



Control Number: 35639



Item Number: 121

Addendum StartPage: 0

**PUC DOCKET NO. 35639**

**APPLICATION OF CENTERPOINT  
ENERGY HOUSTON ELECTRIC, LLC  
FOR APPROVAL OF  
DEPLOYMENT PLAN AND  
REQUEST FOR SURCHARGE FOR AN  
ADVANCED METERING SYSTEM**

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**BEFORE THE  
PUBLIC UTILITY COMMISSION  
OF TEXAS**

2008 JUL 21 PM 12:45  
FILED

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**July 21, 2008**

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Request No: ARM01-01

**CENTERPOINT ENERGY HOUSTON ELECTRIC, LLC  
DOCKET NO. 35639**

**ALLIANCE FOR RETAIL MARKETS**

**QUESTION:**

Please refer to Page 4, line 21 through Page 5, line 9 of the direct testimony of Mr. Thomas Standish:

- (a) Please explain how CNP calculated or determined a maximum AMS deployment of approximately 9,200 meters per month. Please provide any underlying analysis, studies, or other documentation in support of this monthly maximum deployment.
- (b) Please explain whether the maximum of 9,200 advanced meters can be increased to a higher number of advanced meters deployed per month and, if so, what would be necessary to increase this stated maximum.
- (c) Please provide a schedule (by month) indicating the estimated number of advanced meters that will be deployed in each month of the 27-month period, assuming the maximum monthly deployment of 9,200 advanced meters is achieved.
- (d) Please provide a schedule (by month) indicating the estimated costs that will be expended in each month of the 27-month period, assuming the maximum monthly deployment of 9,200 advanced meters is achieved. Please provide the estimated total costs that will be expended over the 27-month period under this scenario.
- (e) If the "monthly REP demand for meter installations falls short of the monthly maximum" and AMS deployment extends beyond 27 months, will the estimated total costs expended to deploy the lesser of 250,000 meters or the number of meters that can be supported by 6,000 cell relays be less than, equal to, or greater than the estimated total costs reflected in response to ARM RFI 1-1(d)? Please provide the reasons underlying any difference between the estimated total costs expended under this scenario and the estimated total costs provided in response to ARM RFI 1-1(d). If providing this explanation, please identify by cost category those costs that will contribute to any such difference between the two.
- (f) With respect to each of the cost categories identified in response to ARM RFI 1-1(e), please provide an estimated monthly cost per cost category that CNP would expend to continue deployment in any month beyond the 27-month period.
- (g) Please provide the number of advanced meters (or alternatively, a range of numbers) that can be supported by 6,000 cell relays along with supporting back office systems.

**ANSWER:**

- (a) CEHE projects a 36 month deployment of which the first nine months are used implementing back offices and communications infrastructure so that meters are fully operational at the time of installation.  $250,000 \text{ meters} / 27 \text{ months} (36 - 9) = 9,259$ , which was rounded to 9,200.
- (b) The 9,200 limit on meter installation is a financial limitation on CEHE's ability to finance additional meter deployment and not a physical limitation on the number of meters that could be installed. If for example, there was no demand for meter installation for the first 3 months, then the installation rate

could become 10,400 meters per month.

- (c) Depending on the number of requests by REPs, CEHE expects to deploy 9,200 meters per month, beginning in October 2009.
- (d) CEHE has not developed a monthly cost schedule. However, a reasonable approximation can be made by taking the annual expenditures provided in response to GCCC01-20 and dividing the dollar amounts by 12. Detailed annual information is also available in the confidential material provided in Schedule VIII of the filing package.
- (e) If the demand for deploying meters falls short of the expected 9,200 meter per month, but the same number of advanced meters are deployed, just over a longer time period, the costs can be expected to increase because of escalation factors. CEHE has not calculated the incremental costs of deploying the 250,000 beyond the current 27 month deployment period outlined in the Company's initial deployment plan.
- (f) If there is a significant shortfall in meter and cell relay deployment requests, then CEHE will revisit the need to continue the project. If the number of meters is substantial, but not yet at the maximum defined in the deployment plan, we would continue to install meters. The number would be dependent upon the demand, no estimate can be given at this time.
- (g) A single cell relay can support anywhere from 1 to 500 meters depending on meter density, the number of buildings and their construction and other obstacles. Therefore, 6,000 cell relays could support anywhere from 6,000 to 3,000,000 meters. CEHE believes 6,000 cell relays will not cover the entire service area.

