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(City Exhibit 1.4)
16 pages incl. cover

ICC Docket No. 17-0049

**Commonwealth Edison Company's Response to
City of Chicago ("COC") Data Requests
COC 1.01 - 1.28**

**Date Received: February 17, 2017
Date Served: March 3, 2017**

REQUEST NO. COC 1.05:

Refer to ComEd Ex. 2.0 at 73:1234 ("Base ECOSS provides a specific example of the computation of a CP allocator. In determining the CP-ALL allocation factors for the individual delivery classes the total CP demand on ComEd's system is 21,687,839 kW.").

- (a) Please explain whether load research techniques that have been used in the past were used to compute the CP or whether AMI data were used.
 - i) Specifically, was the load data used in this case derived from actual AMI readings, from sampling, or from other load research?
- (b) If the source was not exclusively actual data from AMI meters, provide:
 - i) the load studies and data on which ComEd's proposal and testimony are based; and
 - ii) a detailed explanation of the methodology, assumptions, and sampling locations.
- (c) If the data are actual readings taken from AMI meters, provide:
 - i) the time period and geographic coverage of the meters from which the data were taken;
 - ii) a break-out showing the numbers (or percentages) of the meters in each class; and
 - iii) the number of meters in the City of Chicago and the percentage of the total that number represents.
- (d) If the data were derived from a sample of less than all AMI readings, provide a detailed explanation of the sampling methodology, assumptions, and geographic coverage;
- (e) If AMI data were used, please explain why this change was not explained in the testimony.
- (f) Please provide (or identify within previously provided responses) the load research or AMI data that were used to compute CP and NCP for residential ratepayers and watt hour ratepayers. Please explain why the residential load research was not discussed in the testimony.

RESPONSE:

- (a) The work papers used to determine the CP and NCP cost allocators used in this proceeding are the same work papers provided in ICC Docket No. 16-0259, ComEd's 2016 Formula Rate Update ("FRU"). In ICC Docket No. 16-0259, Mr. Leick's direct testimony discusses the use of AMI data to determine the residential CPs and NCPs (*See*, ICC Docket No. 16-0259, ComEd Ex. 7.0, 7:139 - 9:181). Furthermore, ComEd's Schedule E-7 in ICC Docket No. 16-0259 further describes the development of ComEd's profiles used to determine the CP and NCP cost allocators. These documents are publicly available via the ICC's e-Docket system. ComEd had limited AMI data available for the Watthour and Small Load Delivery Classes in its 2016 FRU but intends to consider using AMI data in its 2017 FRU filing.
- (b) See ComEd's response to subpart (a), above.
- (c) ComEd used a random sample of premises distributed by their Maximum Monthly Usage ("MMU") percentile ranking that had an AMI meter for all of 2015 (*See*, ICC Docket No. 16-0259, Leick Dir., ComEd Ex. 7.0, 7:139 - 9:181). The following distribution of AMI meters are in the samples:

	Inside Chicago	Outside Chicago	Total	% Inside Chicago
Single Family without Electric Space Heat:	930	1,570	2,500	37.2%
Multi Family without Electric Space Heat:	1,497	1,003	2,500	59.9%
Single Family with Electric Space Heat:	104	396	500	20.8%
Multi Family with Electric Space Heat:	629	1,871	2,500	25.2%

- (d) See ComEd's response to subpart (a), above.
- (e) This change was addressed in ComEd's 2016 FRU filing.
- (f) See ComEd's response to subpart (a) and subpart (e), above.

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REQUEST NO. COC 1.06:

In ComEd Ex. 2.0, Mr. Leick quotes extensively from prior Commission orders and from the testimony of parties in other proceedings -- e.g., page 76. Please identify with specificity (page and line numbers):

- (a) any statements or portions of the quotations with which Mr. Leick does **not** agree; or
- (b) any statements or portions of the quotations Mr. Leick does **not** present as his own assertions in this case.

