STATE OF ILLINOIS

ILLINOIS COMMERCE COMMISSION

COMMONWEALTH EDISON COMPANY	:	
	:	
Reconciliation of revenues collected under power procurement riders with actual costs associated with power procurement expenditures.	:	No. 15-0535

Direct Testimony of

JOHN HENGTGEN

Consultant

Hengtgen Consulting, LLC

On Behalf of
Commonwealth Edison Company

TABLE OF CONTENTS

I. Introduction and Background

A. Witness Identification

Q. What is your name and business address?

A. My name is John Hengtgen. My business address is 1708 Freedom Court, Mount Prospect, Illinois 60056.

Q. By whom and in what capacity are you employed?

A. I am employed by Hengtgen Consulting, LLC. I am a consultant providing service to Commonwealth Edison Company ("ComEd").

B. Background, Qualifications, and Experience

Q. What is your educational background and business experience?

A. I graduated from Northern Illinois University in 1978 and received a Bachelor of Science degree in Accounting. Also, in 1978, I passed the Certified Public Accounting Examination. In 1985, I received a Masters of Business Administration with a concentration in Finance from Loyola University. I spent my entire career with The Peoples Gas Light and Coke Company ("Peoples Gas"), Peoples Energy Corp. and Integrys Business Support, LLC ("IBS") where I held various regulatory, accounting and financial positions. I retired from IBS on February 1, 2010, and later in 2010 began providing consulting services to various utilities. In May 2013 I formed Hengtgen Consulting LLC, which provides regulatory consulting to utilities.

Q. Have you previously testified before the Commission?

A. Yes, I testified on the cash working capital ("CWC") requirements of ComEd in ICC Docket Nos. 11-0721, 12-0321, 12-0549 ("2010/2011 Reconciliation"), 13-0528

("2011/2012 Reconciliation"), 14-0569 ("2012/2013 Reconciliation") and 14-0312. I have also testified on behalf of Peoples Gas and North Shore Gas Company ("North Shore") as a rebuttal witness in Peoples Gas' and North Shore's general rate proceedings in ICC Docket Nos. 95-0032 and 95-0031, respectively, and in the Peoples Gas' and North Shore's 2009, 2011, 2012, and 2014 general rate proceedings, ICC Docket Nos. 09-0166/09-0167 (cons.), 11-0280/11-0281 (cons.), 12-0511/12-0512 (cons.) and 14-0224/14-0225 (cons.), respectively.

C. Purpose of Testimony

Q. What is the purpose of your direct testimony?

A. The purpose of my direct testimony is to describe and support the reasonableness of ComEd's CWC costs associated with the procurement of electric power and energy for retail customers served under Rider PE - Purchased Electricity ("Rider PE") and under Rate BESH - Basic Electric Service Hourly ("Rate BESH") for the period June 1, 2013, through May 31, 2014 (the "reconciliation period").

In my testimony, I provide a description of the CWC costs and the leads and lags used and explain why it is reasonable for ComEd to recover those costs under Rider PE and Rate BESH.

D. Summary of Conclusions

Q. In summary, what are the conclusions of your direct testimony?

A. The methodology used by ComEd to calculate its CWC costs and develop the leads and lags is reasonable. As such, the CWC amount included in ComEd's costs incurred under Rider PE and Rate BESH is reasonable and should be approved.

E. Attachment to Direct Testimony

Q. Are you sponsoring any attachments to your testimony?

A. Yes, attached to my direct testimony is ComEd Exhibit ("Ex.") 3.1, which summarizes the actual CWC costs included in ComEd's costs incurred under Rider PE and Rate BESH during the reconciliation period.

II. Cash Working Capital Costs included in Rider PE and Rate BESH

A. Overview

Q. What work has ComEd asked you to perform?

A. ComEd has asked me to review the CWC cost calculations included in ComEd's costs incurred under Rider PE and Rate BESH and provide an opinion on the reasonableness of the CWC amounts recovered through Rider PE and Rate BESH.

Q. Who performed the lead/lag calculations that were used to determine the cash working capital costs included in Rider PE and Rate BESH for this reconciliation period?