Sponsor: Don Cortez

Responsive Documents:  
None

Request No: ARM01-02

**CENTERPOINT ENERGY HOUSTON ELECTRIC, LLC  
DOCKET NO. 35639**

**ALLIANCE FOR RETAIL MARKETS**

**QUESTION:**

Please provide any written presentation Mr. Thomas Standish provided to the House Committee on Regulated Industries regarding this docket at the public hearing conducted on June 23, 2008. Please provide any analysis, studies, or other documentation relied upon by Mr. Standish in his oral comments at this public hearing and in any written presentation provided at this public hearing.

**ANSWER:**

Mr. Standish did not use a written presentation for this event. Our public affairs group did provide information to the House Committee on Regulated Industries consisting of a one page summary of benefits expected once the AMS initial deployment is fully integrated into the Houston area electricity market. The one page summary is attached.

Sponsor: Paul Gastineau

Responsive Documents:  
Advanced Metering Flyer

## Advanced Metering for Texas

[www.CenterPointEnergy.com/AMS](http://www.CenterPointEnergy.com/AMS)

JUNE 2008

*Based on pilot programs*

*from across the country,*

*customers with an advanced*

*meter can reduce their power*

*consumption by about*

*25 percent during peak periods.*

*As consumers begin to change*

*their electricity usage patterns,*

*either by using less or shifting*

*from the high-cost periods to*

*lower-cost, off-peak periods,*

*market clearing prices are*

*expected to drop – estimated at*

*\$80 million in savings per year.*

**Save**

## Benefits and Savings for Texas Consumers

### Benefits to Consumers with an Advanced Meter

- Monitor and manage energy consumption with in-home devices and/or web portal
- Conserve energy and save money with timely information on electricity use
- Save additional dollars with new rate plans to be offered by REPs, such as dynamic pricing and time-of-use rates
- Easier transactions, such as connecting customers, managing moves and switching REPs
- Faster power restoration, with new meters that can pinpoint outage locations

### Benefits and Savings for All Consumers

- Based on pilot programs from across the country, customers with an advanced meter can reduce their power consumption by about 25 percent during peak periods.
- Reduced peak period demand translates to lower electricity costs for all consumers.

#### Example:

- A consumer with a typical 2,000 square-foot house, a 4-ton air conditioning unit and maximum power consumption of about 4 kilowatts per month could save 1 kilowatt during summer peak conditions.
- 250,000 advanced meters will be installed as part of CenterPoint Energy's initial deployment plan. If each of the 250,000 end-use customers with an advanced meter saved 1 kilowatt during summer peak conditions, this equates to a 250 megawatt reduction in demand.

- According to ERCOT, 1 megawatt of electricity powers 500-700 average homes under normal conditions in Texas, or about 200 during hot weather when air conditioners are running for longer periods. Reducing demand by 250 megawatts is the equivalent of avoiding generation for 125,000 to 175,000 homes during normal conditions in Texas, or 50,000 homes in the summer.
- Furthermore, society benefits from building two to four fewer peaking power plants, avoiding both the construction costs and the environmental concerns associated with those plants.
- When combined with other price responsive behavior over the rest of the year, annual market savings can yield approximate annual power savings of between \$90 million and \$120 million, depending on the actual amount of energy conservation achieved. Out of this market savings, an estimated \$80 million results from reduction in capacity needs and lower market clearing prices.

#### Savings:

- For all end-use residential customers, those with and without a meter, the \$80 million yields a savings of \$3.35 per 1,000 kWh of consumption, which means the savings are more than the proposed infrastructure cost of \$1.75 per 1,000 kWh of consumption.
- For those with an AMS meter, the savings are even greater, amounting to \$3.35 per 1,000 kWh as mentioned above, plus additional savings of between \$3 per 1,000 kWh and \$12 per 1,000 kWh from AMS customer energy management and the overall level of energy conservation.

