

COMMONWEALTH EDISON COMPANY :  
Formula rate tariff and charges authorized : No. 11-0721  
by Section 16-108.5 of the Public Utilities Act :

2012 MAR -5 | A 10: 50  
CHIEF CLERK'S OFFICE

**UNITED STATES DEPARTMENT OF ENERGY'S PRE-TRIAL MEMORANDUM**

**I - INTRODUCTION** - The United States Department of Energy ("DOE" or "the Department") respectfully proffers this pre-trial memorandum pursuant to the litigation schedule herein. DOE has presented rebuttal testimony of Mr. Dwight Etheridge of Exeter Associates, Inc. That testimony focuses exclusively on distribution loss factors which Commonwealth Edison Company ("ComEd" or "the Company") has proposed. (DOE Exh. 1.0, February 24, 2012)

**II - SUBJECT – DISTRIBUTION LOSS FACTORS** - The Department is at present concerned only with the matter of distribution loss factors, as set forth below.

**III - BACKGROUND** – In the process of delivering energy to its customers, the Company's distribution system loses a certain amount of energy. The Company is permitted to charge its retail distribution customers for these losses. To accomplish this, the Company has established Commission-approved distribution loss factors for each rate class. Each of these distribution loss factors is expressed as a percentage of the total amount of energy that is distributed to that class. Each class's distribution loss factor in effect represents the energy that is lost – that is, in effect consumed – by the distribution system in the course of delivering energy to that class. The Company is proposing to increase its distribution loss factors, and thus increase the amounts that it charges for losses, for nearly every customer class. (ComEd Exh. 10.9, p. 31-33)

ComEd develops distribution loss factors based upon a distribution system loss study. Distribution losses are determined by subtracting energy deliveries to retail and wholesale customers, plus *transmission* losses, from the summation of the net output of all generators within the ComEd zone plus net transmission interchange. (ComEd Exh. 7.1) ComEd's estimated *transmission* loss factor represents ComEd's best estimate of the energy that the *transmission* system loses in the course of delivering energy to the ComEd's *distribution* system. Whatever losses ComEd determines to be *transmission* losses cannot be treated as *distribution* losses. Thus, the magnitude of ComEd's *transmission* loss factor directly and significantly affects the magnitude of ComEd's *distribution* loss factors. In turn, the magnitude of the distribution loss factors directly and significantly affects the magnitude of the distribution losses for which ComEd is permitted to charge its retail customers.

**IV - DISCUSSION**

**(A) ComEd's DLF Study Omits a Crucial Adjustment for Transmission Losses**

**(1) The omission** - ComEd has presented a Distribution System Loss Factor Study ("2010 DLF Study"; ComEd Exh. 7.1) which is almost exactly the same as the Distribution System Loss study that it presented, and the Commission adopted, in ComEd's most recent rate proceeding,

Doc. No. 10-0467. (Final Order, p. 291) That study was based on 2009 class loads and distribution facilities, and a transmission loss factor that dated back eleven years. (Staff Exh. 11, p. 7; Staff Exh. 22.0, p. 4)

The Company now possesses:

- (a) 2010 figures for class loads (zone and delivery) and for distribution facilities (substations and transformers counts) (These new figures will be referred to as “the 2010 system changes.”);
- (b) an updated transmission loss factor.

These new data enable the Company to update the 2009 distribution loss factor study by:

- (a) substituting the newer, more accurate 2010 system changes for the study’s 2009 figures, *and*,
- (b) substituting the much newer and more accurate transmission loss factor for the study’s outdated transmission loss factor, which dates back to the 1990’s.

The Company has opted to update the 2009 study with 2010 system changes, but has omitted adjusting that same study for the new and more accurate transmission loss factor.

**(2) Effect of ComEd’s omission** - As a matter of theory, the 2010 system changes and the significantly changed transmission loss factor *both* cause changes in class distribution loss factors. (Staff Exh. 11.0) To adjust for the one but not the other would be illogical.