A. ComEd personnel performed the calculations.

Q. Were these calculations made in a manner similar to the lead/lag study used to determine the CWC costs included in the 2010/2011, 2011/2012 and 2012/2013 Reconciliations?

A. Yes. ComEd hired Navigant Consulting ("Navigant") to perform a lead/lag study related to the CWC amounts to be recovered through Rider PE and Rate BESH in the 2010/2011 Reconciliation. ComEd updated the calculations performed for this reconciliation period and they are similar to what was done by Navigant for the 2010/2011 Reconciliation and

ComEd's calculations used and approved in the 2011/2012 Reconciliation and the 2012/2013 Reconciliation.

Q. What is a lead/lag study?

A. A lead/lag study is a specific analysis of the timing of applicable cash inflows to a utility in conjunction with an analysis of the timing of applicable cash outflows from the utility. The various cash inflows (lags) and the cash outflows (leads) are discussed below and both are measured in days, and where appropriate, are dollar weighted to reflect the flow of funds.

Q. What steps did you perform in your review?

A. I performed the following steps: (1) I reviewed the lead/lag study performed by Navigant that was the basis for the leads and lags in the 2010/2011 Reconciliation; (2) I reviewed the CWC calculations from the 2011/2012 Reconciliation and the 2012/2013 Reconciliation; (3) I reviewed the tariff language in Rider PE and Rate BESH as it relates to CWC; (4) I had discussions with ComEd's Revenue Accounting and Energy Acquisition groups regarding the CWC calculations and amounts included in ComEd's costs incurred under Rider PE and Rate BESH; (5) I reviewed the Internal Audit Report (ComEd Ex. 1.1) and the Supplemental Statement (ComEd Ex. 1.2); and (6) I reviewed the lead and lag calculations and the calculations of actual costs of CWC provided by ComEd's Revenue Accounting group and have prepared a summary of those actual costs (ComEd Ex. 3.1).

Q. In general, how were the lead and lag calculations developed by ComEd?

A. ComEd prepared the updated leads based primarily on calendar year 2012 data which was the latest calendar year data available prior to the reconciliation period using a methodology similar to what was used for the leads and lags approved in the 2010/2011 Reconciliation, the 2011/2012 Reconciliation and the 2012/2013 Reconciliation. The lags used by ComEd were based on calendar year 2010 data and were approved by the ICC in Docket No. 11-0721 with the exception of the collection lag which was updated based on calendar year 2012.

Q. How were the results of the lead/lag calculations converted into a CWC requirement figure?

A. The computed lead days are subtracted from the computed lag days and the resultant net number of days is divided by 365 to produce a working capital factor or percentage. This factor is then applied to the purchased power costs to determine the CWC requirement. The CWC requirement then is multiplied by the cost of capital to produce the amount of revenue to be collected.

B. <u>Revenue Lag</u>

Q. What is the revenue lag and how was it determined?

A. The revenue lag measures the number of days from the date service was rendered by ComEd until the date payment was received from customers and such funds become available to ComEd. The revenue lag is comprised of five distinct components: (1) service lag; (2) billing lag; (3) collections lag; (4) payment processing lag; and (5) bank float on collections from customers. Considered together, these five

components totaled a weighted average of 52.26 lag days. An explanation of each component of the revenue lag follows.

Q. What is meant by the service lag?

A. The service lag refers to the period of time from when service is rendered to the time the customer's meter is read. Using the mid-point methodology, the average service lag associated with meter reading was 15.21 days (365 days in the year divided by 12 months divided by 2). Twelve months was appropriate to use for purposes of determining the service lag because ComEd bills its customers monthly.

Q. What is the mid-point methodology?

A. To determine the service lead or lag, it is assumed that the service was provided (or received) evenly over a given period, usually a month. For example, with the revenue lag, it was assumed that a customer receives electric service from ComEd evenly over an entire month and not just at the end of a month. Adding the one-half month to the derivation of the lead or lag is referred to as the mid-point methodology.