RESPONSE:

ComEd objects to this request in that it is vague and ambiguous and, depending on how the request is interpreted, may be unduly burdensome and not reasonably calculated to lead to the discovery of admissible evidence. Subject to and without waiving the foregoing specific objections, or any of ComEd's General Objections, ComEd responds as follows:

These passages were provided as a starting point to conveniently review of the positions and decision making process leading up to the Commission's decision to adopt the NCP cost allocator for primary lines. In regards to quotations provided by Mr. Leick, the data provided by ComEd in this proceeding, via testimony and data request responses, does support that (a) street lighting customers are allocated little or no costs related to constructing and maintaining primary lines as stated by Ameren's witness (Leick Dir., ComEd Ex. 2.0, 75:1288-1291), (b) ComEd incurs its costs for primary lines based upon the peak demand requirements of each primary line which does not always occur at the time of the system CP (Leick Dir., ComEd Ex. 2.0, 80:1391 - 86:1472 and ComEd's Response to Staff Data Request WRJ 5.01 and GER 2.01), and (c) it would be reasonable to reduce a primary line NCP cost allocator for street lighting and residential electric space heating customers based upon the data provided to analyze the time and season feeders experience their peak demands (Leick Dir., ComEd Ex. 2.0, 86:1473 - 96:1645).

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**Commonwealth Edison Company's Response to
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COC 1.01 - 1.28

Date Received: February 17, 2017

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REQUEST NO. COC 1.11:

Please refer to the following ComEd testimony (ComEd Ex. 2.0 at 65:1107):

ComEd's historical system peak data showed that its system peaks normally occur in July or August and approximately 62% of the time the peak occurs from 3 p.m.-4 p.m. and approximately 31% of the time from 4 p.m.-5 p.m.

- (a) Please provide the number of feeders out of the total number of feeders on the system that do not experience peak loads in July or August and between 3 p.m. and 5 p.m.
- (b) Provide the same data for feeders serving Chicago.

RESPONSE:

ComEd objects to this request in that it is vague and ambiguous and, depending on how the request is interpreted, may be unduly burdensome and not reasonably calculated to lead to the discovery of admissible evidence. Furthermore, ComEd objects to this data request to the extent it seeks analyses or studies that ComEd has not conducted. Subject to and without waiving the foregoing specific objections, or any of ComEd's General Objections, ComEd responds as follows:

- (a) See ComEd's Response to City of Chicago Data Request COC 1.02. The requested data can be derived from the work papers titled: "WP - ComEd Ex 2.0 - (Confidential) 2014 Peak Feeder Load Charts.xlsx" and "WP - ComEd Ex 2.0 - (Confidential) 2015 Peak Feeder Load Charts.xlsx".
- (b) ComEd has not compiled a database of feeders serving Chicago. The work paper titled: "WP RRGAS 2015 ComEd Ex 2.10 - (Confidential) Table 7.4-2 - Weighted Feeder Costs" provided in ComEd's Response to City of Chicago Data Request COC 1.02 provides the regional operating center that each feeder operates in the Column titled "CDC". Many feeders can extend beyond the operating center identified in the Column titled "CDC".

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**Commonwealth Edison Company's Response to
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REQUEST NO. COC 1.15:

Refer to ComEd Ex. 2.0 at 80:1412 ("ComEd's Capacity Planning Department was able to extract the hour of the peak demand for approximately 5,400 primary lines, or feeders, in 2014 and 2015.").

- (a) Please provide the hour and amount of the peak load for each of the referenced feeders, in 2014 and 2015.
- (b) Provide the length of each feeder in the study in miles.
- (c) Please explain in detail what the planning department had to do to extract the data.
- (d) Please list whether or not each of the feeders served any street lighting load.
- (e) Please provide the amount of street lighting load that is served by each feeder in the study.

