# CenterPoint Energy Unfility Benefits

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enable a "step change" in a utilities ability to improve grid planning, operations, and The 'Intelligent Grid' using BPL provides data and information on demand that can reduced capital, operations, and maintenance costs, improved security, and more maintenance, contributing to fewer and shorter outages, better customer service, effective use of the workforce.

Intelligent meter Field crews with Wide area situs Investment bas Deteriorating as Accurate histor and utilization Smart meters, a	Intelligent Grid & BPL	Intelligent meters, sensors and devices enable better detection, diagnosis and restoration of outages Field crews with the right skills are dispatched to the right place, at the right time with the right parts Wide area situational awareness provides improved event response, diagnosis and management	Investment based on sensor-based, accurate historical data analyzed with advanced tools Deteriorating assets operated below design capacities to extend life and optimize replacement	Accurate historical data enables grid to be built and configured to eliminate over or under design and utilization Smart meters, along with time-of use tariffs and end user portals moderate the growth in demand
		Outages .	Aging Assets	Growing Peak Demand

## CenterPoint Energy

## Intelligent Grid "Enabled" Functions CenterPoint Energy

Advanced Grid Analytics – Using grid information to intelligently manage grid assets, upgrade planning, and operations

# Automated Meter Management

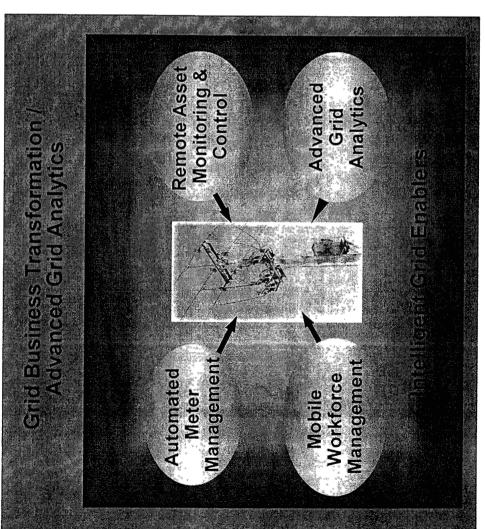
(AMM) Enabling customer participation and grid observability through intelligent device and communication installation

# Remote Asset Monitoring (RAM)

Providing telemetry integration, condition monitoring and advanced metering technologies to drive fact based asset management

# Workforce Management (WFM) -

Implementing programs and systems to manage and utilize the workforce effectively – System and/or Device to crew communication



# Consumer and Texas Electric Market Benefits

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Real time grid information and control promotes an efficient and reliable Texas Grid.

Consumers have detailed consumption information to make informed choices.

Allows REP's to offer new and flexible service plans for additional consumer benefits.

Enables and promotes energy conservation.

### A Disciplined Approach reduces risk and improves efficiency.... CenterPoint Energy



How did CenterPoint Energy approach the evaluation?.....

CenterPoint Energy has taken a disciplined approach in it's evaluation of Distribution Automation opportunities using BPL and has essentially followed the timeline below.



- Analyzed BPL
- Communications platform
- Cost Drivers Technical
  - viability
- Utility / retail applicability
- More Detailed Analysis
- Partnered with BM
- Tech Center - Pilot
- Regulatory
  Tested Utility / Retail ı

