

**CUSTOMER OPERATIONS PANEL - ELECTRIC**

1 Q. Would the members of the Customer Operations Panel  
2 please state their names and business addresses?

3 A. Andrew G. Wood, Richard McKnight and Rebecca Lynch.  
4 The business address of Mr. Wood and Ms. Lynch is 4  
5 Irving Place, New York, NY 10003; the business address  
6 of Mr. McKnight is 30 Flatbush Avenue, Brooklyn, NY  
7 11217.

8 Q. By whom are the Panel members employed?

9 A. We are employed by Consolidated Edison Company of New  
10 York, Inc. ("Con Edison" or the "Company").

11 Q. In what capacity are the panel members employed and  
12 what are their professional backgrounds and  
13 qualifications?

14 A. (Wood) I am General Manager of Strategic Applications.  
15 I have been employed by Con Edison since 1972. I have  
16 held positions of increasing responsibility in  
17 Customer Operations during the past 36 years. From  
18 1972 to 2008, I have held operating positions in all  
19 the functional areas of Customer Operations. From  
20 1999 to the present, I have served as General Manager,  
21 Strategic Applications, on Central Staff. My work  
22 experience is as follows:

## CUSTOMER OPERATIONS PANEL - ELECTRIC

- 1       • Telephone Account Representative, Bronx Customer
- 2           Service Supervisor, Bronx Customer Service
- 3       • Manager, Queens Customer and Commercial Services
- 4       • Division Manager, Central Operations, Queens
- 5           Customer & Commercial Services
- 6       • Division Manager, Branch Operations, Queens Customer
- 7           and Commercial Services
- 8       • Branch Manager, Flushing Branch, Queens Customer &
- 9           Commercial Services
- 10       • Section Manager, Customer Operations Central Staff
- 11       • Department Manager, Staten Island Customer
- 12           Operations
- 13       Before I joined Con Edison, I earned a Bachelor of
- 14       Science degree in Economics from Siena College in
- 15       1969. From 1969 to 1971, I served as an officer in the
- 16       United States Army. I earned an M.B.A. in Business
- 17       Management from Fairleigh Dickinson University in
- 18       1986. I attended Company-sponsored training,
- 19       including the Executive Management Development course
- 20       at the Fuqua School of Business, Duke University,
- 21       Durham, N.C.
- 22       (McKnight) I am General Manager of the Customer
- 23       Assistance group in Customer Operations. I have been

## CUSTOMER OPERATIONS PANEL - ELECTRIC

1 employed by Con Edison for almost 30 years and have  
2 held a variety of positions within Customer Operations  
3 in addition to a position early in my career in our  
4 Accounting Research and Procedures section of our  
5 Accounting Department. The Customer Operations  
6 positions held prior to my current position include  
7 the General Manager of Specialized Activities, Section  
8 Manager of our Corporate Customer Group and Branch  
9 Manager. I joined Con Edison as a Customer Service  
10 Representative while earning my Bachelor of Science  
11 degree in Accounting from Long Island University. I  
12 also have an MBA in Executive Management from St.  
13 John's University.

14 (Lynch) I am the General Manager, Specialized  
15 Activities. I have been employed by Con Edison for 11  
16 years. Joining the company in 1996, as a management  
17 intern, I served as Call Center Supervisor until 1998  
18 when I transferred to Retail Choice Operations. I was  
19 promoted to Senior Specialist, Retail Choice  
20 Operations, in 2000. In 2002, I moved to the  
21 Corporate Customer Group, and was promoted to Section  
22 Manager, Customer Assistance in 2004. In 2006, I  
23 moved into the position of Project Lead, Bill

**CUSTOMER OPERATIONS PANEL - ELECTRIC**

1       Redesign. In 2008, I was promoted to my current  
2       position. I have Bachelor of Business Administration  
3       and Master of Business Administration degrees from  
4       Pace University, New York, NY.

5   Q.   Have you submitted testimony before the New York State  
6       Public Service Commission?

7   A.   All of the panel members have submitted testimony in  
8       previous cases.

9   Q.   What is the purpose of the Panel's testimony?

10  A.   We describe a number of customer-service related  
11       efforts including multi-year capital projects that  
12       were approved but not fully funded under the Company's  
13       current one year electric rate plan, specifically, the  
14       Company's proposal for mandatory hourly pricing  
15       expansion and systems development and other efforts,  
16       specifically, installation of automated meter reading  
17       (AMR), replacement of the cycle meter reading handheld  
18       system, development of a cycle data warehouse, call  
19       center improvements, continuation of the Company's  
20       low-income program, bill redesign, credit and  
21       collections activities, the Company's retail access  
22       program and meter testing.

23  Q.   Does the testimony discuss the costs of the programs?

**CUSTOMER OPERATIONS PANEL - ELECTRIC**

1 A. The testimony describes the total costs of these  
2 programs. The Accounting Panel describes the  
3 allocation of costs to electric customers.

4 Q. Please explain how the Company seeks to mitigate the  
5 level of funding needed for Customer Operations  
6 activities.

7 A. The Company considers cost mitigation in all its  
8 Customer Operations activities and makes a constant  
9 effort to provide its services efficiently.

10 The Company strives to develop easy-to-use self-  
11 service options that are attractive for customers and  
12 give customers the choice in how they want to do  
13 business with the Company. Providing these services  
14 through these automated means reduces costs that would  
15 otherwise be incurred when these services are provided  
16 by representatives while providing a high quality  
17 experience for the customer. In the Call Center many  
18 self-service applications have been developed to  
19 assist customers. Similar functions are available to  
20 customers through the Company's Internet site. These  
21 applications give customers access to information  
22 about their accounts, such as meter reading date and  
23 bill amounts, and allow them to manage their accounts

## **CUSTOMER OPERATIONS PANEL - ELECTRIC**

1 by entering meter readings and paying bills. The  
2 Company also uses outbound automated calling to  
3 provide information to customers.

4 The Company has installed self-service kiosks in  
5 two of its Walk-in Centers and plans to install kiosks  
6 in other locations. These kiosks are similar to an  
7 ATM machine and provide customers an efficient way to  
8 pay their bills without having to transact business  
9 with a teller. In a location where the customer would  
10 have the opportunity to make payment to a payment  
11 agent, customers' use of the kiosks has allowed the  
12 Company to avoid payment agent fees.

13 The Company also strives to reduce costs  
14 associated with meter reading. An example is the  
15 Company's implementation of automated meter reading  
16 ("AMR") in Westchester. AMR reduces the resources  
17 needed to read meters and improves customers'  
18 satisfaction by eliminating the need for Company  
19 personnel to enter customer premises to read meters  
20 and reducing estimated readings.

### **PROGRAMS FUNDED UNDER CURRENT RATE PLANS**

22 Q. The Commission approved a number of programs in the  
23 Company's recent electric rate case. Some of these

**CUSTOMER OPERATIONS PANEL - ELECTRIC**

1 are common to the electric and gas departments. These  
2 programs are now in progress. Is the Company seeking  
3 any capital funding for these projects in this rate  
4 case?

5 A. Yes. We present in this testimony the capital costs  
6 associated with these approved programs for the second  
7 and subsequent rate years. This testimony will  
8 identify these programs.

9 Q. Do programs approved under the current electric rate  
10 plan need to be funded for O&M cost going forward?

11 A. Yes. A number of programs approved by the recent  
12 electric rate order will continue. The proposed  
13 funding levels for some such programs during the rate  
14 year commencing April 2008 are the same as the level  
15 reflected in current rates. Where there was no  
16 spending for these programs in the historical period,  
17 they are considered program changes for purposes of  
18 this filing and therefore coupled with a request for  
19 incremental funding when compared with spending in the  
20 historical period. Where spending for a program is  
21 projected to increase above current levels, we explain  
22 the reasons why. Details of these programs are  
23 included in the following program explanations.

**CUSTOMER OPERATIONS PANEL - ELECTRIC**

**1 MANDATORY HOURLY PRICING ("MHP") PROGRAM EXPANSION**

2 Q. Did the Commission approve the Company's proposed  
3 expansion of the MHP program in its 2008 rate order?

4 A. Yes. Pursuant to the Commission's March 25, 2008 rate  
5 order in Case 07-E-0523 ("2008 electric rate order"),  
6 the Company will implement MHP in two phases for  
7 customers whose maximum demand is greater than 500 kW  
8 in any month during an annual period. The Commission  
9 approved the Company's proposal to reduce the  
10 threshold for MHP together with funding of \$5.8  
11 million in capital for 2008 and \$283,000 for O&M  
12 expenses for the current rate year.

13 Q. How many customers will be involved in this program?

14 A. There are currently 1,570 customers with demand  
15 greater than 500 kW and up to and including 1500 kW.

16 Q. Is interval metering and the necessary communications  
17 infrastructure currently available to provide the  
18 Company with MHP billing determinants for the  
19 customers in this group?

20 A. No. The majority of customers with maximum demand of  
21 1500 kW and below do not have interval metering  
22 equipment. Interval metering equipment and  
23 communications infrastructure must be installed for



## CUSTOMER OPERATIONS PANEL - ELECTRIC

1 1,360 customers. The Company will first install  
2 interval meters and communications infrastructure for  
3 those customers with maximum demand greater than 1000  
4 kW. Thereafter, interval meters and communications  
5 infrastructure will be installed for customers whose  
6 maximum demand is greater than 500 kW but less than or  
7 equal to 1000 kW.

8 Q. Prior to being subject to MHP, will customers have  
9 access to usage data?

10 A. The Company will provide hourly meter data to  
11 customers with demand over 1000 kW and up to 1500 kW  
12 for 6 months and to customers with demand over 500 kW  
13 and up to 1000 kW for 12 months.

14 Q. Does the expansion of MHP require any changes to the  
15 Company's billing systems?

16 A. Yes. At present, we use a combination of systems and  
17 manual effort to bill customers served under the MHP  
18 program. The use of multiple systems and manual  
19 involvement in the billing process is supportable  
20 given the low volume of customers billed under MHP.  
21 As the volume of customers on MHP increases, manual  
22 involvement is no longer viable. In order to manage  
23 billing for the greater number of customers that will

## CUSTOMER OPERATIONS PANEL - ELECTRIC

1 be billed under MHP, a Meter Data Management System  
2 ("MDMS") and associated interfaces are required.

3 Q. Please explain how the MDMS will support billing for  
4 these customers.

5 A. The Company will be collecting hourly data from the  
6 meters used in the MHP program. The Company needs to  
7 store this much larger volume of data and use it for  
8 time-based billing. To manage the increased volume of  
9 meter data and provide the required information to all  
10 stakeholders, a single, robust system is better suited  
11 than the multiplicity of systems currently in use for  
12 MHP customers. The MDMS will enable a much more  
13 complex and robust billing environment to be developed  
14 within the Company. The MDMS provides a single  
15 repository of all meter-related data and will be  
16 interfaced to existing Con Edison systems to enable  
17 data to be provided for analysis, billing and other  
18 uses.

19 Q. What is involved in the implementation of MDMS  
20 technology?

21 A. The MDMS requires integration with meter data  
22 acquisition systems and will interface with other  
23 internal systems, including CIS, to enable complex

## CUSTOMER OPERATIONS PANEL - ELECTRIC

1 time-based rates to be applied to customer bills and  
2 provide access to monthly, daily, and hourly data.

3 The Company must complete this work during 2009 as the  
4 MDMS will be required to support the provision of  
5 hourly meter data to customers with demands over 500  
6 kW and up to and including 1000 Kw in the period prior  
7 to the application of MHP rates. The MDMS is vital to  
8 enabling this provision of data.