RESPONSE:

ComEd objects to this request in that it is vague and ambiguous and, depending on how the request is interpreted, may be unduly burdensome and not reasonably calculated to lead to the discovery of admissible evidence. Furthermore, ComEd objects to this request to the extent it seeks analyses or studies that ComEd has not conducted. Subject to and without waiving the foregoing specific objections, or any of ComEd's General Objections, ComEd responds as follows:

- (a) See ComEd's response to City of Chicago Data Request COC 1.02. See the work papers titled "WP - ComEd Ex 2.0 - (Confidential) 2014 Peak Feeder Load Charts.xlsx" and "WP - ComEd Ex 2.0 - (Confidential) 2015 Peak Feeder Load Charts.xlsx" for the requested data.
- (b) The work paper titled: "WP RRGAS 2015 ComEd Ex 2.10 - (Confidential) Table 7.4-2 - Weighted Feeder Costs" provided in ComEd's Response to City of Chicago Data Request COC 1.02 provides the length of each feeder in miles.

- (c) ComEd's Information Technology ("IT") Department wrote script enabling the Capacity Planning Department to extract the data from the Distribution Load Management Database that accumulates hourly averaged three phase feeder loading data.
- (d) ComEd's unmetered street lighting load is not assigned to a transformer and corresponding feeder in ComEd's billing system. Therefore ComEd cannot accurately determine each feeder that has street lighting load. Given the fact that most, if not all, feeders extend along roads that have street lights at least at intersections, it is likely that at least one street light is served from a majority of ComEd's feeders.
- (e) See ComEd's response to subpart (d), above.

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**Commonwealth Edison Company's Response to
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COC 1.01 - 1.28

Date Received: February 17, 2017

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REQUEST NO. COC 1.19:

Please provide the reports that describe the need for new construction of distribution systems and include a detailed description of how the load estimate is used to size the new facilities.

- (a) Include actual examples of each such report.

RESPONSE:

ComEd objects to this request in that it is vague and ambiguous and, depending on how the request is interpreted, may be unduly burdensome and not reasonably calculated to lead to the discovery of admissible evidence. Furthermore, ComEd objects to this request to the extent it seeks analyses or studies that ComEd has not conducted. Subject to and without waiving the foregoing specific objections, or any of ComEd's General Objections, ComEd responds as follows:

See ComEd's Response to Staff Data Request GER 2.01 for an explanation of how ComEd determines the need for new distribution facilities.

- (a) ComEd does not have an associated report.

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**Commonwealth Edison Company's Response to
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Date Received: February 17, 2017

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REQUEST NO. COC 1.21:

Please refer to ComEd Ex. 2.0 at 86:1469 ("The data further indicates that feeder kW peaks do not even occur at the same hour or season and can be different each year depending on how the local kW loads are set by the customers served from each feeder."). Please explain with an example what would make one feeder have a peak load in the summer in one year and a peak load in the winter in a second year. For example, does a factory suddenly change its seasonal output; does space heating cause the swing, etc.

RESPONSE:

ComEd objects to this request in that it is vague and ambiguous and, depending on how the request is interpreted, may be unduly burdensome and not reasonably calculated to lead to the discovery of admissible evidence. Furthermore, ComEd objects to this request to the extent it seeks analyses or studies that ComEd has not conducted. Subject to and without waiving the foregoing specific objections, or any of ComEd's General Objections, ComEd responds as follows:

ComEd has not conducted a study to determine what caused a feeder to have a peak load in the summer in one year and a peak load in the winter in a next year. Mild or extreme temperatures in a season and customer usage levels could contribute to the reason a feeder has a peak load in the summer in one year and a peak load in the winter in the next year.

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**Commonwealth Edison Company's Response to
City of Chicago ("COC") Data Requests
CTA 1.01 - 1.28**

Date Received: February 17, 2017

Date Served: March 3, 2017

REQUEST NO. COC 1.24:

Pretend that you were explaining how ComEd engineers determine and design needed distribution system investments using estimates of regional peak load. Using an actual feeder investment, please provide clear and simple explanations and examples of the documents and processes used in ComEd's feeder investment decision/construction process.