Q. What is meant by the billing lag?

A. The billing lag refers to the average number of days from the date on which the meter was read until the date a customer is billed. Based on information received from ComEd's Customer Service Department, it was determined that ComEd bills the majority of its customers based on actual reads and that process takes one day. Where an estimated bill is issued or an actual billing needs to be reviewed and possibly reworked the billing process could take up to five days. Taking this information into account, the billing lag at ComEd was determined to be 2.06 days.

Q. What is meant by the collections lag?

A. The collections lag refers to the average amount of time from the date when ComEd issues a bill to the customer to the date that it received payment from that customer. Based on information from ComEd's Revenue Accounting Department and by using accounts receivable aging data for calendar year 2012, the average collections lag at ComEd was determined to be 33.35 days.

Q. What is the payment processing lag?

A. The payment processing lag is the time period between the recording of a payment as having been received by ComEd from a customer and the payment being deposited into ComEd's bank account. Based on interviews with ComEd's customer service department, regardless of how a customer pays ComEd, *i.e.*, check or electronic, the customer's payment is in ComEd's bank account on the same day as received, therefore the normal processing time was determined to be 0.50 days. The exceptions would be if the payment were to be received on a Friday, Saturday, or a public holiday in which case additional time would be involved. When the exceptions are taken into account, the overall payment processing lag at ComEd was determined to be 0.85 days.

Q. What is meant by bank float?

A. Bank float is the time between ComEd's deposit of the customer's payment and the time ComEd has access to the cash. It was determined that data provided by ComEd's bank indicated that there was a float time of about 0.79 days between aggregate deposits of customer checks into ComEd's bank account and its access to the cash.

Q. Can you summarize the calculation of revenue lag days for this reconciliation period and show a comparison to what was approved in the 2010/2011, the 2011/2012 and the 2012/2013 Reconciliations?

A. Yes. The calculation of the overall revenue lag, by lag component, is summarized below in the 2013/2014 column and totals 52.26 days. The revenue lag that was approved in the 2012/2013 Reconciliation is shown in the second column, the revenue lag that was approved in the 2011/2012 Reconciliation is shown in the third column and the revenue lag that was approved in the 2010/2011 Reconciliation is shown in the fourth column.

Reconciliation Period	**2013/2014**	**2012/2013**	**2011/2012**	**2010/2011**
Service Lag	**15.21**	**15.21**	**15.21**	**15.21**
Billing Lag	**2.06**	**2.06**	**1.49**	**1.49**
Collections Lag	**33.35**	**32.34**	**32.34**	**36.31**
Payment Processing Lag	**0.85**	**0.85**	**0.85**	**0.85**
Bank Float	**0.79**	**0.79**	**0.61**	**0.61**
Total Lag Days	**52.26**	**51.25**	**50.50**	**54.47**

C. Expense Leads

Q. What is an expense lead and how is that term used in your testimony?

A. An expense lead is the time difference between when a good or service is provided to ComEd and when ComEd pays for that good or service.

Q. How is an expense lead determined?

A. An expense lead consists of a service lead and a payment lead. The service lead assumes that the goods are received by or the service is provided to ComEd evenly over the service period, which in most cases is a month. The payment lead represents the time period from the end of the service period until the time the payment is made.

Q. What expense-related leads were considered in the lead/lag calculations performed by ComEd?

A. Lead times associated with the following items were considered in the study: (1) contracted supply based on Request for Proposals ("RFP") and auctions; (2) payments to PJM Interconnection ("PJM") for non-transmission and transmission related products and services; (3) payments to suppliers for renewable energy certificates ("RECs"); and (4) payments to suppliers under Long Term Power Purchase Agreements ("LTPPAs"). Payment data for these items during calendar year 2012 was analyzed by ComEd in order to calculate and update the applicable expense leads.

Q. Can you provide an explanation of the leads associated with RFPs and auctions?

A. Yes. During 2012, ComEd had in place a number of contracts based on RFPs and auctions. The payment terms related to these contracts were such that payments were made 1 business day after the 19th of the month following the month the products and services were received. Taking into consideration a service lead and a payment lead and using actual payments made in 2012, the weighted average expense lead at ComEd was determined to be 35.56 days. This expense lead was used in the calculation of the cash working capital requirement of Rider PE only.