9 Q. Please describe the program plan for the deployment of  
10 MHP.

11 A. A dual track project plan has been developed to manage  
12 the process for the installation of the MHP meters in  
13 concert with the deployment of the MDMS. The goal for  
14 meter deployment for customers with demand greater  
15 than 1000 kW and up to and including 1500 kW is to  
16 have the meters set by March 31, 2009. The goal for  
17 customers with demand greater than 500 kW up to and  
18 including 1000 kW is to have the meters set by March  
19 31, 2010.

20 In the meantime, the MDMS deployment is being  
21 planned to enable the MDMS to be calculating billing  
22 determinants by the fourth quarter of 2009, that is,  
23 for the first group of expansion customers. The

## CUSTOMER OPERATIONS PANEL - ELECTRIC

1 Company has already completed orientation sessions for  
2 internal business users and Information Technology  
3 employees to facilitate their participation in  
4 functional analysis and has begun the process of  
5 defining the functional requirements for the MDMS. We  
6 have also begun the analysis and design of the  
7 integration required between the field collection  
8 systems and our billing systems.

9 Q. What is the total capital cost of this program?

10 A. The total capital cost of this program is \$7.53  
11 million.

12 Q. What additional capital funding in addition to the  
13 \$5.8 million previously approved is needed for this  
14 program?

15 A. The projected additional capital cost of \$1.73 million  
16 represents the forecasted funding required for this  
17 program (meters and meter installation) and additional  
18 funding required for the MDMS. The Company requested  
19 funding for the MDMS in its last electric rate case  
20 under the Advanced Metering Infrastructure ("AMI")  
21 program with the purpose of using the MDMS for both  
22 the AMI program and the MHP program. Funding for  
23 implementation of the MDMS for the specific

## CUSTOMER OPERATIONS PANEL - ELECTRIC

1 requirements of the MHP program was approved in the  
2 2008 electric rate order. The MDMS is critical for  
3 the implementation of MHP as described in more detail  
4 below. Due to this, full funding for the MDMS is  
5 being requested under this program.

6 Q. What is the projected O&M cost for this program?

7 A. The current rate plan provides for O&M of \$283,000.  
8 We expect a cost increase of \$33,000 in rate year 1, a  
9 further increase of \$518,000 in rate year 2 and a  
10 third increase of \$200,000 in rate year 3. That is,  
11 the O&M for this program in the third year is  
12 projected to be \$1.03 million. It is expected that  
13 the O&M for these meters will remain at this level.

14 Q. Please describe these costs.

15 A. O&M funding is needed for communication costs. As  
16 meters are installed, communication will be  
17 established with each meter. A monthly communications  
18 charge will begin to be incurred by the Company once  
19 the meter is communicating regularly with the  
20 Company's data collection systems. These costs, as a  
21 total, will grow with the number of meters installed.  
22 In addition, license and maintenance costs for the  
23 MDMS software and hardware are included. The O&M also

**CUSTOMER OPERATIONS PANEL - ELECTRIC**

1 includes \$100,000 to be used to provide for the  
2 Outreach and Education activities related to educating  
3 customers regarding MHP as directed by the Commission  
4 in the 2008 electric rate order.

5 Q. Have you prepared, or had prepared under your  
6 supervision, exhibits that detail the Company's  
7 proposed investment in the deployment of MHP?

8 A. Yes. We have prepared an exhibit entitled "MANDATORY  
9 HOURLY PRICING", Exhibit \_\_ (CO-1) and an exhibit  
10 entitled "MANDATORY HOURLY PRICING WORKSHEET", Exhibit  
11 \_\_ (CO-2).

12 MARK FOR IDENTIFICATION AS EXHIBIT \_\_ (CO-1) and EXHIBIT \_\_  
13 (CO-2)

14 **AUTOMATED METER READING ("AMR")**  
15

16 Q. Please summarize Con Edison's planned program for AMR.

17 A. The Company's plan involves several initiatives:  
18 complete the saturated installation of AMR in  
19 Westchester County; install AMR meters strategically  
20 for hard-to-read meters; and include AMR modules in  
21 meters to be installed in selected projects.

22 The Company refers to the deployment of AMR as  
23 "saturated AMR" when AMR technology is installed on  
24 every meter in a target area. The Company has reduced

**CUSTOMER OPERATIONS PANEL - ELECTRIC**

1 the scale of our AMR project and will limit the  
2 saturated installation of AMR to Westchester County.

3 Q. Please describe the Company's plan for the saturated  
4 installation of AMR.

5 A. The Company commenced the deployment of AMR in  
6 Westchester County in 2003. Since that time saturated  
7 AMR has been deployed in the Peekskill and Rye meter  
8 reading branches. During 2008 to 2009, saturated AMR  
9 will be deployed in the Mount Vernon meter reading  
10 branch. During 2009 to 2010, the Company proposes to  
11 complete the installation of AMR meters in the Yonkers  
12 meter reading branch, which will complete the  
13 deployment of saturated AMR throughout Westchester  
14 County.

15 Q. What are the benefits of AMR?

16 A. Manual meter reading is one of the most labor-  
17 intensive tasks at Con Edison because it requires that  
18 each meter be physically visited in order for the  
19 meter reader to visually read the meter and record the  
20 reading. AMR considerably reduces the resources  
21 required to read meters. AMR also overcomes the  
22 difficulties associated with reading meters considered  
23 to be "hard-to-read," for example, where there is

## CUSTOMER OPERATIONS PANEL - ELECTRIC

1 restricted access due to their location or in cases  
2 where customers are unavailable to provide access to  
3 their meters. Customer convenience and the reduction  
4 in estimated readings are also key benefits of AMR  
5 deployment. It is also the case that AMR reduces the  
6 injuries associated with manual meter reading (slips,  
7 trips and falls) during inclement weather and the  
8 normal course of meter reading activities.

9 Q. Please describe the AMR technology that the Company is  
10 installing.

11 A. The selected AMR technology uses small, low-powered  
12 radio-frequency transmitters that are integrated into  
13 the meters. Generally, the existing electric meters  
14 currently located at the customer's premises are  
15 replaced with meters already equipped with AMR  
16 technology. Gas meters at customer locations are  
17 generally field retrofit to upgrade them so they are  
18 AMR capable. The transmitters allow the meters to be  
19 remotely read by walking by with a specially equipped  
20 hand held meter reading device or driving by in a  
21 vehicle specially equipped with a data collection  
22 device. The technology will also allow meters to be  
23 read using a fixed network of pole-mounted data



**CUSTOMER OPERATIONS PANEL - ELECTRIC**

1 collectors and repeaters. This technology offers a  
2 very high degree of flexibility in meter reading.  
3 Using this approach, additional functionality can be  
4 enabled, and thousands of meters can be read more  
5 frequently than once each billing cycle depending upon  
6 billing requirements and other data needs.

7 Q. Considering the AMR benefits you just described, why  
8 does the Company propose to continue the installation  
9 of saturated AMR only in Westchester County?

10 A. The Company's cost of manual meter reading is highest  
11 in Westchester. In Westchester, customer homes are  
12 more widely dispersed than in other areas of our  
13 service territory, and, therefore, a greater amount of  
14 time is required to read each meter than in more  
15 densely populated parts of our service territory.  
16 Further, because the meter reading routes are  
17 geographically long, due to the lack of meter density,  
18 most of the meter readers require vehicles. Weather  
19 has a more severe impact in Westchester than in other  
20 areas of our service territory, for example more  
21 fallen trees, contributing to increased difficulty and  
22 expense of reading as well as increased potential for  
23 injury and vehicle accidents. Installation of

**CUSTOMER OPERATIONS PANEL - ELECTRIC**

1 saturated AMR in Westchester County significantly  
2 mitigates these costs and improves overall reading  
3 performance and efficiency. The technology selected  
4 for Westchester can be adapted to provide increased  
5 functionality while leveraging the Company's existing  
6 investment for meter deployment in these areas.

7 Q. Has the Company conducted similar analysis of other  
8 areas in the Company's service territory?

9 A. Yes. We have conducted cost/benefit analyses of all  
10 other areas. At this time there is not a positive  
11 business case for progressing with the saturated  
12 deployment of AMR outside of Westchester. This  
13 analysis is based on the current cost of the required  
14 metering equipment. We continue to monitor the cost  
15 of this equipment and will re-assess the viability of  
16 further AMR saturation should the cost/benefit  
17 relationship change to allow a positive business case.

18 Q. Is Con Edison planning any other initiatives that  
19 involve AMR?

20 A. Yes. The Company plans to continue the installation  
21 of AMR at locations outside of Westchester that are  
22 hard to read and for specific projects.

**CUSTOMER OPERATIONS PANEL - ELECTRIC**

1 Q. Please describe Con Edison's plans for AMR deployment  
2 at hard-to-read locations.

3 A. The Company plans to deploy AMR equipment at locations  
4 and meter reading routes where it is expensive,  
5 dangerous or otherwise inefficient to read meters in a  
6 conventional manner. These meters are regularly  
7 inaccessible on the meter reading day and generally  
8 require that a meter reader expend more than the  
9 average time to obtain readings, and the overall rate  
10 of meter reading is low. The installation of AMR  
11 equipment for these meters or routes will increase  
12 meter reading efficiency and provide an actual reading  
13 for the customer.

14 Q. Please describe Con Edison's plans for AMR deployment  
15 for meters to be installed in selected projects.

16 A. The Company plans to install AMR in selected projects  
17 where meter reading efficiencies can be gained through  
18 the use of AMR. An example is a new building  
19 requiring large numbers of electric meters. In such  
20 cases, the sheer volume of meters at the location may  
21 result in a meter reading route becoming too large to  
22 be read by a single meter reader. Where such projects  
23 exist, AMR will be used to avoid the need for

**CUSTOMER OPERATIONS PANEL - ELECTRIC**

1 additional staffing. The Company expects to include  
2 AMR modules in about 35,000 electric and gas meters  
3 per year at these projects.

4 Q. What is the total capital cost of the AMR program?

5 A. The total capital cost of this program is \$35.96  
6 million.

7 Q. Please describe the capital funding that is needed for  
8 this project.

9 A. The Company's projected capital expenditures for the  
10 deployment of AMR meters in 2009 is \$22.8 million, in  
11 2010 is \$7 million, in 2011 is \$3 million, and in 2012  
12 is \$3 million. These costs are predominantly the  
13 costs of the AMR modules, meters and installation.

14 Q. What is the projected additional O&M cost for the AMR  
15 program?

16 A. We expect a cost increase of \$210,000 in rate year 1  
17 for vehicle-related costs. No further O&M increases  
18 are expected after rate year 1 and as AMR saturation  
19 comes to an end, we expect the O&M levels to be  
20 reduced after rate year 3.

21 Q. Does the Company expect to reduce Customer Field  
22 Representative ("CFR") staffing as a consequence of  
23 the installation of AMR?

**CUSTOMER OPERATIONS PANEL - ELECTRIC**

1 A. Yes. The Company continues to reduce CFR staffing  
2 levels as a consequence of the installation of AMR.  
3 In rate year 1, costs for CFRs are forecast to be  
4 reduced by \$880,000 over the historical year. In rate  
5 year 2, a further reduction of \$846,000 is expected  
6 and in rate year 3, a further reduction of \$691,000 is  
7 expected.

8 Q. Have you prepared, or had prepared under your  
9 supervision, exhibits that detail the AMR  
10 implementation?

11 A. Yes. We have prepared three exhibits. These are  
12 entitled "AUTOMATED METER READING", Exhibit \_\_ (CO-3),  
13 "AUTOMATED METER READING WORKSHEET", Exhibit \_\_ (CO-4)  
14 and "AUTOMATED METER READING SATURATION SAVINGS",  
15 Exhibit \_\_ (CO-5).