Request No: ARM01-03

**CENTERPOINT ENERGY HOUSTON ELECTRIC, LLC  
DOCKET NO. 35639**

**ALLIANCE FOR RETAIL MARKETS**

**QUESTION:**

Please refer to Page 16, lines 3-7 of the direct testimony of CNP witness Thomas Standish:

- (a) Please define the term "load research" and how such research will be conducted as part of the initial deployment.
- (b) Please explain the purpose(s) of this load research.
- (c) If one purported purpose of this load research is to evaluate "lost revenues" attributable to AMS deployment, please specify any statutory provision, Commission rule, Commission precedent, and/or judicial opinion that would support a CNP request to recover such "lost revenues" in a future proceeding.

**ANSWER:**

- (a) In the context of CEHE's AMS filing load research refers to the study of consumer's use of home area network devices and their impact on energy consumption (i.e. access potential savings). CEHE proposes to engage a consultant to collaborate with REPs and PUC staff through workshops to develop, conduct and openly publish the results and findings of the load research study. The research will be conducted with 1,000 meters serving two sample groups; one the study group and one the control group. The groups will be selected across a varying socioeconomic consumer base and be given varying degrees of training on how to use and benefit from devices. Research results will be openly published. Also, please see the response to ARM01-04.
- (b) The primary purpose of the load research proposed by CEHE in its AMS filing is to determine the amount of load savings that the consumer will achieve through near real-time knowledge of energy consumption and power prices. Deployment of Advanced Meters by CenterPoint Houston Electric (CEHE) will require hundreds of millions of dollars of capital costs, regardless of the ultimate deployment scenario. Even after deployment of the full system, annual savings to CEHE are not expected to be modest. Nevertheless, company savings will not justify the capital and O&M costs necessary to deploy this program. Therefore, there must be some additional market economic or societal benefits to justify this expense. Preliminary estimates show that, for a modeled year such as 2007, a deployment of as few as 250,000 meters can result in approximately a one KVA reduction by each participant across typical summer peak periods thereby saving the market almost \$100 million/year in energy and capacity prices. Furthermore, more recent estimates, as referenced in the response to PUC08-08, show that over \$100 million annual savings could be achieved in less than a week if the market experiences power price spikes similar to the ones in May 2008 when customers with Advanced Meters might have modified their consumption by as much as 4 KVA. These additional, non-CEHE savings, occur through a combination of reduced and/or shifting energy usage. CEHE's proposal is to perform load research and then determine the extent to which KVA consumption can be modified by consumers with Advanced Meters during on peak periods and to quantify those potential benefits for these both individuals as well as for the market as a whole. If KVA

consumption is not modified in a manner consistent with CEHE's initial estimates then it may be better for the market to not incur the incremental expense of a full deployment.

- (c) While the load research studies may allow CEHE to quantify lost revenues resulting from the reduction in energy usage, CEHE has not included any provision for the recovery of lost revenues in its AMS filing even though PURA Sec 39.107 (h) contemplates full cost recovery and "lost revenues" is a real economic cost to the Company. From a ratemaking perspective, rates are designed to ensure that a utility recovers its costs and earns a fair return on its investment. To the extent that revenues decline as a result of the implementation of AMS, in a future ratemaking proceeding, all else being equal, rates would be increased to the extent of any reduction in revenues. To the extent revenues decline as a result of decreased usage, billing determinants in future rate cases would be lower, resulting in higher rates.

Sponsor: Don Cortez

Responsive Documents:  
None



Request No: ARM01-04

**CENTERPOINT ENERGY HOUSTON ELECTRIC, LLC  
DOCKET NO. 35639**

**ALLIANCE FOR RETAIL MARKETS**

**QUESTION:**

Please refer to page 45, lines 3-17 of the direct testimony of Mr. Don Cortez:

- (a) Please explain the purpose(s) of this load research project and list all of the planned uses for the data collected by CNP in this project.
- (b) Please explain how CNP will select the 1,000 retail customers (assuming one advanced meter per customer) who will be a part of this project. Will these customers be residential customers, small commercial customers, or a mix of both? Will the identity of the customer's REP be a factor in this selection process? Will the customer's REP be informed of the customer's participation in the project? Is the customer's REP precluded from providing the customer with Smart Energy services for the duration of the project?
- (c) Please state the duration of this load research project and specify the quality controls governing how the project will be conducted during this period, including any protocols, rules, or other documentation detailing CNP's interactions and communications with the selected customers during the project period.
- (d) How will CNP select the two groups (500 advanced meters per group) "to be demographically similar"?
- (e) Please define what is meant by the term "market's maturity."
- (f) How will this "market maturity" be measured? Will one or more objective standards be used for this measurement purpose? If so, please specify the objective standard(s).
- (g) Will CNP use the results of this load research project in deciding whether to go forward with deployment beyond the initial deployment of the lesser of 250,000 meters or the number of meters that can be supported by 6,000 cell relays? If so, please explain how those results will factor into such a decision.

**ANSWER:**

- (a) Please see the response to ARM01-03 part (a).
- (b) Please see the response to ARM01-03 part (a). The load research study will focus mainly on residential accounts, but may include some small commercial accounts. CEHE intends to work with both REPs and the Commission Staff in designing and implementing the load research efforts primarily through open workshops. Although REPs will be aware of which customers are participating in the study, the identity of the REP will not be a factor in the customer selection process. Rather, that will be based on geographic and/or socioeconomic factors. CEHE fully hopes its load research project will be a collaborative effort, which means that CEHE will be looking for customers for its non-control group whose REP does offer certain smart energy services in order to correctly attribute consumer savings.

- (c) Duration of project & governance will be deferred to the workshop where duration, protocols and details will be designed in a collaborative workshop with PUC staff and REPs wishing to participate.
- (d) The details for selecting consumer groups has not been determined. CEHE expects to work out those details through the planned workshops in conjunction with both REP and PUC staff input.
- (e) Market maturity includes customer demand for offerings utilizing advanced metering, development and quality of in-house HANs, ERCOT state of system development for 15-minute settlement and the services publicly offered by REP based on AMS.
- (f) Market meter measures are subjective. The only standard that is subject to an objective measurement will be whether or not ERCOT has implemented 15 minute interval settlement.
- (g) Yes, please refer to Tom Standish's testimony page 18 lines 7-9 ( Bates page 66). The results of the load research project should provide information on basic AMS benefits which should contribute to a decision to continue to full deployment. Failure to realize significant basic benefits would likely preclude full deployment.

Sponsor: Don Cortez

Responsive Documents:

None

Request No: ARM01-05

**CENTERPOINT ENERGY HOUSTON ELECTRIC, LLC  
DOCKET NO. 35639**

**ALLIANCE FOR RETAIL MARKETS**

**QUESTION:**

Please refer to Page 46, Figure DC-7 in the direct testimony of Mr. Don Cortez:

- (a) Please specify the role of the consultant in the load research project.
- (b) How will CEHE select determine a consultant for load research?
- (c) What marketing research will be performed by CNP and/or its consultant? How will this marketing research be used?
- (d) Please provide a copy of the Satisfaction Survey. If such a document does not yet exist, please describe in detail the expected contents of the survey. Who will be surveyed? How the results of the satisfaction survey be used?

**ANSWER:**

- (a) The consultant's role will be to conduct the load research workshop, develop a detailed plan, execute the load research study and document and communicate the results and findings of the study.
- (b) CEHE will develop a scope of work, issue an RFP and ultimately select a consultant from the responders.
- (c) Neither CEHE nor its consultant will conduct any marketing research other than basic determination of socioeconomic consumer groupings. The socioeconomic research will help ensure similar customer groupings for both the test and control groups from a wide cross section of consumers.
- (d) The Satisfaction Survey will be a part of the load research project designed to get feedback from the load research participants once the study is concluded. At this point in time, the specific details of the Satisfaction Survey have not been determined.

Sponsor: Don Cortez

Responsive Documents:  
None

Request No: ARM01-06

**CENTERPOINT ENERGY HOUSTON ELECTRIC, LLC  
DOCKET NO. 35639**

**ALLIANCE FOR RETAIL MARKETS**

**QUESTION:**

Please refer to Page 5, line 19 through Page 6, line 20 of the direct testimony of Mr. Don Cortez:

- (a) For each of the seven components of AMS, please provide a breakdown of the total capital costs that will be expended in the proposed initial deployment of AMS by individual capital cost category.
- (b) For each of the seven components of AMS, please provide a breakdown of the total O&M expenses that will be expended in the proposed initial deployment of AMS by individual O&M expense category.