Q. What were the leads associated with payments to PJM for non-transmission and transmission related services?

A. ComEd purchases energy and ancillary services from PJM and then arranges transmission to deliver the products to its customers. The payments to PJM are based on PJM's policies including weekly payments and including reconciliations and monthly

true-ups. Taking into consideration a service lead and a payment lead and using actual payments made in 2012, the weighted average expense lead at ComEd was determined to be 14.51 days. This expense lead was used in the calculation of the cash working capital requirements of both Rider PE and Rate BESH.

Q. What was the lead associated with payments for RECs?

A. It was determined that the lead for RECs related to Rider PE would be based on the current plan for procuring RECs, *i.e.*, on a quarterly basis over a 12-month period. ComEd determined a lead time of 88.67 days was appropriate. This expense lead was used in the calculation of the cash working capital requirements for Rider PE. For the RECs related to the hourly customers served under Rate BESH, ComEd determined that the lead would be based on the assumption of ratable collections from customers over the June, 2013 – May, 2014 current reconciliation period and the amounts collected would be provided to the Illinois Power Agency on a quarterly basis beginning in September 2015 and ending in July 2016. Based on this information ComEd determined that a working capital factor of a negative 212.44% was appropriate for Rate BESH.

Q. What was the lead associated with the payments for LTPPAs?

A. In Docket No. 09-0373 the ICC approved the procurement of renewable energy and credits for ComEd with the delivery of the renewable energy and credits beginning on June 1, 2012. Payment terms require that ComEd must pay invoices by the latter of the 20th of the following month or the 10th day after receipt of the invoice. Based on payments made during the period July 2012 through December 2012 the weighted

expense lead was determined to be 39.05 days. This expense lead was used in the calculation of the cash working capital requirement of Rider PE only.

Q. Can you summarize the various leads that were determined for this reconciliation period and show a comparison to what was approved in the 2010/2011, the 2011/2012 and the 2012/2013 Reconciliations?

A. Yes. The various leads are summarized below in the 2013/2014 column. The leads approved in the 2012/2013 Reconciliation are shown in the second column, the leads approved in the 2011/2012 Reconciliation are shown in the third column and the leads approved in the 2010/2011 Reconciliation are shown in the fourth column.

Reconciliation Period	**2013/2014**	**2012/2013**	**2011/2012**	**2010/2011**
PJM	**14.51**	**14.61**	**15.05**	**15.84**
REC-Rider PE	**88.67**	**85.96**	**74.21**	**74.21**
RFP	**35.56**	**35.96**	**35.71**	**35.52**
LTPPAs	**39.05**	**N/A**	**N/A**	**N/A**
SWAP	**N/A**	**29.12**	**29.35**	**30.67**
Transmission - PJM	**14.51**	**14.61**	**15.05**	**15.84**
REC-Rate BESH	**(212.44%)**	**(212.14%)**	**(40.46%)**	**(139.11%)**

III. Reasonableness of Cash Working Capital Costs

Q. Are the CWC costs shown on ComEd Ex. 3.1 that ComEd incurred associated with the procurement of electric power and energy for retail customers served under Rider PE and Rate BESH for the period June 1, 2013, through May 31, 2014, reasonable?

A. Yes they are. During the reconciliation period, ComEd incurred supply related CWC costs because ComEd pays most of its various supply resources before it receives

payment from its customers, who use those resources. ComEd performed lead/lag calculations in which it determined the leads and lags to be applied to the various components of the supply costs and therefore calculate the cash working capital amounts that should be included in ComEd's costs incurred under Rider PE and Rate BESH. The methodology used by ComEd in this proceeding to calculate the leads and the lags is similar to the methodology that was used for the 2010/2011, the 2011/2012 and the 2012/2013 Reconciliations and is reasonable and consistent with other lead/lag studies that I personally have performed and studies done by others that I have reviewed. In addition, the internal audit department reviewed the cost recovery process performed by Revenue Accounting and determined that it is consistent with the requirements of Rider PE and Rate BESH. *See also* the Direct Testimony of Gerald Kozel, ComEd Ex. 1.0.

Q. Does this complete your direct testimony?

A. Yes.