16 MARK FOR IDENTIFICATION AS EXHIBIT \_\_ (CO-3), EXHIBIT  
17 \_\_ (CO-4) and EXHIBIT \_\_ (CO-5)

18 **AMI FUNDING**

19 Q. In the Order Relating to Electric and Gas Metering  
20 Services (issued Aug. 1, 2006) in the Competitive  
21 Metering proceeding, Case Nos. 94-E-0952, In the  
22 Matter of Competitive Opportunities Regarding Electric  
23 Service, et al., the Commission directed utilities to

**CUSTOMER OPERATIONS PANEL - ELECTRIC**

1 file plans for the development and deployment of  
2 advanced electric and gas metering systems, including  
3 automated meter reading technology. What actions has  
4 the Company taken in response to this Order?

5 A. The Company conducted an investigation of potential  
6 AMI solutions and in our last gas and electric rate  
7 cases sought funding to initiate pre-deployment  
8 projects in three areas followed by a system-wide  
9 deployment of AMI.

10 Q. What was the outcome of the Company's effort to secure  
11 Commission approval of this program and associated  
12 funding in those cases?

13 A. In Case Nos. 06-G-1332 and 07-E-0523, the Commission  
14 found that a determination to reflect in rates costs  
15 for AMI investments was premature since the Company's  
16 proposed programs were being considered in the AMI  
17 proceeding. In the gas rate case, the Company was  
18 authorized to defer the AMI costs being addressed in  
19 the AMI proceeding. In the electric rate case, the  
20 Commission provided for the Company to seek deferral  
21 of any reasonable AMI costs incurred during the rate  
22 year as a result of Commission determinations in the  
23 AMI proceeding.

**CUSTOMER OPERATIONS PANEL - ELECTRIC**

1 Q. What is the Company's position with regard to AMI?

2 A. The Company supports the Commission's long-standing  
3 position "to provide customers with more information  
4 about their energy usage so that they have the ability  
5 to control their energy costs by responding to peak  
6 prices through the use of state-of-the-art technology"  
7 and that "the infrastructure needed to support real-  
8 time peak pricing programs must include advanced  
9 meters as well as expanded back-office information  
10 systems that can manage exponentially greater amounts  
11 of usage information, and bill customers using time-  
12 sensitive rates." Public Service Commission Press  
13 Release (Dec. 12, 2007), *"Commission Moves Con Edison,*  
14 *O&R Advanced Metering Plans Forward - State-of-the-Art*  
15 *Meter Technology Could Help Consumers Control Costs,*  
16 *07110/94-E-0952;00-E-0165;02-M-0514, p.1)* Further,  
17 the City of New York advised that the implementation  
18 of a comprehensive AMI is "central to Mayor  
19 Bloomberg's PlaNYC." Case No. 07-E-0523, Recommended  
20 Decision (Jan. 8, 2008), p. 63. The Company is  
21 actively participating in the Commission's AMI  
22 proceeding and will proceed with an AMI pilot program  
23 as and when appropriate.

**CUSTOMER OPERATIONS PANEL - ELECTRIC**

1 Q. What is the Company's position with regard to funding  
2 an AMI program?

3 A. The Company believes that funding for AMI initiatives  
4 should be commensurate with the initiation of AMI  
5 investments. Should the AMI proceeding will be  
6 decided before this rate proceeding is concluded, the  
7 rates in this case should provide for funding AMI  
8 initiatives.

9 Q. How does the Company propose that this be  
10 accomplished?

11 A. This can be accomplished in one of two ways. If the  
12 Company's specific AMI proposal is approved before new  
13 rates take effect in this case, the rates to be  
14 effective in the first rate year and thereafter should  
15 be adjusted to reflect the costs of the AMI programs.  
16 If the Company's specific AMI proposal is authorized  
17 after rates become effective in this case, the  
18 Commission should authorize the Company to implement a  
19 surcharge to its rates to collect AMI-related costs on  
20 a contemporaneous basis pending the inclusion of AMI  
21 costs in base rates the next time the Company makes a  
22 base rate filing.

23



## **CUSTOMER OPERATIONS PANEL - ELECTRIC**

### **1                    CYCLE METER READING HANDHELD SYSTEM**

2    Q.    Is the Company proposing to replace the cycle meter  
3           reading handheld system?

4    A.    Yes.

5    Q.    Why is a new meter reading system needed?

6    A.    We currently use a PC-based handheld application  
7           (referred to as the "PET system") to control our meter  
8           reading activities. The system was installed in 2002  
9           and automated the flow of information for meter  
10          reading using a hand-held microcomputer. The Company  
11          has been advised by the vendor of the PET system that  
12          it will not support the system beyond 2012. Our plan  
13          is to replace this system with an application that  
14          will continue to provide for the effective control of  
15          our meter reading activities and timely billing for  
16          our customers' accounts and offer us the flexibility  
17          to expand as new technology becomes available.

18   Q.    What operations are supported by the cycle meter  
19          reading handheld system?

20   A.    The current system provides the ability to read  
21          conventional and AMR meters with a handheld device or  
22          a mobile collector installed in a vehicle and deliver  
23          these readings into the Company's Customer Service

## CUSTOMER OPERATIONS PANEL - ELECTRIC

1       System. This system also enables automated route  
2       restructuring at the local level for the purpose of  
3       maintaining efficient routes.

4   Q.   What is the Company's plan for replacing the PET  
5       system?

6   A.   Using the competitive bid and RFP process, the Company  
7       will investigate the market for systems designed to  
8       deliver correct and timely billing of customer account  
9       data. The Company will use the opportunity of the  
10      significant lead time for replacement to conduct a  
11      detailed analysis of the requirements of the system  
12      and to develop a competitive RFP process, which will  
13      enable us to maximize the operational benefits that  
14      can be secured at the most competitive market price  
15      for these benefits. The process will carefully  
16      consider our current operational needs and those  
17      expected to be experienced in the future. Initial  
18      indications are that the systems now available in the  
19      market will offer new functionality beyond the  
20      capability of our current system, and we will be  
21      looking to take maximum advantage of such developments  
22      as we pursue a replacement system. The Company has

**CUSTOMER OPERATIONS PANEL - ELECTRIC**

1 the goal of purchasing and installing a new system in  
2 2011.

3 Q. What is the projected capital cost of the new system?

4 A. The Company projects a capital cost of approximately  
5 \$3.5 million, which will be incurred in 2011.

6 Q. What is the projected O&M cost of the new system?

7 A. It is expected that the Company will incur O&M costs,  
8 relating to system maintenance, of approximately  
9 \$263,000 per year beginning in 2012.

10 Q. Have you prepared, or had prepared under your  
11 supervision, an exhibit that details the Company's  
12 proposed investment in the cycle meter reading  
13 handheld system?

14 A. Yes. We have prepared an exhibit, entitled "CYCLE  
15 METER READING HANDHELD SYSTEM", Exhibit \_\_ (CO-6).

16 MARK FOR IDENTIFICATION AS EXHIBIT \_\_ (CO-6)

17 **CYCLE METER READING DATA WAREHOUSE**

18 Q. Is the Company developing a cycle meter reading data  
19 warehouse?

20 A. Yes.

21 Q. What is the function of the cycle data warehouse?

22 A. The cycle meter reading data warehouse is comprised of  
23 meter reading related data from operational databases

## CUSTOMER OPERATIONS PANEL - ELECTRIC

1 and the Customer Service System ("CSS") that will  
2 provide detailed information related to meter reading  
3 performance. The data warehouse is designed and built  
4 on business intelligence technology that allows for  
5 reporting in a variety of ways to a broad spectrum of  
6 users.

7 Q. What functionality will the cycle data warehouse  
8 deliver?

9 A. The data warehouse will have pre-designed and  
10 scheduled reports to provide CFR statistics, meter  
11 reading statistics and route analysis on a periodic  
12 (daily, monthly, etc.) basis. The ability to draw  
13 these reports as needed will allow users to easily  
14 interrogate such events as demand meters not read,  
15 irregular conditions and routes with abnormal elapsed  
16 time. The data warehouse will also have dashboards  
17 and scorecards that are information rich and visually  
18 accessible and provide actionable information with  
19 regard to the root causes of problems to enable  
20 corrective action. For example, trending of meters  
21 that the CFR did not reach on the assigned route and  
22 supporting information could identify possible causes,  
23 such as an increase of meters on existing routes or

## CUSTOMER OPERATIONS PANEL - ELECTRIC

1 decrease in performance and productivity of specific  
2 personnel. This information will enable the Company  
3 to decide between splitting routes or training and  
4 mentoring employees as the optimum solution. Managers  
5 will not need training in data manipulation or query  
6 formulation to exploit the new system's functionality.

7 Q. Why is the Company developing this warehouse at this  
8 time?

9 A. The current reports are mostly operational in nature  
10 and do not have the capability to answer more  
11 fundamental strategic questions such as: How are we  
12 doing? Why are we achieving these results? What  
13 actions should we be taking? The current technology  
14 is not conducive to either management by exception or  
15 strategic long-term planning. The data warehouse  
16 addresses these current constraints and provides a  
17 self-service model for the user to get information  
18 when and where required, thus reducing reliance on  
19 information technology personnel for ad hoc  
20 assistance. Importantly, the effective access to high  
21 level data, with drill-down capability, will allow  
22 senior management greater vision and oversight of  
23 these important areas of operation. This will allow

**CUSTOMER OPERATIONS PANEL - ELECTRIC**

1 the Company to ensure these areas of operation are  
2 operating appropriately and to the benefit of all  
3 customers.

4 Q. What is the projected capital cost of the new system?

5 A. The Company projects a capital cost of approximately  
6 \$400,000, to be incurred for programming costs over  
7 the years 2009 to 2012. It is anticipated that  
8 programming will be continued at a consistent pace  
9 over the project term until completion in 2012.

10 Q. What is the projected O&M cost of the new system?

11 A. There is no O&M expense associated with this system.

12 Q. Have you prepared, or had prepared under your  
13 supervision, an exhibit that details the Company's  
14 proposed investment in the development of a Cycle Data  
15 Warehouse?

16 A. Yes. We have prepared an exhibit, entitled "CYCLE DATA  
17 WAREHOUSE", Exhibit \_\_ (CO-7).

18 MARK FOR IDENTIFICATION AS EXHIBIT \_\_ (CO-7)

19 **CALL CENTER IMPROVEMENTS**

20 Q. Are you proposing enhancements to the Company's Call  
21 Center?

22 A. Yes.

23 Q. Please describe these changes.

## CUSTOMER OPERATIONS PANEL - ELECTRIC

1 A. This program involves replacement of the Call Center's  
2 automatic call distribution ("ACD") system,  
3 replacement of the existing self service system  
4 options and implementation of business continuity  
5 initiatives, and replacement of the Call Center's  
6 workstations. The Company is also adding Customer  
7 Service Representatives ("CSRs").