**ANSWER:**

- (a) The total AMS project costs include more than the seven items identified on pages 5 and 6 of Mr. Cortez's testimony (Bates pages 92 and 93). Please see the cost breakdown shown in Figure DC-13 on Bates page 167 for a complete listing of all cost components in the AMS project. The detailed cost information requested has already been provided in the confidential material provided in Schedule VIII of the filing package.
- (b) Please see the response to part (a) above.

Sponsor: Don Cortez

Responsive Documents:  
None

Request No: ARM01-07

**CENTERPOINT ENERGY HOUSTON ELECTRIC, LLC  
DOCKET NO. 35639**

**ALLIANCE FOR RETAIL MARKETS**

**QUESTION:**

Please refer to Page 13, lines 12-15 of the direct testimony of Mr. Don Cortez:

- (a) How will CNP determine "if the volume of data being collected and transmitted reaches a high enough concentration in a specific area" in its decision of whether to use communications technologies capable of supporting a higher data density (e.g., a combination of Ethernet, BPL, and microwave or fiber optics)? When will this determination be made by CNP and will REPs be informed of any determination by CNP to use those other technologies in a specific area?
- (b) What threshold constitutes a "high enough concentration" of data? Is there an objective standard for measuring this threshold of data density and, if so, what is the objective standard?
- (c) Did CNP consider whether to deploy communications technologies capable of supporting a higher data density (e.g., a combination of Ethernet, BPL, and microwave or fiber optics) in certain areas in its service territory in lieu of an initial installation of General Packet Radio Service (GPRS) technology in those areas? If not, please explain why. If it considered that option and rejected it, please explain why.

**ANSWER:**

- (a) CEHE will monitor communications infrastructure as a routine part of AMS operations. Increased latency found through on-going system performance monitoring will provide the first indication a section of communications infrastructure is reaching sufficient data traffic concentration to justify increasing the bandwidth capacity for that section. REPs may or may not be informed of a change in communications technology.
- (b) There is no objective standard for determining what constitutes a high enough concentration of data traffic. Using industry standard system monitoring tools, CEHE will monitor trends relative to throughput, latency, and response time to data requests and, based on this data, will develop data growth/transmission performance projections from which decisions will be made to modify system capacity.
- (c) Yes, at one time CEHE did consider using other communications technologies such as BPL. However, given the fact that under CEHE's limited deployment plan of only 250,000 meters REPs (and not CEHE) would determine where meters were deployed, which could potentially be spread across a broad service area (no guarantee they would be in a highly concentrated area), CEHE decided to base the communications system in its initial deployment plan on GPRS. CEHE will however, deploy BPL and fiber communications infrastructure if the data density requirements justify the need to do so.

Sponsor: Don Cortez

Responsive Documents:  
None

Request No: ARM01-08

**CENTERPOINT ENERGY HOUSTON ELECTRIC, LLC  
DOCKET NO. 35639**

**ALLIANCE FOR RETAIL MARKETS**

**QUESTION:**

Please refer to Page 14, lines 7-9 of the direct testimony of Mr. Don Cortez:

- (a) In order for the one advanced meter to communicate to the cell relay through the wireless link, what is the maximum distance that can separate the one advanced meter and the cell relay for purposes of creating the communication path?
- (b) What is the maximum distance that can separate the one advanced meter (i.e., the one communicating with the cell relay) from adjacent advanced meters for purposes of creating the communication path?
- (c) What is the maximum distance that can separate an adjacent advanced meter and another adjacent advanced meter for purposes of creating the communication path?
- (d) Please state the time period in which one advanced meter communicates to another advanced meter in the communication path. Is this time period affected by the distance between meters?
- (e) Assuming a contiguous geographic deployment of advanced meters in an area (e.g., from house to house in a neighborhood, not skipping any house) and the maximum distance(s) specified in response to ARM 1-7 (a), (b), and/or (c) are not exceeded, what is the maximum number of advanced meters that can communicate in a communications path with a single cell relay?
- (f) To the extent a maximum distance is provided in response to ARM 1-7 (a), (b), and/or (c), please explain how a REP-driven deployment of advanced meters (in which the distance between advanced meters will be a function of the REPS' selection of which ESI ID locations obtain an advanced meter) can achieve the maximum number of advanced meters communicating with a single cell relay, as specified in response to ARM 1-7(e)? Will additional cell relays need to be installed if a REP or REPS' selection(s) of those ESI ID locations results in a greater distance than the maximum distance(s) specified in response to ARM 1-7 (a), (b), and/or (c)?