Moreover, the Company’s distribution loss factor study as presently constituted includes a transmission loss factor of 1.6 percent. (ComEd Exh. 18.0, p. 3) ComEd’s updated transmission loss factor is 2.31 percent, a nearly fifty percent increase from the outdated 1.6 percent loss factor. (DOE Exh. 1.0, p. 5) If ComEd were permitted to adjust for the 2010 system changes but not adjust its outdated 1.6 percent transmission loss factor, its distribution loss factors would increase significantly. Such increases would contradict evidence which demonstrates that distribution loss factors should be lowered by substantial amounts. (DOE Exh. 1.1, p. 2) Such increases in the distribution loss factors would cause distribution loss-related costs for nearly all retail delivery service customers to increase significantly. Some of these increases would range as high as 20 percent. (DOE Exh. 1.0, p. 3) If, by contrast, ComEd adopts the new 2.31 percent transmission loss factor, all of ComEd retail delivery service customers will pay lower distribution loss-related costs, with decreases ranging from 4percent to nearly 20 percent. (DOE Exh. 1.1, p. 2)

**(3) ComEd’s unpersuasive reasons for the omission**

ComEd asserts, first, that there is insufficient time in this proceeding to review the new transmission loss factor. (ComEd Exh. 18, p. 2) In fact, there is no need to review the new factor. It has been adopted as an integral part of a Siemens Power Technologies International study that the Company has provided in this proceeding. (ComEd Study Report #7A) Furthermore, ComEd’s transmission loss factor is, and has been for many years, treated as an exogenous input to its distribution loss factor study. (DOE Exh. 1.0, p. 7) Finally, DOE witness

Etheridge has stated, and no one has disputed, that the new factor is the best available indication of the Company's present day transmission losses. (DOE Exh. 1.0, p. 7) There is no need to review the new transmission loss factor

Second, the Commission's final order in Doc. No. 11-0467 specifically directed the Company to update its distribution loss study with information from an updated transmission loss study. (Final Order, p. 291) The Company contends that it is prohibited from incorporating this directive into its distribution loss study because the new statute mandates that "...rate design and cost allocation across customer classes shall be consistent with the Commission's most recent order..." (220 ILCS 5/16-108.5(c) (6)) (ComEd Exh. 11.0, p. 33; ComEd Exh. 18.0, p.2)

This is questionable at best. The statute mandates that rate design be consistent with the Commission's most recent *order*. That most recent order includes the very directive – to update the transmission loss factor - that the Company asserts the statute prohibits it from following. Moreover, if the statute prohibits ComEd from departing from the final order in regard to its transmission loss factor, it must also prohibit it from departing from the final order in regard to the 2010 system changes. Thus, it would appear that the statute requires the Company either to adjust for *both* its 2010 system changes *and* its new transmission loss factor, or adjust for neither.

**(B) The Parties' Recommendations**

Staff and DOE agree that the Commission should:

- (1) adopt the distribution loss study that ComEd submitted as Study Report #7B, and which includes both the 2010 system changes and the new transmission loss factor (Staff Exh. 11.0, p.3; Staff Exh. 22, p. 6; DOE Exh. 1.0, p. 8), or, in the alternative,
- (2) adopt the distribution loss study which it approved in Doc. No. 10-0467, and which includes neither of those adjustments. (Staff Exh.11, pp. 3, 8; Staff Exh. 22, p. 6; DOE Exh. 1.0, p. 9);
- (3) adopt both adjustments or neither adjustment. (Staff Exh. 11.0, p. 3; Staff Exh. 22.0, p. 4; DOE Exh. 1.0, pp. 7-8)

**V - Requested Disposition** - As per Subsecs. IV (B) (1) (2) (3), above.

Respectfully submitted,



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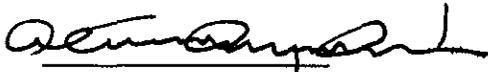
**STATE OF ILLINOIS  
ILLINOIS COMMERCE COMMISSION**

**COMMONWEALTH EDISON COMPANY       :**  
**Formula Rate Tariff and Charges Authorized   :** Doc. No. 11-0721  
**by Section 16-108.5 of the Public Utilities Act   :**

**NOTICE OF FILING AND CERTIFICATE OF SERVICE**

I, Arthur Perry Bruder, hereby certify that, on February 29, 2012, the foregoing Pre-Trial Memorandum of the United States Department of Energy in the above-captioned proceeding was transmitted:

- (1) via overnight service for filing via e-Docket with the Chief Clerk of the Illinois Commerce Commission, at 527 E. Capitol Avenue, Springfield, IL 6270;
- (2) via overnight service to each of the Administrative Law Judges, at 160 N. LaSalle St., Suite C-800, Chicago, IL 60601-3104;
- (3) via electronic mail to all of the parties of record and counsel who are listed on the service list for the above-captioned proceeding.



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**Dated: February 29, 2012**