8 Q. Why is the Company proposing to replace the existing  
9 ACD?

10 A. The existing telephone ACD system is the Call Center's  
11 most critical infrastructure asset and processes more  
12 than 15.6 million customer calls annually. All  
13 customer contacts made to the Call Center via  
14 telephone are processed and distributed to CSRs in our  
15 four Call Centers via the ACD telephone system. The  
16 ACD system provides an intelligent call routing engine  
17 that distributes customer calls to CSRs in accordance  
18 with call types and CSR skill sets. Additionally, the  
19 ACD telephone system offers tiered messaging  
20 capabilities, which provide customers with generic and  
21 emergency-related announcements. It is vital that  
22 appropriate messages be available to our customers  
23 during emergencies. The ACD system is connected to

## CUSTOMER OPERATIONS PANEL - ELECTRIC

1 multiple voice and data systems. The replacement  
2 effort must begin at least two years before the  
3 system's end of life to integrate all communication  
4 circuits and peripheral systems into the replacement  
5 environment. This system was installed in 1998 and  
6 will reach the end of its service life by 2013 as ACD  
7 manufacturers move to supporting only the technology  
8 on which the more recent systems are based. Such a  
9 lack of support will not only increase maintenance  
10 costs but limit the ability to integrate the ACD with  
11 other, more advanced, Call Center technology. While  
12 the Company recognizes that it is prudent to replace  
13 the system prior to a significant increase in  
14 operation risk due to this circumstance, it is  
15 fortunate that a reasonable lead time exists for  
16 replacement. The Company will conduct a thorough  
17 needs assessment and will be able to conduct a  
18 comprehensive RFP process to target the best solution  
19 for the Call Center's future needs that integrates  
20 effectively with other Call Center technology. As  
21 integration of such an important system is a long and  
22 complex process, the Company has set the goal of  
23 securing the required replacement solution by 2011 so



## CUSTOMER OPERATIONS PANEL - ELECTRIC

1 the system will have been through a robust testing  
2 protocol before the end of life of the current system.  
3 Such a strategy will protect the level of service to  
4 customers at all stages of this significant system  
5 change.

6 Q. What is the cost for this program?

7 A. The projected cost for the replacement of the ACD is  
8 \$2.25 million in capital in 2011. At this time it is  
9 expected that a single vendor will supply the total  
10 system. The O&M cost of the system is \$28,000  
11 beginning in RY 3 when system maintenance costs are  
12 expected to begin to be applicable.

13 Q. Why is the Company replacing the existing self service  
14 system ("VRU")?

15 A. The Company's VRU is an automated interactive voice  
16 response system which provides customers with self-  
17 service options. Currently, there are approximately  
18 thirty-five VRU self-service applications available to  
19 customers, and we continue to see annual growth in the  
20 use of VRU self-service. The VRU system processes  
21 more than fifty percent of all inbound customer calls.  
22 The VRU also handles most outbound calls made to  
23 customers during outage events in order to provide

## CUSTOMER OPERATIONS PANEL - ELECTRIC

1 customers with the estimated time of service  
2 restoration and to allow customers to verify service  
3 restoration following an outage event. The existing  
4 VRU employs outdated technology that will not be  
5 supported by the existing vendor beyond 2013. With  
6 the existing VRU hardware of an age where replacement  
7 parts have become scarce, replacement of the VRU is  
8 critical to avoid hardware failures that could have an  
9 impact on system availability. Such failures would  
10 negatively affect the Call Center's ability to provide  
11 customers with quality customer service. Furthermore,  
12 the Company's existing self service VRU system  
13 utilizes a proprietary programming language - an  
14 uncommon language in the industry. This limits the  
15 development of software required for future self  
16 service applications and increases the difficulty of  
17 system upkeep as programmers capable of writing  
18 programs in this language become more difficult to  
19 source and secure. The new VRU self service system  
20 will be in operation by mid-2009.

21 Q. Please describe the additional work that is required  
22 as part of the VRU replacement.

**CUSTOMER OPERATIONS PANEL - ELECTRIC**

1 A. The solution developed by the Company involves the  
2 replacement of the existing VRU system with a next  
3 generation interactive voice response ("IVR") system.  
4 The new system will better serve customers over a  
5 range of services. This new generation system will be  
6 complemented by virtual hold technology - a technology  
7 allowing the customer to select from among call back  
8 options if they want to speak with a CSR but do not  
9 wish to continue to hold for a CSR to be available.

10 Q. Please continue.

11 A. Currently, the system utilizes many self-service  
12 applications that were specifically developed by the  
13 Company over the years to meet the needs of our  
14 customers. These applications will need to be re-  
15 written and/or re-engineered; this constitutes a major  
16 part of the system replacement project. These self-  
17 service applications currently handle approximately  
18 6.5 million calls per year. Such volume handled  
19 manually would require the equivalent of approximately  
20 300 CSRs.

21 Q. What is the cost for this program?

22 A. The projected capital cost for the development of self  
23 service system applications is \$2.87 million in 2010,

## CUSTOMER OPERATIONS PANEL - ELECTRIC

1       \$1.97 million in 2011 and \$1.13 million in 2012 for a  
2       total program capital cost of \$5.96 million. The  
3       Company will begin incurring O&M costs of \$170,000  
4       associated with this program in rate year 2 and  
5       incremental O&M of \$300,000 in rate year 3. This will  
6       bring the total O&M requirement to \$470,000 per year  
7       in the third year.

8   Q.   Please describe the business continuity initiatives.

9   A.   The Call Center business continuity plan requires the  
10       Company to improve its means to provide continued  
11       service to our customers during the loss of Call  
12       Center infrastructure, including server computing  
13       resources and facilities. The current Call Center LAN  
14       server architecture is not redundant and lacks a  
15       robust disaster recovery implementation. Failure of a  
16       given server will prevent all users connected to the  
17       server, including CSRs, from accessing information  
18       that is necessary to handle and process customer  
19       inquires and emergency transactions. During most  
20       server outages, users remain out of service until the  
21       server problem is corrected. Typically, the  
22       restoration process requires at least six hours, which  
23       could hamper our ability to assist customers during an

## CUSTOMER OPERATIONS PANEL - ELECTRIC

1 emergency period when they need us to be available and  
2 have access to essential information. The proposed  
3 improvement includes the implementation and  
4 installation of a redundant server cluster environment  
5 with near real time recovery capabilities.  
6 Additionally, the proposed improvement design will  
7 include a robust storage area network ("SAN") to  
8 ensure files/data are backed up and stored to disk  
9 routinely for archiving and restoration purposes. In  
10 the proposed server recovery solution, a failed server  
11 will be immediately recovered by a redundant like and  
12 kind server. Most importantly, this mechanism will be  
13 transparent to server users. The proposed improvement  
14 will mitigate downtime through the implementation of  
15 server recovery and data replication technologies.  
16 This solution will also address existing points of  
17 failures that exist today in the computer network  
18 wiring infrastructure. Further, Call Center network  
19 performance analytics, system monitoring tools, and  
20 data warehousing technology will be implemented to  
21 consolidate information and refine data to enable  
22 proactive, rules based, responses to system  
23 performance. This will allow the Company to identify

## CUSTOMER OPERATIONS PANEL - ELECTRIC

1 areas of potential failure at the earliest possible  
2 time and take corrective steps to avoid such failure  
3 or limit its impact. Further, analysis will enable  
4 process review to improve system process for future  
5 operation.

6 Q. What is the cost for this program?

7 A. The projected capital cost for the business continuity  
8 initiatives is \$1.58 million in 2010 and \$844,000 in  
9 2011 for a total program capital cost of \$2.42  
10 million. The O&M associated with this program will be  
11 \$50,000 beginning in rate year 2 and will increase by  
12 \$50,000 in rate year 3 for an O&M requirement of  
13 \$100,000 in rate year 3.

14 Q. Why is the Company planning to upgrade the Call Center  
15 CSR workstations?

16 A. By 2012, this hardware will have reached the end of  
17 its useful life. In this context it is important that  
18 arrangements are made to replace this vital equipment.

19 Q. What is the cost for this program?

20 A. The projected capital cost for the replacement of the  
21 Call Center workstations and servers is \$1.35 million,  
22 and it is expected that this cost will be incurred in



**CUSTOMER OPERATIONS PANEL - ELECTRIC**

1 A. The Company plans to continue CSS Life Extension to  
2 enhance our existing Customer Service System ("CSS"),  
3 to develop applications for the automatic billing of  
4 customers currently billed outside of the Company's  
5 CSS, and to reinforce other Company customer service  
6 systems. The Commission approved funding of \$1  
7 million for this project for the current rate year in  
8 the 2008 electric rate order.

9 Q. Please describe the work that needs to be performed on  
10 CSS.

11 A. We continue to upgrade the programming language in  
12 which CSS was originally developed. We have been  
13 systematically reprogramming CSS to a more universally  
14 used and supported language. Some of the portions of  
15 CSS that we need to upgrade include the bill  
16 calculation facility, the activity file maintenance  
17 application, and other specific functions.

18 Q. Why is this work required?

19 A. This project is important to the Company to maintain a  
20 viable CSS with the required flexibility to support  
21 the current and future operating environment. The  
22 availability of programmers and technicians trained in  
23 the older programming language and system design



**CUSTOMER OPERATIONS PANEL - ELECTRIC**

1 continues to diminish. This leaves the support for  
2 this key suite of systems vulnerable as the Company  
3 could be unable to create new applications or fix  
4 problems as they occur. Further, new programming is  
5 needed to more efficiently facilitate CSS' integration  
6 with other systems, and to create the ability to  
7 effectively make any necessary modifications. These  
8 changes are especially important as the nature of  
9 customer needs and billing are becoming more complex.  
10 The CSS must be able to interact effectively with  
11 systems that enable options in the competitive  
12 marketplace and real-time pricing and facilitate  
13 quality data presentation to Customer Service  
14 Representatives.

15 Q. What is the projected cost of this program?

16 A. The projected capital cost of this program is \$1  
17 million per year during the period 2009-2012.

18 Q. Have you prepared, or had prepared under your  
19 supervision, an exhibit that details the Company's  
20 proposed investment in the CSS?

21 A. Yes. We have prepared an exhibit, entitled "CSS LIFE  
22 EXTENSION", Exhibit \_\_ (CO-11).

23 MARK FOR IDENTIFICATION AS EXHIBIT \_\_ (CO-11)

**CUSTOMER OPERATIONS PANEL - ELECTRIC**

1 Q. Please describe the application that you propose to  
2 develop for accounts that are billed outside of the  
3 Company's Customer Service System ("CSS").

4 A. Currently, the Company utilizes a number of off-system  
5 billing processes outside of the CSS to bill customers  
6 taking service under certain rates and programs.  
7 Managing and billing these customer accounts involves  
8 manual processes and/or systems other than CSS. The  
9 Company proposes to utilize a common automated system  
10 to replace all of the off-system billing applications  
11 currently in use. Development of this system will  
12 support these billing activities and provide full  
13 automation of these processes, eliminating the use of  
14 manual processes for billing currently in use and will  
15 automate all billing protocols. The Commission  
16 considered and approved this program in Case No. 07-E-  
17 0523.

18 Q. What off-system billing applications currently in use  
19 will be replaced?

20 A. The Company plans to utilize the common automated  
21 system to replace all of the off-system billing  
22 applications currently in use. As planned, the first  
23 phase of system development will provide billing for

## CUSTOMER OPERATIONS PANEL - ELECTRIC

1 electric customers served under standby rates and  
2 those rates currently billed via the Economic  
3 Development Delivery System ("EDDS"). The EDDS rates  
4 include Power for Jobs ("PFJ"), New York City Public  
5 Utility Service ("NYCPUS"), County of Westchester  
6 Public Utility Service Authority ("COWPUSA"), World  
7 Trade Center ("WTC") and Substitute Energy. In the  
8 second phase of the system development, billing  
9 relating to New York Power Authority ("NYPA") rates  
10 will be addressed.

11 Q. What is the status of this project?

12 A. A comprehensive review of the billing and system  
13 processes involved in billing the involved rates has  
14 been completed. Next, a technical analysis will be  
15 conducted in preparation for system development.

16 Q. Please describe the benefits of utilizing a single  
17 automated system to bill these customers.

18 A. The migration from multiple satellite (non-CSS)  
19 billing systems to a common automated system will  
20 allow for the elimination of the heavily manual  
21 billing processes currently required in serving the  
22 customers under the involved rates. Using a common  
23 system will allow for greater cross training of system

## CUSTOMER OPERATIONS PANEL - ELECTRIC

1 users and support personnel to ensure greater  
2 reliability of the billing provided to customers. The  
3 common system will also enable the automation of  
4 quality control mechanisms and improvement of the  
5 database management and maintenance for the accounts  
6 of the customers involved. The system being developed  
7 will also enable greater flexibility in regard to the  
8 development and modification of the rates we are able  
9 to offer customers.