RESPONSE:

ComEd objects to this request in that it is vague and ambiguous and, depending on how the request is interpreted, may be unduly burdensome and not reasonably calculated to lead to the discovery of admissible evidence. Furthermore, ComEd objects to this request to the extent it seeks analyses or studies that ComEd has not conducted. Subject to and without waiving the foregoing specific objections, or any of ComEd's General Objections, ComEd responds as follows:

See ComEd's Response to Staff Data Request GER 2.01 for a description of how ComEd considers additional customer load in relation to the regional peak load on a feeder when considering if additional investment is necessary. Documents and processes used to assist in the determination of the amount of investment necessary include ComEd's Asset Suite design tool and the Commonwealth Edison Geographical Information System ("CEGIS") distribution mapping and design system to determine the least cost construction plan if several options are available. These tools include ComEd's Construction Standards information and related labor hours and equipment costs and data on ComEd's existing distribution system. Depending on the cost of the project, additional levels of approval are necessary to budget the project and meet construction deadline requirements.

ICC Docket No. 17-0049

**Commonwealth Edison Company's Response to
Chicago Transit Authority ("CTA") Data Requests**

CTA 2.01 - 2.26

Date Received: January 18, 2017

Date Served: February 8, 2017

REQUEST NO. CTA 2.07:

Who requested and/or required ComEd to change the cost allocation for primary voltage distribution lines to conform with the methodologies of AIC and MidAm? Provide all documents related to the ComEd decision to change the cost allocation for primary voltage distribution lines to conform with the methodologies of AIC and MidAm.

RESPONSE:

ComEd objects to this request to the extent it seeks information and documents protected by the attorney work product privilege, the attorney-client privilege, and/or any other applicable privilege. Subject to and without waiving the foregoing specific objection, or any of ComEd's General Objections, ComEd responds as follows:

No specific party requested, or required, ComEd to change the cost allocation for primary voltage distribution lines to conform with the methodologies of AIC and MidAmerican.

ICC Docket No. 17-0049

**Commonwealth Edison Company's Response to
Chicago Transit Authority ("CTA") Data Requests**

CTA 2.01 - 2.26

Date Received: January 18, 2017

Date Served: February 8, 2017

REQUEST NO. CTA 2.17:

Why is ComEd not taking its guidance for the SFH Class and the MFH Class from AIC and MidAm on Lines 1590 through Lines 1597, Page 93, ComEd Ex. 2.0?

RESPONSE:

ComEd objects to this request as vague and ambiguous; it is not clear what "guidance" from AIC and MidAmerican this request is referring to. Further, ComEd objects to this request to the extent that it assumes that ComEd must look to the cost studies of other utilities when preparing such a study, as no such obligation exists. Subject to and without waiving the foregoing specific objections, or any of ComEd's General Objections, ComEd responds as follows:

Leick Dir., ComEd Ex. 2.0, 92:1586 - 93:1597 notes that the data and discussion provided in Leick Dir., ComEd Ex. 2.0, 72:1205 - 92:1585 support making adjustments to reduce the SFH and MFH Classes NCPs. ComEd is not taking a position on what that reduction should exactly be, if any.

ICC Docket No. 17-0XXX

**Commonwealth Edison Company's Response to
Illinois Commerce Commission ("STAFF") Data Requests
WRJ 1.01 - 1.14**

Date Received: January 6, 2017

REQUEST NO. WRJ 1.10:

ComEd Ex. 2.0, pages 101-102, provides a summary of ComEd's opinions and observations on using the NCP cost allocator for primary lines instead of the CP cost allocator.

- A. Please provide ComEd's position on whether the Commission should accept the use of the CP or NCP allocator for primary lines.
- B. Please include ComEd's position on whether there should be a reduction to the NCP allocator for primary line costs for dusk to dawn street lighting customers in the FIL Class and DDL Class and how much.
- C. Please provide ComEd's position on how the residential electric heating customers should be handled if ComEd proposes to use the NCP allocator.
- D. Please provide ComEd's position on rate design considerations, such as a phase in for classes that may be impacted negatively by this change.