**ANSWER:**

- (a) Meters and cell relays have the same LAN radio. Factors that impact the distance between meter devices that are considered when deploying a wireless network include height of the cell relay, geographic meter density, terrain, buildings, local construction materials, and data transport expectations. Based on Itron's experience with deploying over 50 million wireless RF metering devices, the design software requires, on average, a relationship of 0.16 meters per acre to ensure good communications in a typical utility setting.
- (b) See part (a) above.
- (c) See part (a) above.
- (d) An RF packet generally takes 150 milliseconds from the time it is received from one meter and retransmitted to another meter. The distance between meters has a negligible impact on the time period.
- (e) A single cell relay is capable of supporting as many as 1,000 meters with little impact to normal utility

operational functions. However, optimal meters per cell relay ratios must also reflect the data transport burden expected of the system. The actual meters per cell relay ratio will vary depending on individual utility, REP and customer uses, HAN use and the deployment considerations described in ARM01-01 part (a).

- (f) Achieving a maximum number of meters communicating with a single cell relay is not the objective. The objective is to obtain the maximum number of meters where a customer will use this meter and infrastructure to reduce/shift their energy usage to benefit the market. If the goal was to achieve maximum number of meters communicating with a single cell relay, we would only deploy to apartments. With that said, cell relay deployment design in CEHE's initial deployment plan supports approximately 0.16 meters per acre or less depending on geographic meter density, terrain, buildings, local construction materials, and data transport expectations. CEHE will deploy cell relays based on a pre-designed plan as meter installations are forecasted by REPs. CEHE has asked for requests for at least 5 meters within a cell relay's range before installing the cell relay and meters. Yes, additional cell relays, as compared to a typical system design, may be required to support REP demand driven meter installations.

Sponsor: Don Cortez

Responsive Documents:  
None



Request No: ARM01-09

**CENTERPOINT ENERGY HOUSTON ELECTRIC, LLC  
DOCKET NO. 35639**

**ALLIANCE FOR RETAIL MARKETS**

**QUESTION:**

Please refer to Page 15, lines 4-21 of the direct testimony of Mr. Don Cortez:

- (a) Has CNP computed a cap on the level of costs that it will spend on BPL and fiber optic/microwave installations in high density areas in the initial deployment? If so, please identify this amount.
- (b) Are costs associated with BPL and fiber optic/microwave installations proposed to be recovered in the infrastructure surcharge proposed by CNP in this docket? If so, please identify this amount.
- (c) If an amount is specified in response to ARM 1-9(b), does that mean that CNP will deploy BPL and fiber optic/microwave installations in one or more high density areas during the time period in which initial deployment occurs?

**ANSWER:**

- (a) No.
- (b) There are no future BPL and fiber installations planned other than currently utilized in the pilot project. To the extent that BPL and fiber is deployed, we would request recovery of and return on any additional costs either in a future rate case or a reconciliation proceeding.
- (c) CEHE would consider BPL and fiber, if data delivery requirements justify the need to do so.

Sponsor: Don Cortez

Responsive Documents:  
None

Request No: ARM01-10

**CENTERPOINT ENERGY HOUSTON ELECTRIC, LLC  
DOCKET NO. 35639**

**ALLIANCE FOR RETAIL MARKETS**

**QUESTION:**

Please refer to Page 15, lines 20-21 of the direct testimony of Mr. Don Cortez. Please provide a list of the substations in the CNP service area where CNP would use fiber and a list of the substations where CNP would use microwave technology. If such lists do not exist, please explain the methodology for determining when one technology versus the other would be used, including why location would be a factor in such a decision.