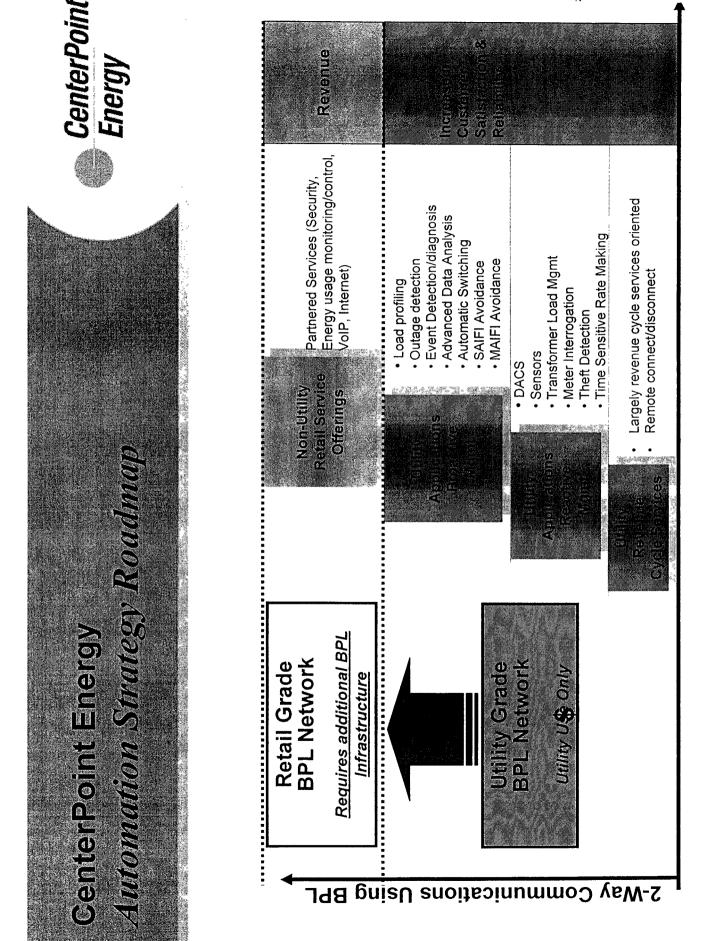
Opportunities

# 2005 activities resulted in:

- An Automation Roadmap
- An Intelligent Grid Architecture

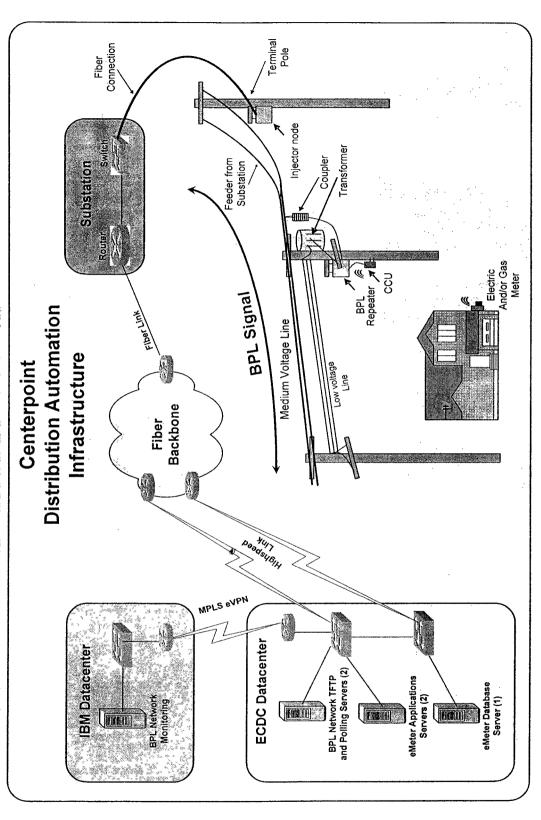
### And a....

 Distribution Automation Implementation Plan



### CenterPoint Energy Intelligent grid Architecture

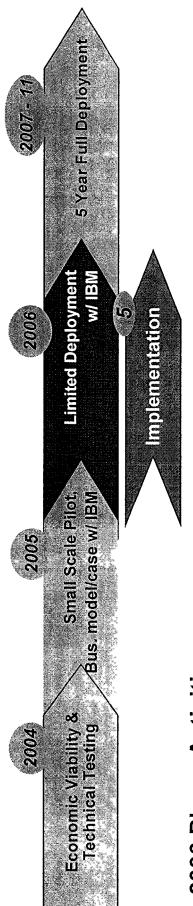
CenterPoint Energy



# CenterPoint Energy Implementation Plan.

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# We are on target with our 2006 plan...



### 2006 Phase Activities

- Engaged IBM to Implement the following:
- Automated meter reading for gas (23k homes) and electric (45k homes)
  - Electric meter turn on / turn off for subset of above
- A level of "Intelligent Grid" (Distribution Automation) capability
  - Utilize BPL as backhaul
- Validate cost and performance assumptions
- IBM provides technology expertise and end to end system integration
  - REP Input (Pending)

### **CenterPoint** Energy

# Om Selnadulle and Key Cost Metrics On Target 1.0.2006. Wilestone Status

CentierPoint Energy 2006 Plan

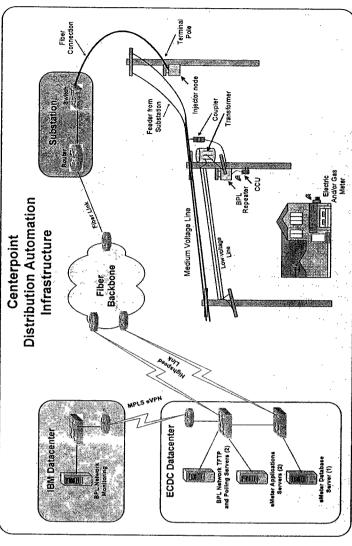
### Completed 1Q Milestone:

The Intelligent Grid deployment is on milestone has been achieved as schedule and the first critical indicated below.

