STATE OF ILLINOIS

ILLINOIS COMMERCE COMMISSION

ILLINOIS COMMERCE COMMISSION
ON ITS OWN MOTION

VS.
Docket No. 11-0546

COMMONWEALTH EDISON COMPANY

Evaluation of experimental real-time pricing program.

Direct Testimony of

AHMAD FARUQUI, PH.D
Principal- the Brattle Group
On behalf of
Commonwealth Edison Company
I. **Introduction**

A. **Identification of Witness**

Q. **What is your name and business address?**

A. My name is Ahmad Faruqui. My business address is 201 Mission Street, Suite 2800, San Francisco, California.

Q. **By what entity are you employed and in what position are you employed?**

A. I am a Principal with The Brattle Group (“Brattle”).

B. **Purpose of Direct Testimony**

Q. **What is the purpose of your direct testimony?**

A. The purpose of my testimony is to present Brattle’s report entitled *The Benefits of Commonwealth Edison Company’s Residential Real Time Pricing Program, 2012* (the “Brattle Report”) prepared for Commonwealth Edison Company (“ComEd”), and attached hereto as ComEd Ex. 4.2.

C. **Background and Qualifications**

Q. **What are your current duties and responsibilities?**

A. I am a Principal with Brattle and specialize in the design and evaluation of innovative energy programs involving the customer, such as dynamic pricing, block rate design, demand response and energy efficiency. I also specialize in load forecasting and cost-benefit analysis, especially as it relates to advanced metering infrastructure (AMI) and smart grid systems.
Q. **What is your educational background and professional experience?**

A. I graduated with a B.A. in economics, mathematics, and statistics from the University of Karachi, Pakistan, where I earned a Gold Medal in economics. I also earned an M.A. in agricultural economics and a Ph.D. in economics from the University of California at Davis, where I was a Regents Fellow and wrote my dissertation on demand forecasting under a grant from the Kellogg Foundation. I have authored, co-authored, or co-edited four books and more than one hundred articles, papers and reports on various aspects of energy policy. A major focus of my work during the past thirty years has been the design and evaluation of pricing experiments. My early work on time-of-use pricing is cited in Professor Bonbright’s text on public utility regulation.\(^1\) I was one of the lead designers and evaluators of California’s Statewide Pricing Pilot with time-based pricing. I was also the lead investigator in Baltimore Gas & Electric’s dynamic pricing experiment, which began in the summer of 2008 and has been running ever summer since then. Additionally, I was the lead designer and evaluator of Northeast Utilities’ time-based pricing experiment in Connecticut and I am assisting Florida Power & Light Company in the evaluation of their smart grid pilot involving several customer applications. I would like to note that since the beginning of my career in 1979, I have been tracking smart grid pilots that have been conducted around the globe. Additional information about my qualifications appears in my resume, which is appended to this testimony. My *curriculum vitae* is attached hereto as ComEd Ex. 4.1.

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II. The Brattle Report

Q. Why did Brattle prepare the Brattle Report?

A. In its order in ICC Docket 06-0617, the Illinois Commerce Commission (“Commission”) required that an economic evaluation of ComEd’s residential real-time pricing (“RRTP”) program be conducted to assess if the program generated net benefits for ComEd customers. In June 2011, ComEd filed with the ICC the Evaluation of the Residential Real Time Pricing Program, 2007-2010 (“Navigant Report”), prepared by Navigant Consulting, Inc. (“Navigant”). In its Order initiating an evaluation of ComEd’s RRTP, Docket No. 11-0546, the ICC further requested that the parties in the proceeding provide supplemental estimations of direct and indirect consumer and societal costs and benefits of the RRTP program that go beyond the initial filing. ComEd retained The Brattle Group to carry out an assessment that would expand on the benefits presented in the Navigant Report and Navigant Supplemental Report.

Q. Could you describe your participation in the preparation of the Brattle Report?

A. Yes. I helped conceptualize the approach to quantifying benefits, extensively reviewed literature on the subject, supervised the development of the new benefit estimates, and assisted in drafting the final report.

Q. Could you provide an overview of the Brattle Report?

A. Yes. Attached ComEd Ex. 4.2 is the Brattle Report. In its Order initiating an evaluation into ComEd’s RRTP, the ICC requested that the parties “provide supplemental estimations of direct and indirect consumer and societal costs and benefits” of the RRTP program that go beyond the Navigant Report and Supplemental Navigant Report. ComEd retained Brattle to carry out an assessment that would expand upon the benefits
presented in the Navigant Report and the Supplemental Navigant Report. Accordingly, we identified and analyzed three new benefit areas. Those are: avoided transmission and distribution capacity costs, improved customer satisfaction, and improved national security. Additionally, while maintaining the same methodologies used by Navigant, we performed the same calculations, but with higher enabling technology and participation assumptions consistent with best industry practice for customer-side programs. Accordingly, we present two new scenarios that expand upon Navigant’s initial analysis. The first serves as a baseline that is close to Navigant’s results and the second is an Aggressive Scenario that provides a reasonable upper bound, consistent with best industry practices.

Q. **Could you summarize the findings and conclusions set forth in the Brattle Report?**

A. Yes. We conclude that adding the three new benefit categories would add non-zero benefits. However, these are relatively small compared to the already quantified categories. The best way to significantly enhance the benefits is by expanding the number of participating customers. This would likely mean higher costs, but because of economies of scale in program deployment, we would expect net benefits to increase as participation increases.

Q. **Does this complete your direct testimony?**

A. Yes.