10 Q. Why does this work need to be conducted at this time?

11 A. Billing of customers under these rates and programs  
12 using current methods requires a high degree of  
13 experience and expertise. The rates that are  
14 currently billed "off-system" are managed this way  
15 because they are very complex, and the existing core  
16 billing system (CSS) is not able to provide for this  
17 complexity. The billing of these rates is complicated  
18 due to a rate treatment that requires a series of  
19 calculations; our existing CSS does not have the  
20 flexibility to support the complex algorithms  
21 involved. In the past, the Company was able to rely  
22 on an extremely stable workforce and employees that  
23 billed these complicated accounts occupied their

## CUSTOMER OPERATIONS PANEL - ELECTRIC

1 positions for long periods. In that environment, it  
2 was possible for employees to gain the experience and  
3 knowledge needed to bill these accounts using the  
4 current methods and for the organization to retain  
5 these employees once they gained mastery of the  
6 billing methods. In our current environment, with a  
7 higher level of attrition of experienced employees and  
8 a more transient workforce replacing them, it has  
9 become extremely difficult to replicate the skills  
10 needed to manage these accounts using current methods  
11 and to retain the employees performing these  
12 functions. This makes it critical that we develop a  
13 system that will automate the billing of these  
14 accounts while we still retain experienced employees.  
15 The remaining experienced workforce is critical to the  
16 continued billing of these accounts until a new system  
17 is developed and will also serve to advise the new  
18 system designers on the intricate details of the rate  
19 construction and customer billing needs. It is  
20 therefore important to all stakeholders that the new  
21 system be developed at this time.

22 Q. What is the cost of this program?

**CUSTOMER OPERATIONS PANEL - ELECTRIC**

1 A. The cost to develop the proposed system for the  
2 automation of off-system billing is estimated to be a  
3 total of \$7 million in capital spending over the 2009-  
4 2012 period.

5 Q. Have you prepared, or had prepared under your  
6 supervision, exhibits that detail the Company's  
7 proposed investment in off-system billing?

8 A. Yes. We have prepared an exhibit entitled "OFF-SYSTEM  
9 BILLING", Exhibit \_\_ (CO-12) and an exhibit entitled  
10 "OFF-SYSTEM BILLING WORKSHEET", Exhibit \_\_ (CO-13).

11 MARK FOR IDENTIFICATION AS EXHIBIT \_\_ (CO-12) and EXHIBIT  
12 \_\_ (CO-13)

13 Q. Please describe your other proposals with respect to  
14 the reinforcement of other Company customer service  
15 systems.

16 A. The Company proposes to reinforce the systems that  
17 support the Company's existing obligations to  
18 accommodate customers that elect to take service from  
19 ESCOs, including those that elect to return to full  
20 service status. This will involve improvements to the  
21 systems supporting enrollment activities (i.e., the  
22 Retail Access Information System, "RAIS", and the  
23 Transportation Cost Information System, "TCIS"). The

**CUSTOMER OPERATIONS PANEL - ELECTRIC**

1 Commission considered and approved this program in  
2 Case No. 07-E-0523.

3 Q. What progress has been made on this work?

4 A. The Company has selected a consultant who began  
5 performing a strategy assessment of retail access  
6 systems during April 2008. The consultant is  
7 responsible for developing a work plan that will  
8 provide specific technology solutions to increase the  
9 performance and efficiency of the retail access  
10 systems, enhance customer communication tools,  
11 standardize programming languages, and enhance the EDI  
12 Phase III testing process. The strategy assessment  
13 will be completed by the end of July 2008.

14 Immediately after completion of the strategy  
15 assessment and an acceptable work plan, the Company  
16 will begin system development work to implement the  
17 technology solutions in accordance with the work plan.

18 Q. Why is this work necessary?

19 A. Reinforcement of the systems supporting the  
20 competitive marketplace is needed to manage the  
21 Company's obligation to facilitate the enrollment of  
22 customers with ESCOs, the transfer of customers  
23 between ESCOs and back to utility service. The

**CUSTOMER OPERATIONS PANEL - ELECTRIC**

1 movement of customers has significantly increased as a  
2 result of initiatives such as the Purchase of  
3 Receivables program and PowerMove, which were  
4 implemented during prior gas and electric rate plans.  
5 During 2007, the Company processed a total of 354,377  
6 switches with a total of 259,928 customers moving from  
7 utility supply service to ESCO supply service and a  
8 total of 94,449 customers returning to full service.  
9 In addition, in the past year, the Company processed a  
10 total of 92,491 requests to switch from one ESCO to  
11 another. With the volume increased to involve so many  
12 customer accounts, the importance of these systems has  
13 grown.

14 Q. Please continue.

15 A. Due to the large numbers of customers switching to  
16 ESCOs, the Company's RAIS and TCIS systems have  
17 reached effective capacity. It is important to note  
18 that RAIS and TCIS were initially developed over 10  
19 years ago, and since then additional systems and  
20 applications were developed to support the competitive  
21 marketplace. Specifically, the Company developed the  
22 Consolidated Utility Billing System ("CUBS"), in order  
23 to bill customers on behalf of ESCOs, and implemented



## CUSTOMER OPERATIONS PANEL - ELECTRIC

1 Electronic Data Interchange ("EDI") to standardize  
2 information exchanges between the Company and ESCOs.  
3 Both CUBS and EDI require interactions between RAIS  
4 and TCIS and the Company's Customer Information  
5 System, which has further stressed RAIS and TCIS.  
6 With over 30,000 customers switching monthly it is  
7 critical that systems supporting customer elections to  
8 switch service be reinforced so that customer service  
9 activities can be adequately supported. Due to these  
10 factors, reinforcement of RAIS and TCIS is necessary  
11 at this time so that the systems are able to continue  
12 to function as required.

13 Q. What specific systems enhancements will be completed  
14 as part of this program?

15 A. Specific aspects of RAIS and TCIS to be enhanced  
16 include updating and standardizing program languages  
17 to improve efficiency of maintaining the systems, and  
18 increasing capacity and efficiency of system processes  
19 to support the increased volumes of ESCO transactions  
20 and to provide for processing in a timely fashion.  
21 Customer information tools will also be enhanced,  
22 which will increase the information that is available  
23 to our Call Center to provide customers with

## **CUSTOMER OPERATIONS PANEL - ELECTRIC**

1 comprehensive information about their account with  
2 respect to ESCO provided supply. Improvements will  
3 also be made to the system's test environments to  
4 allow for more efficient mandated Phase III  
5 certification of ESCO's EDI communication.

6 Q. What is the cost of this project?

7 A. The cost of this program is estimated to be a total of  
8 \$3 million in capital spending over the period 2009 to  
9 2010.

10 Q. Have you prepared, or had prepared under your  
11 supervision, exhibits that detail the Company's  
12 proposed investment in the competitive market customer  
13 service systems?

14 A. Yes. We have prepared an exhibit entitled  
15 "COMPETITIVE MARKET CUSTOMER SERVICE SYSTEMS", Exhibit  
16 \_\_ (CO-14) and an exhibit entitled "COMPETITIVE MARKET  
17 CUSTOMER SERVICE SYSTEMS WORKSHEET", Exhibit \_\_ (CO-  
18 15).

19 MARK FOR IDENTIFICATION AS EXHIBIT \_\_ (CO-14) and EXHIBIT  
20 \_\_ (CO-15)

### **LOW INCOME PROGRAM**

22 Q. Does the Company currently have a Low Income Program  
23 for residential electric customers?

**CUSTOMER OPERATIONS PANEL - ELECTRIC**

1 A. Yes, the Company has a Low Income Program that  
2 provides a reduced Customer Charge to customers  
3 receiving Public Assistance, Supplemental Security  
4 Income ("SSI") or Food Stamps or who are recipients of  
5 Home Energy Assistance Program ("HEAP") benefits in  
6 the last 12 months. Funding for this program was set  
7 at \$17.4 million annually in the 2008 electric rate  
8 order.

9 Q. Is the Company proposing to continue this Low Income  
10 Program?

11 A. Yes. The Company proposes to continue the program at  
12 the same funding level as in the current Rate Plan,  
13 \$17.4 million per year. With funding at this level,  
14 the Company will provide a Customer Charge reduction  
15 of \$5.92 to the customer charge adopted in this case  
16 for low income residential customers taking service  
17 under Rate I of SC 1 (non-heating) and 7 (heating) who  
18 receive benefits under one of the assistance programs  
19 mentioned above. Customers already on the program  
20 would not have to reapply to receive the benefit of  
21 the reduced charge.

22 Q. How many customers would be expected to receive  
23 benefits under this program?

**CUSTOMER OPERATIONS PANEL - ELECTRIC**

1 A. At the \$17.4 million level, the \$5.92 monthly  
2 reduction in the customer charge will be available to  
3 approximately 245,000 customers annually.

4 **BILL REDESIGN**

5 Q. Has the Company recently redesigned its bill?

6 A. Yes. The functionality of Con Edison's prior bill  
7 format had been maximized and could not accommodate  
8 any further expansions to bill content. Therefore,  
9 bill design changes were necessary.

10 Q. Why were these changes necessary?

11 A. For full service customers, the Company needed to  
12 provide an unbundled bill format as a result of the  
13 February 18, 2005 Order Directing Submission of  
14 Unbundled Bill Formats issued in Case No. 00-M-0504.  
15 This included being able to display delivery, supply  
16 and tax charges. The redesigned bill provides more  
17 information and a breakdown of competitive versus non-  
18 competitive charges to assist customers in making  
19 informed choices about energy supply alternatives.

20 Q. Has the Commission approved the bill redesign project?

21 A. Yes. In the 2008 electric rate order, the Commission  
22 approved incremental O&M costs of \$1.1 million.

**CUSTOMER OPERATIONS PANEL - ELECTRIC**

1 Q. Does the Company expect to incur additional  
2 incremental O&M costs as a result of full deployment  
3 of the new bill?

4 A. Yes.

5 Q. What is the cause of these incremental costs?

6 A. Incremental costs are due to the full deployment of  
7 the new bill using larger bill paper and envelopes and  
8 the use of environmentally friendly recycled paper.  
9 Specifically, based on an anticipated annual volume of  
10 the larger bill paper and envelopes, costs will  
11 increase by approximately \$670,000. In addition, the  
12 use of environmentally friendly recycled paper and  
13 envelopes will result in approximately \$420,000 of  
14 additional paper costs. Thus, a total incremental  
15 cost of \$1.09 million per annum will be incurred.

16 Q. Please continue.

17 A. A critical initiative of this project has been to  
18 provide Call Center representatives with a facsimile  
19 version of the newly designed bill as issued to each  
20 customer so that the representative can successfully  
21 respond to customer inquiries. Specifically,  
22 customers often inquire about specific items that are  
23 shown on their bills. Prior to having access to an

## CUSTOMER OPERATIONS PANEL - ELECTRIC

1 image of the customer's bill, CSRs had difficulty  
2 satisfying these customer inquiries. With the  
3 facsimile bill, the CSR is looking at the exact same  
4 bill as the customer when responding to the customer's  
5 inquiry. This greatly improves our ability to satisfy  
6 these types of inquiries. To better support our  
7 customers, the Company will utilize a new service  
8 providing a more robust tool to electronically  
9 archive, and that will allow CSRs to view and  
10 retrieve, copies of customers' bills. The new service  
11 will enable us to more effectively and efficiently  
12 respond to customer inquiries, by providing  
13 representatives with a more rapid and direct manner to  
14 view facsimile bills as well as the ability to view  
15 multiple bills for a customer at the same time. It  
16 will also enable us to issue a duplicate bill for  
17 customers who request one. Further, this service will  
18 better support the Company's e\*bill program by  
19 providing newly enrolled customers with a historical  
20 electronic bill history as well as electronic current  
21 bills. This new service will result in an increase in  
22 O&M expenses of approximately \$460,000 per annum.