**ANSWER:**

A listing of substations where CEHE would use fiber and / or Microwave does not exist. This is due to the fact that in a REP demand driven deployment it is not known where areas of high density might develop during meter deployment. Should an area require higher speed or bandwidth due the higher data traffic, a number of economic and technical factors will play into the decision to whether fiber or microwave is utilized at a substation. Some of the factors that are taken into account include: distance and line of sight to an existing CEHE microwave link; the proximity to an existing fiber ring; and the extent to which boring, trenching, or placement of conduits is required for fiber installation.

Sponsor: Don Cortez

Responsive Documents:  
None

Request No: ARM01-11

**CENTERPOINT ENERGY HOUSTON ELECTRIC, LLC  
DOCKET NO. 35639**

**ALLIANCE FOR RETAIL MARKETS**

**QUESTION:**

Please refer to Page 16, lines 6-9 of the direct testimony of Mr. Don Cortez:

- (a) When does an area become one with "higher data concentration"? If this threshold is reached for a specific area, will the decision to install Ethernet cabling be discretionary or will it be installed as a general rule?
- (b) If an area becomes an area with a "higher data concentration," will installing Ethernet cabling require CNP or its subcontractors to revisit individual meters that have already been installed in order to install the cabling? If so, what is the cost to install Ethernet cabling on a second visit and how does it compare to installing the cabling as an initial matter as the meters are deployed?

**ANSWER:**

- (a) Please see the response to ARM01-07 parts (a) through (c).
- (b) No. Cell relays in the planned deployment are capable of both GPRS and Ethernet to BPL connection, so no additional meter system investment at the cell relay other than BPL repeaters would be required.

Sponsor: Don Cortez

Responsive Documents:  
None

Request No: ARM01-12

**CENTERPOINT ENERGY HOUSTON ELECTRIC, LLC  
DOCKET NO. 35639**

**ALLIANCE FOR RETAIL MARKETS**

**QUESTION:**

Please refer to page 17, lines 1-9 of the direct testimony of Mr. Don Cortez. Does the installation of Ethernet cabling affect the "self-healing" nature of the communication system in AMS? If so, please explain how.

**ANSWER:**

No.

Sponsor: Don Cortez

Responsive Documents:  
None

Request No: ARM01-13

**CENTERPOINT ENERGY HOUSTON ELECTRIC, LLC  
DOCKET NO. 35639**

**ALLIANCE FOR RETAIL MARKETS**

**QUESTION:**

Please refer to Page 50, lines 6-8 of the direct testimony of Mr. Don Cortez. Please explain why "there is little point, however, to installing the meters until these other AMS components in place" when CNP seeks approval of an Advanced Meter Information Network ("AMIN") tariff in Docket No. 35620 under which similar components (e.g., data collection engine (DCE) and meter data management system (MDM)) will not be in place prior to the installation of advanced meters.

**ANSWER:**

Unless funded under AMIN, the other AMS components will not exist in a robust form. Please refer to Section 4 b. of the AMIN Agreement. AMIN meters will be installed where there is communications infrastructure. If there is no communications infrastructure supporting the requested meter location, the participating REP must also request installation of communications infrastructure. CEHE is operating early versions of the data collection engine (DCE) and meter data management system (MDM). Prior to AMS deployment, these systems will undergo limited development supporting a pre-AMS deployment bridge environment. During this period, only basic AMS features may be utilized by a REP participating in the CCET project (basic HAN support, raw 15-minute interval data, and remote service connect/disconnect). A REP participating in AMIN may fund development of unique capabilities (AMIN Agreement Section 8) or accelerate development of back office infrastructure reliability, scalability or functionality (AMIN Agreement Sections 5, 6 and 7), such as validation, edit and estimation (VEE) processes required for providing settlement quality 15-minute interval data.

Sponsor: Don Cortez

Responsive Documents:  
None

# CERTIFICATE OF SERVICE

I hereby certify that a true and correct copy of the foregoing document was served on all parties of record in this proceeding by facsimile, hand delivery, e-mail, or United States first class mail on this 21st day of July, 2008.

Paxley Livingston