComEd engineering.

Poles 50 feet or lower in height

In Docket No. 10-0467, ComEd allocated 74.2 percent of poles 50 feet and lower in height to shared costs. The field review found the following distribution of costs:

- 5.0 percent to secondary distribution costs;
- 2.2 percent to secondary transformer costs; and
- 92.8 percent to shared (primary) distribution costs.

Note that the higher proportion of shared costs is in large part due to the change in the allocation of poles with both secondary and primary equipment described above. If we had maintained ComEd's engineering judgment of a 50/50 allocation for combination poles, the field review would have resulted in an allocation of 70.1 percent of poles 50 feet or lower to shared costs.

Poles taller than 50 feet in height

In Docket No. 10-0467, ComEd allocated 82.5 percent of poles taller than 50 feet in height to shared costs. The field review found the following distribution of costs:

- 0.0 percent to secondary distribution costs;
- 2.5 percent to secondary transformer costs; and
- 97.5 percent to shared (primary) distribution costs.

As was the case with shorter poles, the higher proportion of shared costs is due in part to the change in the allocation of poles with both secondary and primary equipment. If we had maintained ComEd's 50/50 engineering judgment, the field review would have resulted in an allocation of 87.8 percent to shared costs.

Summary of Findings

Table 2.3 shows a comparison of the allocation shares found in this study and those used by ComEd in Docket 10-0467. The second column ("Recommended Share from Field Observations") incorporates our recommendation that poles carrying both primary and secondary equipment be allocated entirely to the primary service level. The third column ("Share from Field Observations, using ComEd's 50/50 Shared Pole Allocation") shows the allocations that would result from maintaining ComEd's engineering judgment that poles with both primary and secondary equipment should have 50 percent of their costs allocated to each service level. While these are not the allocations that we recommend using, they provide a better comparison of the differences between the results of our direct observation and the allocations used by ComEd for the cost categories shown.

In most cases, it appears that ComEd was reasonably accurate in estimating cost shares. The exception is weather resistant wire, for which ComEd overestimated the share used as transformer tap wire.

Table 2.3 Comparison of Allocations in this Study and those in Docket 10-0467

Cost Category	Recommended Share from Field Observations	Share from Field Observations, using ComEd's 50/50 Shared Pole Allocation	ComEd 10-0467 Cost Assignment
Weather resistant wire			
Secondary	22.4%	n/a	20.0%
Transformer Tap Wire	1.0%	n/a	50.0%
Primary	76.6%	n/a	30.0%
Poles over 50 ft.			
Secondary	0.0%	8.0%	14.7%
Secondary Transformer	2.5%	4.2%	2.8%
Primary	97.5%	87.8%	82.5%
Poles up to 50 ft.			
Secondary	5.0%	24.3%	21.7%
Secondary Transformer	2.2%	5.6%	4.1%
Primary	92.8%	70.1%	74.2%
Underground conduit outside the City of Chicago			
Secondary	1.0%	n/a	1.0%
Primary	99.0%	n/a	99.0%

3. Separating Costs into 4kV and Above 4kV Primary Voltage Categories

This section contains a description of the methods used to allocate the shared¹⁷ primary voltage plant in service costs between 4kV primary voltage and above 4kV primary voltage cost categories. Specifically, ComEd is required to "study, define, and delete from the costs assigned to the Railroad Class the costs that are associated with the 4kV facilities that are not used to serve the Railroad Class."¹⁸

To address this requirement, the project team reviewed each cost item with primary voltage "shared costs" contained in ComEd's Primary / Secondary Study for 2010 costs, prepared in the same manner as the 2009 costs presented in ComEd Exhibit 49.4 in Docket No. 10-0467 to allocate costs between secondary voltage distribution, 4kV primary voltage, and above 4kV primary voltage cost categories. Except for cases in which we apply our findings from Section 2.4, the project team accepts the assignment of costs categorized as secondary voltage distribution costs from the 2010 Order, and focuses on dividing primary (or "shared") costs into the 4kV and above 4kV cost categories.

¹⁷ Primary voltage plant in service costs shared by customers with primary voltage service points and by customers with secondary voltage service points

¹⁸ Final Order, Docket No. 10-0467, page 191.