**CUSTOMER OPERATIONS PANEL - ELECTRIC**

1 Q. What other incremental costs will be experienced as a  
2 result of full deployment?

3 A. As the new bill generation system has moved from the  
4 development stage to full deployment, incremental  
5 equipment maintenance and software license fees have  
6 become applicable. Incremental O&M costs will be  
7 incurred for equipment maintenance in the approximate  
8 amounts of \$128,000 for duplex printers and \$15,000  
9 for upgraded mail inserters and software license fees  
10 of approximately \$133,000 for the Bill Composition  
11 Dialogue software and \$34,000 for Publication software  
12 which supports the Dialogue product.

13 Q. What is the total incremental cost for the above  
14 items?

15 A. The Company expects to incur incremental O&M costs of  
16 \$800,000 in the rate year beginning April 2009 in  
17 addition to the \$1.1 million already approved.  
18 Therefore, for the paper costs, the facsimile bill and  
19 equipment maintenance and software license fees the  
20 Company is requesting \$1.9 million in O&M funding for  
21 this project for the rate year.

**CUSTOMER OPERATIONS PANEL - ELECTRIC**

1 Q. Have you prepared, or had prepared under your  
2 supervision, exhibits that detail the Company's  
3 proposed investment in bill redesign?

4 A. Yes. We have prepared an exhibit entitled "BILL  
5 REDESIGN", Exhibit \_\_ (CO-16) and an exhibit entitled  
6 "BILL REDESIGN WORKSHEET", Exhibit \_\_ (CO-17).

7 MARK FOR IDENTIFICATION AS EXHIBIT \_\_ (CO-16) and EXHIBIT  
8 \_\_ (CO-17)

9 **CREDIT AND COLLECTION ACTIVITIES**

10 Q. Is the Company proposing any changes to its customer  
11 service field forces?

12 A. Yes. The Company is proposing to increase Field  
13 Operations staffing assigned to collections activities  
14 to address the increased volume of accounts that  
15 require field collection. The Company also requires  
16 additional administrative staff to support the  
17 replevin work generated as a consequence of the  
18 increased collections activities that will be  
19 performed. The Company will incur certain capital  
20 costs, discussed below, to support these efforts.

21 Q. Please explain the actions that the Company takes to  
22 collect on overdue bills prior to the accounts being  
23 scheduled for field collections action.



## CUSTOMER OPERATIONS PANEL - ELECTRIC

- 1 A. The Company takes a number of actions to resolve  
2 overdue bills. Customers receive a series of notices  
3 from the Company, including reminders, alerts and  
4 termination notices, in an effort to make them aware  
5 that their bills are overdue and effect payment.  
6 Termination notices sent to residential customers also  
7 offer deferred payment agreements as a way for the  
8 customer to resolve the arrears. Once customer  
9 accounts reach the stage where the next step would be  
10 field collection action, the Company endeavors to  
11 contact the customer by telephone in another attempt  
12 to resolve the arrears before the account is scheduled  
13 for field collection. Customers are also contacted by  
14 telephone when the initial field collection visit does  
15 not result in the resolution of the arrears or  
16 disconnection of the customer's meter.
- 17 Q. Has the volume of accounts requiring field collections  
18 increased?
- 19 A. Yes. The Company has experienced an increase in the  
20 number of accounts that require field collections  
21 activities. From 2004 to 2005, accounts requiring  
22 field collections activities increased by 2%. From  
23 2005 to 2006, accounts requiring field collections

**CUSTOMER OPERATIONS PANEL - ELECTRIC**

1 activities increased by 7%. The same 7% rate of  
2 increase was experienced from 2006 to 2007. It is  
3 expected that volumes will increase by a slightly  
4 higher rate of 9% during 2008 due to the current  
5 economic downturn.

6 Q. Has the Company seen an increase in accounts requiring  
7 field collection activities in the first quarter of  
8 2008?

9 A. Yes. As compared to the first quarter of 2007, the  
10 Company has experienced a 14.6% increase in accounts  
11 requiring field collection activities in the first  
12 quarter of 2008.

13 Q. What has the Company done to address these increased  
14 volumes of accounts that require field collections  
15 activities?

16 A. The Company recently implemented a new work management  
17 system to control field collections work. This system  
18 schedules the work based on geographic proximity.  
19 This allows the collectors to be more efficient in  
20 addressing the higher volume of work by reducing  
21 travel time. Jobs reached per route increased from  
22 24.52 in the first quarter of 2007 to 26.19 in the  
23 first quarter of 2008.

**CUSTOMER OPERATIONS PANEL - ELECTRIC**

1 Q. Was the Company able to address the increases in work  
2 volume this way?

3 A. No. An increase in the staffing level was still  
4 necessary. During 2007, 24 Customer Field  
5 Representatives ("CFRs") were hired and assigned to  
6 field collection activities. This increased staffing  
7 has resulted in an increased number of collection  
8 matters being resolved.

9 Q. Did this meet the Company's needs for field collection  
10 activities?

11 A. No. The Company determined that additional staffing  
12 of 27 CFRs over the level in the historical period is  
13 needed in the rate year.

14 Q. What will these resources cost?

15 A. The Company projects an incremental O&M cost of  
16 approximately \$1.2 million in the rate year and a  
17 capital cost in 2009 of \$52,000 for handheld meter  
18 reading devices for the additional CFRs.

19 Q. Why are costs increasing in the replevin group?

20 A. The replevin group is responsible for obtaining court  
21 orders (writs of replevin) to recover Company  
22 equipment (Company meters) on accounts where Company  
23 field collections efforts have been unable to resolve

**CUSTOMER OPERATIONS PANEL - ELECTRIC**

1 account arrears or to terminate service. As more  
2 collection activities are completed, the number of  
3 writs will increase. The Company will require an  
4 increase in its staff and related administrative costs  
5 associated with replevin activity.

6 Q. Why is prompt action by the replevin group important?

7 A. By completing the replevin action on these defaulting  
8 accounts in a prompt fashion, the potential for  
9 additional uncollectible consumption being generated  
10 is greatly reduced.

11 Q. What will these resources cost?

12 A. The Company projects an O&M cost of approximately  
13 \$437,000 in the rate year for additional personnel and  
14 administrative costs.

15 Q. Have you prepared, or had prepared under your  
16 supervision, exhibits that detail the Company's  
17 proposed costs for credit and collection activities?

18 A. Yes. We have prepared an exhibit entitled "CREDIT AND  
19 COLLECTION ACTIVITIES", Exhibit \_\_ (CO-18), an exhibit  
20 entitled "CREDIT AND COLLECTION - DOCUMENT GROWTH",  
21 Exhibit \_\_ (CO-19), and an exhibit entitled "CREDIT  
22 AND COLLECTION CFR STAFFING", Exhibit \_\_ (CO-20).

**CUSTOMER OPERATIONS PANEL - ELECTRIC**

1 MARK FOR IDENTIFICATION AS EXHIBIT \_\_ (CO-18), EXHIBIT \_\_  
2 (CO-19) and EXHIBIT \_\_ (CO-20)

3 **RETAIL ACCESS PROGRAMS**

4 Q. As a result of the Company's 2004 and 2005 gas and  
5 electric rate plans, what programs did the Company  
6 initiate?

7 A. The Company initiated PowerMove, Market Match, and  
8 Purchase of Receivables ("POR") in support of retail  
9 access.

10 Q. Is the Company proposing any changes to any of these  
11 programs?

12 A. Yes. With respect to PowerMove, while the Company  
13 will continue the existing program without  
14 modification it is also in the process of reviewing a  
15 proposed expansion of the program.

16 Q. Please describe the expansion the Company is  
17 considering.

18 A. As directed in the Commission's order in Case No. 07-  
19 E-0523, the Company will be filing a report addressing  
20 an intervener's proposal that the Company expand its  
21 PowerMove program to include customers who contact the  
22 Company for new service. The report will address  
23 whether it is feasible to provide new customer

**CUSTOMER OPERATIONS PANEL - ELECTRIC**

1        referrals to ESCOs, how HEFPA regulations will be met,  
2        and how the expansion would not present an impediment  
3        to the timely provision of service as required by law  
4        as well as how Con Edison would recover the cost for  
5        any expansion of the ESCO referral program. The  
6        Company is required to file the report by May 24,  
7        2008.

8    Q.    What are the Company's plans for Market Match?

9    A.    The Company plans to continue the Market Match program  
10        without modification. The Company's new website  
11        features this program and provides easy access to  
12        information about individual ESCOs participating in  
13        the Company's service territory. Costs to continue  
14        this program are de minimis.

15   Q.    Does the Company propose to continue its POR Program?

16   A.    Yes, the Company will be continuing its POR program  
17        without modification.

18   Q.    Does this conclude your testimony?

19   A.    Yes.

<b>Project/Program Title</b>	<b>Mandatory Hourly Pricing</b>
------------------------------	---------------------------------

**Work Description:**

The Company is expanding MHP to customers whose maximum demand is over 500 kW in any month during an annual period ending 9/30 (approx. 1,570 customers). The Company is proposing to implement this in phases. The first phase would be directed to the larger customers, over 1 MW to 1.5 MW (approx. 330 customers). The second phase would be directed to the customers over 500 kW to 1 MW (approx. 1,240 customers).

As only the first year of the multi year MHP program was approved in case 07-E-0523, funding is needed to provide for the total capital cost of the program and the meter communication costs which were in the latter years of the O&M submission. Staff has also required an expanded MHP customer education program.

**Justification:**

The Commission has approved and endorsed the importance of this program, and the program has been funded in the 2008/2009 Rate Plan. This program extends beyond the one year rate period and funding is needed to the address capital and O&M funding requirements to complete implementation of this program.

\$283,000 of the O&M request has been approved in case 07-E-0523 but must be re-submitted in the financials as it is not in the historical year.

**Capital Funding (\$000)**

Forecast 2009	Forecast 2010	Forecast 2011	Forecast 2012	Forecast Total
\$1,725	\$0	\$0	\$0	\$1,725

**O&M Funding (\$000)**

Historical Year (2007)	Forecast RYE 2010	Forecast RYE 2011	Forecast RYE 2012	Forecast RYE 2013	Forecast Total
\$0	\$316	\$834	\$1,034	\$1,034	\$3,218

**Mandatory Hourly Pricing Worksheet**

Capital		Costs							
		2009		2010		2011		2012	Total
Professional Services	Days								
Project Management	60	\$	108,000	\$	-	\$	-	\$	108,000
Business Process & Requirements	190	\$	342,000	\$	-	\$	-	\$	342,000
System Integration	60	\$	108,000	\$	-	\$	-	\$	108,000
Travel Expenses		\$	83,700	\$	-	\$	-	\$	83,700
Systems									
System Warranty		\$	115,875	\$	-	\$	-	\$	115,875
Meters	Number								
Meters	573	\$	419,006	\$	-	\$	-	\$	419,006
Labor		\$	225,619	\$	-	\$	-	\$	225,619
Communication Point Installation		\$	322,313	\$	-	\$	-	\$	322,313
Capital Total		\$	1,724,513	\$	-	\$	-	\$	1,724,513

<b>O&amp;M</b>	<b>RY0*</b>	<b>RY1</b>	<b>RY2</b>	<b>RY3</b>
Maintenance - Hardware	\$ 40,000	\$ 40,000	\$ 40,000	\$ 40,000
Maintenance - Database	\$ 63,000	\$ 63,000	\$ 63,000	\$ 63,000
Maintenance - Software	\$ 22,500	\$ 45,000	\$ 45,000	\$ 45,000
Maintenance Support Resource Cost	\$ -	\$ 124,800	\$ 124,800	\$ 124,800
Communications	\$ 90,000	\$ 286,000	\$ 486,000	\$ 486,000
Outreach and Education	\$ 100,000	\$ 100,000	\$ 100,000	\$ 100,000
Billing/Support Staff	\$ -	\$ 175,000	\$ 175,000	\$ 175,000
<b>O&amp;M Total</b>	<b>\$ 283,000</b>	<b>\$ 315,500</b>	<b>\$ 833,800</b>	<b>\$ 1,033,800</b>
Incremental	\$ 32,500	\$ 518,300	\$ 200,000	

RY0\* = April 1, 2008 to March 31, 2009



<b>Project/Program Title</b>	<b>Automated Meter Reading</b>
------------------------------	--------------------------------

**Work Description:**

The deployment of saturated Automated Meter Reading (AMR) that is expected to complete the saturation of Westchester County and installation of AMR for hard to read accounts. Deployment involves the installation of meters with low-powered radio transmitters which enables the meters to be read using walk by or drive by data collection. This program maintains AMR installation infrastructure through the first half of 2010; these resources will be used to complete the AMR deployment in Westchester.