RESPONSE:

- A. ComEd does not have a position at this time with respect to whether the Commission should accept the use of the CP or NCP allocator for primary lines, although ComEd does support consistency between jurisdictions when practical and where appropriate.
- B. ComEd does not have a position at this time with respect to whether there should be a reduction to the NCP allocator for primary line costs for dusk to dawn street lighting customers in the FIL Class and DDL Class. However, ComEd does think it is reasonable to provide a reduction to such NCP allocator based upon the information presented in Leick Dir., ComEd Ex 2.0 at 86:1474-91:1570 if the Commission directs ComEd to use the NCP cost allocator for primary lines.
- C. ComEd does not have a position at this time with respect to whether there should be a reduction to the NCP allocator for primary line costs for residential electric space heating customers. However, ComEd does think it is reasonable to provide a reduction to such NCP allocator based upon the information presented in Leick Dir., ComEd Ex 2.0 at 92:1571 - 96:1645 if the Commission directs ComEd to use the NCP allocator for primary lines.
- D. ComEd does not have a position at this time with respect to a phase in approach for increases to certain delivery classes that may negatively impact rates for other delivery classes.

ICC Docket No. 17-0XXX

**Commonwealth Edison Company's Response to
Illinois Commerce Commission ("STAFF") Data Requests
WRJ 1.01 - 1.14**

Date Received: January 6, 2017

REQUEST NO. WRJ 1.14:

Referring to ComEd Ex. 2.0, page 92, lines 1580 to 1585, please answer the following:

- A. When will all residential electric heating customers have meters capable of measuring demand?
- B. When residential electric heating customers have meters capable of measuring demand, will ComEd be able to determine when those customers contribute to the Peak demands on feeders even though customers are dispersed throughout ComEd's service territory?

RESPONSE:

- A. ComEd's AMI Deployment Plan will be completed by the end of 2018. At that time all residential electric space heating customers that have not refused an AMI meter will have meters capable of measuring demand.
- B. ComEd's has not attempted to perform such a study and does not know what limitations may exist in performing this study. ComEd does believe that it will be able to identify the hour a feeder experiences its peak demand and can identify demand usage during the same hour for the customer's assigned to that feeder. Such a study for over 206,000 residential space heating meters (over 4.1 million meters if all customers are included) and approximately 5,400 feeders may have limitations but ComEd should be able to perform such a study for a sample of feeders with assistance from its Information Technology ("IT") teams.

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**Commonwealth Edison Company's Response to
Illinois Commerce Commission ("STAFF") Data Requests
WRJ 5.01**

Date Received: February 15, 2017

Date Served: February 17, 2017

REQUEST NO. WRJ 5.01:

Referring to ComEd's discussion of the CP cost allocator for primary lines on, ComEd Ex. 2.0, pages 72-75, please answer the following:

- A. Are coincident peak ("CP") (either system wide or regional) or non-coincident peak ("NCP") demands more relevant to ComEd's approach in sizing primary distribution facilities?
- B. Are primary distribution facilities sized to meet summer or winter demands?
- C. Are primary lines constructed to serve customers within a single class or to serve customers from numerous classes?
- D. Are ComEd's investments in primary lines shaped by system peak demands or the demands of individual rate classes?
- E. When designing primary distribution facilities does ComEd rely on CP (either system-wide or regional), or NCP demands, or some other basis? If ComEd relies on some other basis, please identify that basis

RESPONSE:

- A. The NCP load on the individual primary voltage distribution facilities is most relevant for sizing such facilities. At the time of the initial installation of the facilities, or when connecting a new customer to existing facilities, ComEd considers the expected maximum load on those facilities and when that maximum load is expected to occur, and will install or modify facilities to reliably provide electric service. ComEd conducts on-going reviews of its primary voltage distribution facilities and reviews each distribution circuit and substation annually, comparing the NCP peak load on those facilities to the allowable rating to determine if any action is necessary to maintain the facilities.
- B. See ComEd's response to subpart (A), above. ComEd's primary facilities must be able to serve the highest demand expected to occur on those facilities regardless of the season during which the peak load on those facilities occurs. Some primary distribution facilities experience peak loads during the summer months, while others experience peak loads during winter months.

- C. Primary lines are constructed to serve the customers that are expected to be connected to the facilities, which may include customers from numerous classes.
- D. The investments in primary lines are determined by the demands of the customers connected to the facilities, which generally includes customers from numerous classes.
- E. See ComEd's response to subpart (A), above.