**Justification:**

The deployment of automated meter reading will be continued to secure the benefits of off site meter reading. These benefits include labor reductions, removal of hard-to-reads and meter reading associated injuries. Savings from AMR saturation are shown in the "AMR Saturation Savings" program.

**Capital Funding (\$000)**

Forecast 2009	Forecast 2010	Forecast 2011	Forecast 2012	Forecast Total
\$22,796	\$7,003	\$3,080	\$3,080	\$35,959

**O&M Funding (\$000)**

Historical Year (2007)	Forecast RYE 2010	Forecast RYE 2011	Forecast RYE 2012	Forecast RYE 2013	Forecast Total
\$121	\$331	\$331	\$121	\$121	\$904

**AUTOMATED METER READING WORKSHEET****AMR Deployment 2009**

Capital Components	Cost
Meter Equipment	\$ 9,107,970
Mobile Data Collector	\$ 78,750
Labor	\$ 10,414,080
Administrative Cost	\$ 115,200
Saturation Program Total	\$ 19,715,999.63
Hard-to-Read Meters (New Locations)	\$ 1,300,000.00
Hard-to-Read Meters (Technology Replacement)	\$ 500,000.00
AMR - New Accounts	\$ 1,280,000.00
Strategic Program Total	\$ 3,080,000
<b>AMR Program Total (Saturation and Strategic)</b>	<b>\$ 22,796,000</b>

**AMR Deployment 2010**

Capital Components	Cost
Meter Equipment	\$ 730,000
Mobile Data Collector	-
Labor	\$ 3,143,000
Administrative Cost	\$ 50,000
Saturation Program Total	\$ 3,923,000
Hard-to-Read Meters (New Locations)	\$ 1,300,000.00
Hard-to-Read Meters (Technology Replacement)	\$ 500,000.00
AMR - New Accounts	\$ 1,280,000.00
Strategic Program Total	\$ 3,080,000
<b>AMR Program Total (Saturation and Strategic)</b>	<b>\$ 7,003,000</b>

**AMR Deployment 2011**

Capital Components	Cost
Saturation Program Total	\$ -
Hard-to-Read Meters (New Locations)	\$ 1,300,000.00
Hard-to-Read Meters (Technology Replacement)	\$ 500,000.00
AMR - New Accounts	\$ 1,280,000.00
Strategic Program Total	\$ 3,080,000
<b>AMR Program Total (Saturation and Strategic)</b>	<b>\$ 3,080,000</b>

**AMR Deployment 2012**

Capital Components	Cost
Saturation Program Total	\$ -
Hard-to-Read Meters (New Locations)	\$ 1,300,000.00
Hard-to-Read Meters (Technology Replacement)	\$ 500,000.00
AMR - New Accounts	\$ 1,280,000.00
Strategic Program Total	\$ 3,080,000
<b>AMR Program Total (Saturation and Strategic)</b>	<b>\$ 3,080,000</b>

<b>Project/Program Title</b>	<b>Automated Meter Reading Saturation Savings</b>
------------------------------	---

**Work Description:**

The saturation deployment of Automated Meter Reading (AMR) equipment will result in a reduction in the number of Customer Field Representatives (CFRs) required to read meters in the area covered by AMR.

**Justification:**

The reduction in the numbers of CFRs needed to read meters is a key benefit of the AMR program.

**Capital Funding (\$000)**

Forecast 2009	Forecast 2010	Forecast 2011	Forecast 2012	Forecast Total
\$0	\$0	\$0	\$0	\$0

**O&M Funding (\$000)**

Historical Year (2007)	Forecast RYE 2010	Forecast RYE 2011	Forecast RYE 2012	Forecast Total
(\$860)	(\$1,740)	(\$2,586)	(\$3,277)	(\$7,603)

<b>Project/Program Title</b>	<b>Cycle Meter Reading Handheld System</b>
------------------------------	--

**Work Description:**

Replacement of cycle meter reading system and handhelds. This will involve the purchase of approximately 540 handheld devices, 470 desk-based docking stations and compatible software. Annual maintenance for the handheld devices and docking stations will be included. Apart from the vendor's professional services for implementation, the Company's resources will be required to develop an interface for the new system to company systems. New internal hardware such as servers and desktop computers will also be purchased.

**Justification:**

It is critical that the cycle meter reading system be replaced since, as advised by the supplier of the current system, this system will not be supported beyond 2012.

**Capital Funding (\$000)**

Forecast 2009	Forecast 2010	Forecast 2011	Forecast 2012	Forecast Total
\$0	\$0	\$3,488	\$0	\$3,488

**O&M Funding (\$000)**

Historical Year (2007)	Forecast RYE 2010	Forecast RYE 2011	Forecast RYE 2012	Forecast RYE 2013	Forecast Total
\$0	\$0	\$0	\$0	\$263	\$263

<b>Project/Program Title</b>	<b>Cycle Data Warehouse</b>
------------------------------	-----------------------------

**Work Description:**

Development of a data warehouse that stores and aggregates meter reading related data from a number of sources. The primary function of the warehouse is the integration of data from the Company's CSS and meter reading systems that will provide a platform for the generation of comprehensive meter reading reports.

**Justification:**

The warehouse has report capability that will greatly improve the information available to Field Operations management that will assist in developing operational improvements such as the rerouting of cycle meter reading routes.

**Capital Funding (\$000)**

Forecast 2009	Forecast 2010	Forecast 2011	Forecast 2012	Forecast Total
\$100	\$100	\$100	\$100	\$400

**O&M Funding (\$000)**

Historical Year (2007)	Forecast RYE 2010	Forecast RYE 2011	Forecast RYE 2012	Forecast RYE 2013	Forecast Total
\$0	\$0	\$0	\$0	\$0	\$0

<b>Project/Program Title</b>	<b>Call Center Enhancements</b>
------------------------------	---------------------------------

**Work Description:**

This program involves replacement of the Call Center's automatic call distribution (ACD) system and the existing self service system; and implementation of business continuity initiatives. Next generation self-service technology will be implemented to replace the legacy self-service systems and enable a wide range of automated functionality that targets improved customer self-service. The business continuity program will enable redundant server architecture with recovery capabilities to increase the reliability of Call Center computing resources. In 2012 the Call Center's workstations will be replaced.

**Justification:**

The existing telephone ACD system will reach the end of its service life by 2013 and must be replaced in order to ensure continued operation of the Call Center. The replacement effort must begin at least two years before end of life to ensure that all peripheral systems are properly integrated into the replacement environment

The Company is replacing the existing self service system. Additional work is required to develop the self service options available to customers via this new system.

The Call Center business continuity plan also requires improvement to ensure the continued service to our customers via the Call Center in the event of the occurrence of various scenarios. Particular attention is being given to server hardening and redundancy to mitigate the occurrences of various system outages due to server failure.

As it is anticipated that the Call Center's workstations will have reached end of life state, they require replacement.

**Capital Funding (\$000)**

Forecast 2009	Forecast 2010	Forecast 2011	Forecast 2012	Forecast Total
\$0	\$4,444	\$5,063	\$2,475	\$11,982

**O&M Funding (\$000)**

Historical Year (2007)	Forecast RYE 2010	Forecast RYE 2011	Forecast RYE 2012	Forecast RYE 2013	Forecast Total
\$0	\$0	\$220	\$598	\$589	\$1,378

## Call Center Worksheet

Capital	Costs					Total
	2009	2010	2011	2012		
ACD Replacement						
Accounts Payable	\$ -	\$ -	\$ 450,000	\$ -	\$ 450,000	
Company Labor	\$ -	\$ -	\$ 225,000	\$ -	\$ 225,000	
Hardware/Software	\$ -	\$ -	\$ 1,575,000	\$ -	\$ 1,575,000	
Self Service VRU						
Accounts Payable	\$ -	\$ 1,350,000	\$ 1,023,750	\$ 900,000	\$ 3,273,750	
Company Labor	\$ -	\$ 247,500	\$ 160,875	\$ 123,750	\$ 532,125	
Hardware/Software	\$ -	\$ 652,500	\$ 277,875	\$ 101,250	\$ 1,031,625	
Virtual Hold						
Accounts Payable	\$ -	\$ 123,750	\$ 101,250	\$ -	\$ 225,000	
Company Labor	\$ -	\$ 30,938	\$ 25,313	\$ -	\$ 56,251	
Hardware/Software	\$ -	\$ 464,062	\$ 379,687	\$ -	\$ 843,749	
Business Continuity						
Accounts Payable	\$ -	\$ 56,250	\$ 42,188	\$ -	\$ 98,438	
Company Labor	\$ -	\$ 225,000	\$ 126,562	\$ -	\$ 351,562	
Hardware/Software	\$ -	\$ 843,750	\$ 675,000	\$ -	\$ 1,518,750	
Performance Analytics and Reporting						
Accounts Payable	\$ -	\$ 270,000	\$ -	\$ -	\$ 270,000	
Company Labor	\$ -	\$ 45,000	\$ -	\$ -	\$ 45,000	
Hardware/Software	\$ -	\$ 135,000	\$ -	\$ -	\$ 135,000	
CSR Workstations						
Hardware/Software	\$ -	\$ -	\$ -	\$ 1,350,000	\$ 1,350,000	
Capital Total	\$ -	\$ 4,443,750	\$ 5,062,500	\$ 2,475,000	\$ 11,981,250	
O&M	RY1	RY2	RY3			
ACD Replacement	\$ -	\$ -	\$ 28,000			
Self Service VRU	\$ -	\$ 80,000	\$ 310,000			
Virtual Hold	\$ -	\$ 90,000	\$ 160,000			
Performance Analytics and Analysis	\$ -	\$ 50,000	\$ 100,000			
O&M Total	\$ -	\$ 220,000	\$ 598,000			
Incremental	\$ -	\$ 220,000	\$ 378,000			

<b>Project/Program Title</b>	<b>Call Center – CSRs</b>
------------------------------	---------------------------

**Work Description:**

The increase of 18 Customer Service representatives and 1 Supervisor approved in Case 07-E-0523 requires funding.

**Justification:**

The 18 Customer Service Representatives and 1 Supervisor are needed to address under staffing in the Call Center due to attrition and the extensive training that new Customer Service Representatives must complete prior to being assigned to the Call Center.

These resources were approved in Case 07-E-0523.

**O&M Funding (\$000)**

Historical Year (2007)	Forecast RYE 2010	Forecast RYE 2011	Forecast RYE 2012	Forecast RYE 2013	Forecast Total
\$0	\$651	\$651	\$651	\$651	\$2,604



<b>Project/Program Title</b>	<b>CSS Life Extension</b>
------------------------------	---------------------------

**Work Description:**

The CSS Life Extension project incorporates changes to major processes of the billing system. These changes are to upgrade the programming language in which CSS was originally developed to a more universally used and supported language. Some of the portions of CSS that we are now planning to upgrade include the payment agreements facility and the activity file maintenance application. This project will help the Company to maintain a viable CSS.

**Justification:**

In order to continue to utilize the Company's existing CSS, the Company must upgrade the programming language in which CSS was originally developed. This project will help the Company to maintain a viable CSS and to respond to the constantly evolving customer and business needs.

**Capital Funding (\$000)**

Forecast 2009	Forecast 2010	Forecast 2011	Forecast 2012	Forecast Total
\$1,000	\$1,000	\$1,000	\$1,000	\$4,000

**O&M Funding (\$000)**

Historical Year (2007)	Forecast RYE 2010	Forecast RYE 2011	Forecast RYE 2012	Forecast RYE 2013	Forecast Total
\$0	\$0	\$0	\$0	\$0	\$0

<b>Project/Program Title</b>	<b>Off System Billing</b>
------------------------------	---------------------------

**Work Description:**

Currently, the Company utilizes a number of off-system billing processes (outside of the Customer Service System, CSS) to bill customers taking service under certain rates and programs including the following:

- Economic Development Customers: Power For Jobs (PFJ) rate program, NYCPUS, COWPUSA, World Trade Center and Substitute Energy
- Electric standby service customers
- NYPA

Managing and billing these customers involves manual processes and/or systems other than CSS. This project proposes to utilize a common automated system to support off-system billing applications currently in use. Development of this system will support these billing activities and provide full automation of these processes, eliminating the use of manual processes for billing currently in use and will automate all billing protocols.

**Justification:**

Migration of Con Edison's multiple (non-CSS) satellite billing systems to a common automated system would provide the following benefits:

- Elimination of manual processes involved in managing and billing customers taking service under these programs.
- Enables cross training for users and system support personnel.
- Enables automation of quality control mechanisms and improved database management and maintenance for the involved accounts.
- More flexible system that will assist in the development/modification of rates.

**Capital Funding (\$000)**

Forecast 2009	Forecast 2010	Forecast 2011	Forecast 2012	Forecast Total
\$1,620	\$1,380	2,000	\$2,000	\$7,000

**O&M Funding (\$000)**

Historical Year (2007)	Forecast RYE 2010	Forecast RYE 2011	Forecast RYE 2012	Forecast Total
\$0	\$0	\$0	\$0	\$0

**Off System Billing Worksheet**

	<b>2009</b>	<b>2010</b>	<b>2011</b>	<b>2012</b>
<b>Labor</b>				
System Programming	\$1,345,000	\$1,080,000	\$1,525,000	\$1,650,000
System Analysis	\$275,000	\$300,000	\$325,000	\$350,000
<b>Infrastructure</b>				
Hardware	\$0	\$0	\$150,000	\$0
<b>Total</b>	<b>\$1,620,000</b>	<b>\$1,380,000</b>	<b>\$2,000,000</b>	<b>\$2,000,000</b>

<b>Project/Program Title</b>	<b>Competitive Market Customer Service Systems</b>
------------------------------	--

**Work Description:**

Reinforcement of the systems supporting the competitive marketplace is needed to manage the Company's obligation to enroll customers with Energy Services Companies (ESCOs), move customers between ESCOs and move customers back to utility service. Work will involve improvements to the systems supporting various activities related to Retail Choice such as customer enrollment and processing of information required to be sent to energy suppliers. The primary systems involved are the Retail Access Information System (RAIS) and the Transportation Customer Information System (TCIS). Specific work items to be addressed include the following:

- Updating and standardizing program languages to improve efficiency of maintaining the systems.
- Increasing capacity and efficiency of system processes to ensure the increased volumes of ESCO transactions can be supported and are processed in a timely fashion.
- Improvement of customer information tools that will increase the information that is available to our Call Center to provide customers with comprehensive information about their account with respect to ESCO provided supply.
- Improvement of the test environment to allow for more efficient mandated Phase III certification of ESCOs EDI communication. This improvement will assist us in meeting the PSC required timeframe for testing.
- Upgrades to the websites affiliated with RAIS and TCIS that ESCOs utilize to access customer information, and for TCIS to help manage the supply of gas to customers.

Funding of this program was approved in Case 07-E-0523.

**Justification:**

Due to the large numbers of customers switching to ESCOs, the Company's RAIS and TCIS systems are reaching effective capacity. In addition, it is important to note that RAIS and TCIS were initially developed over 10 years ago, and since then additional systems and applications were developed to support the competitive marketplace. Specifically, the Company developed the Consolidated Utility Billing System (CUBS) and implemented Electronic Data Interchange (EDI). Both CUBS and EDI require interactions between RAIS and TCIS and the Company's Customer Information System, which has further stressed RAIS and TCIS. Due to these factors, improvements to RAIS and TCIS are necessary at this time.

Funding of this program was approved in Case 07-E-0523.

**Capital Funding (\$000)**

Forecast 2009	Forecast 2010	Forecast 2011	Forecast 2012	Forecast Total
\$1,375	\$1,625	\$0	\$0	\$3,000

**Competitive Market Customer Service System Worksheet**

<b>Element of Expense</b>	<b>Request 2009</b>	<b>Request 2010</b>	<b>Request 2011</b>	<b>Request 2008 - 2011</b>
Update and Standardize Programming Languages	\$ 500,000	\$ 440,000	\$ -	\$ 1,340,000
Increase Capacity and Improve Efficiency of System Processes	\$ 475,000	\$ 560,000	\$ -	\$ 1,485,000
Customer Information Enhancements	\$ 200,000	\$ 600,000	\$ -	\$ 850,000
Improving the EDI Test Environment	\$ 100,000	\$ 25,000	\$ -	\$ 175,000
Upgrades to TCIS and RAIS websites for ESCOs	\$ 100,000		\$ -	\$ 150,000
<b>Total</b>	<b>\$ 1,375,000</b>	<b>\$ 1,625,000</b>	<b>\$ -</b>	<b>\$ 4,000,000</b>

<b>Project/Program Title</b>	<b>Bill Redesign</b>
------------------------------	----------------------

**Work Description:**

Maintenance contracts for key pieces of equipment have been secured and funding for bill archive and retrieval functions is needed. Transition is also being made to use of recycled paper for the bill and envelope.

**Justification:**

The additional costs cover new maintenance contracts and the archival and retrieval of each customer's bill. Also some incremental costs have occurred due to the use of bill paper and envelopes made from recycled paper.

\$1.1 million of this funding was approved in Case 07-E-0523.

**Capital Funding (\$000)**

Forecast 2009	Forecast 2010	Forecast 2011	Forecast 2012	Forecast Total
\$0	\$0	\$0	\$0	\$0

**O&M Funding (\$000)**

Historical Year (2007)	Forecast RYE 2010	Forecast RYE 2011	Forecast RYE 2012	Forecast RYE 2013	Forecast Total
\$1,483	\$3,337	\$3,337	\$3,337	\$3,337	\$13,348

## Bill Redesign Worksheet

Item		Historical Year	Rate Year 1	Incremental Amount
Envelopes		\$800,806	\$ 1,492,816	\$692,010
Paper		\$681,921	\$ 1,076,803	\$394,882
System/software maintenance		\$0	\$307,975	\$307,975
Customer Bill Archival and Retrieval Costs		\$0	\$459,000	\$459,000
<b>Total O&amp;M Expenditures</b>		<b>\$1,482,727</b>	<b>3,336,594</b>	<b>\$1,853,867</b>

Project/Program Title	Credit and Collection Activities
-----------------------	----------------------------------

**Work Description:**

27 Customer Field Representatives (CFRs) are required to accelerate collection activities. Additional handheld meter reading devices will be needed for the additional staff. 2 additional replevin related administration staff will be required and processing costs will also be incurred as a consequence of the increased collection activities.

**Justification:**

The number of accounts requiring collections actions continues to increase. Funding is needed to address these increases and expedite the fielding of such accounts.

**Capital Funding (\$000)**

Forecast 2009	Forecast 2010	Forecast 2011	Forecast 2012	Forecast Total
\$52	\$0	\$0	\$0	\$52

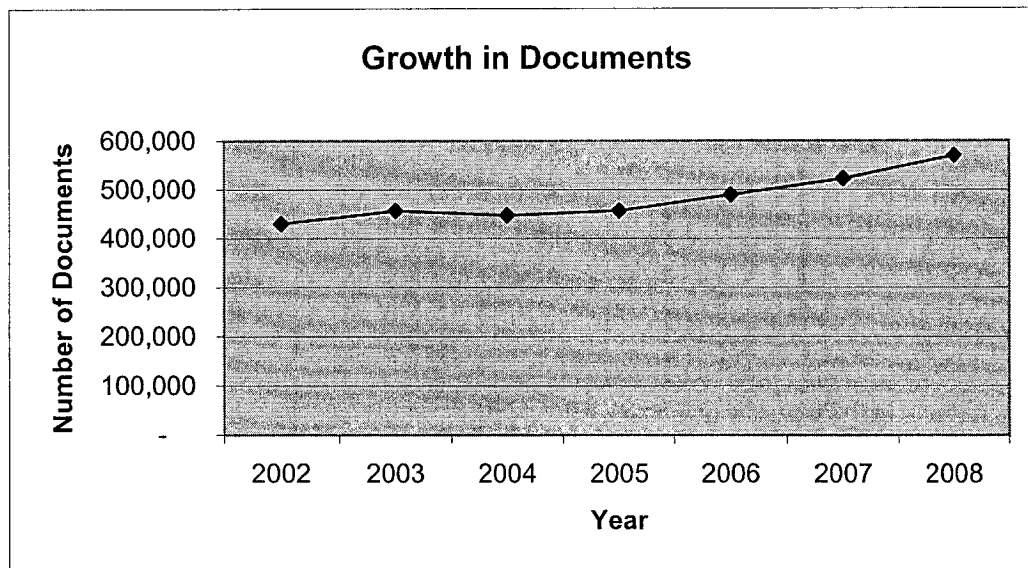
**O&M Funding (\$000)**

Historical Year (2007)	Forecast RYE 2010	Forecast RYE 2011	Forecast RYE 2012	Forecast RYE 2013	Forecast Total
\$293	\$2,041	\$2,041	\$2,041	\$2,041	\$8,164



## Credit and Collection - Document Growth

Growth of Documents		
	Documents	% (+ -)
2002	429,945	
2003	457,059	6%
2004	447,636	-2%
2005	456,661	2%
2006	489,469	7%
2007	523,042	7%
2008	570,116	9%



### Credit and Collections Staffing Requirement

Forecasted documents for Rate Year 1 (April 2009 to March 2010)	<b>572,166</b>
Field calls required to complete expected Rate Year 1 documents	<b>683,658</b>
Average documents reached per route	<b>29.5</b>
Required routes to complete the expected number of documents	<b>23,177</b>
CFRs required for the expected number of routes	<b>203</b>
Current Staffing Levels	<b>176</b>
Required Additional Staffing	<u><b>27</b></u>

**Notes:**

The forecasted documents for rate year 1 are based on the amount of documents experienced from January 2007 to March 2008 (being 656,152) reduced to a 12 month average and with a 9% growth factor added.

The number of field calls required to complete a document is 1.195 based on that experienced from January 2008 to March 2008.

The average number of documents reached per route is 29.5 and is based on that experienced from January 2007 to March 2008.

The required staffing levels are based on 252 work days per year, an average of 1.84 staff per route and a 20% staff outage rate.