- The meter management systems necessary to collect the meter data have been implemented.
  - disconnect collars in the field and the meter management system has been established, installation of meters and service connect / End to end connectivity between the initial
- the Broadband over Power line (BPL) network The meters are sending data over the first of backhaul circuits planned for 2006.
- being tested (circuit breaker, voltage regulator, communications via BPL to those devices is Utility electric grid automation / monitoring equipment has also been installed and switches to open / close circuits)
  - A Network Operations Center (NOC) has been established at an IBM facility to monitor and support the Intelligent Grid network and systems

### Significance of Milestone:

- meters and collars in the field to the meter application systems at ECDC Have established end to end connectivity between
- Ability to provide web access to meter consumption



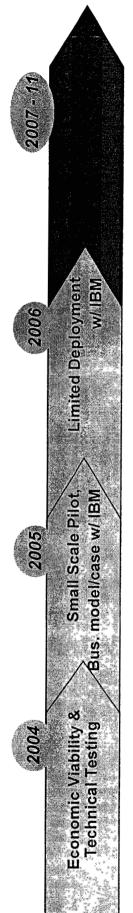
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### Transforming the Business CenterPoint Energy 2007 - 2011

CenterPoint

Energy

Full deployment of the Distribution Automation Strategy or "Intelligent Grid" using BPL is planned to begin in 2007.



# 2007 – 2011 Phase Activities

- The strategy or "Intelligent Grid" implementation would include:
- Automated meter reading (2m electric and 1m gas meters)
- Meter Connect / Disconnect
- Distribution grid sensors, switches, and substation breakers working together to improve reliability and optimize assets.

### CenterPoint. Energy

Business Ecosystem

CenterPoint Energy

Utility Automation Sensing and Controls Intelligent Grid Automated Meter Management

Retail Apps **Customer Self-Service Utility Apps** 

Refall Opportunities Energy Conservation Real Time Pricing Smart Home ISPs

Automated Weter Reading Work Force Mainagement Street Light Managemen Othere Wassegarnen Grid Diagnostics.

Stomer Benefit Information on Demand

Increased Reliability

Informed Choices

### CENTERPOINT ENERGY HOUSTON ELECTRIC, LLC PUC DOCKET NO. 32093 SOAH DOCKET NO. 473-06-2043

### OFFICE OF PUBLIC UTILITY COUNSEL

### **QUESTION:**

Please provide Center Point's best estimate of future rate charges which Center Point intends to request for installation and operation of advanced meters in the residential and small commercial classes. Provide any supporting documentation, memoranda, or email.

### ANSWER:

CenterPoint TDU has not made the requested estimates.

Sponsor: James N. Purdue

Responsive Documents:

### CENTERPOINT ENERGY HOUSTON ELECTRIC, LLC PUC DOCKET NO. 32093 SOAH DOCKET NO. 473-06-2043

### OFFICE OF PUBLIC UTILITY COUNSEL

### QUESTION:

Please provide any internal assessments, work plans, memoranda, or emails generated by Center Point employees during the development of the rate filing which pertain to the class cost of service study.

### ANSWER:

The information responsive to this request as indexed below is voluminous and will be made available in the Houston and Austin offices. A CD containing the electronic files referenced in the documents is also voluminous and will be made available in the Houston and Austin offices. To make arrangements for viewing these documents and/or the CD, please contact Lisa Harris in Houston at (713) 207-5217 or Dolores Prince in Austin at (512) 397-3060.

	Pages	
Responsive documents - email printouts	1 - 138	

Two emails were redacted to protect the customer identity and usage.

Sponsor: James N. Purdue

Responsive Documents:

See list of documents above.

### CENTERPOINT ENERGY HOUSTON ELECTRIC, LLC PUC DOCKET NO. 32093 SOAH DOCKET NO. 473-06-2043

### OFFICE OF PUBLIC UTILITY COUNSEL

### QUESTION:

Please provide any internal assessments, work plans, memoranda, or emails generated by CenterPoint employees during the development of the rate filing which pertain to the energy efficiency program budgets.

### ANSWER:

All internal assessments, work plans, memoranda, or emails generated by CenterPoint employees during the development of the rate filing which pertain to the energy efficiency program budgets are included in the workpapers to the direct testimony of Alan Ahrens, Bates pages 4465-4537.

Sponsor: Alan Ahrens

Responsive Documents:

### CENTERPOINT ENERGY HOUSTON ELECTRIC, LLC PUC DOCKET NO. 32093 SOAH DOCKET NO. 473-06-2043

### OFFICE OF PUBLIC UTILITY COUNSEL

### **QUESTION:**

Please provide any CNP distribution planning manuals or guidelines which show that distribution facilities are planned on the basis of <u>system</u> peaks.

### ANSWER:

The attached document, CenterPoint Energy Distribution System Design Criteria, provides the guidelines for planning distribution facilities. As the criteria state, distribution facilities are planned on the basis of peak load on the distribution circuit and on the distribution substation transformer under normal and contingency conditions. Distribution circuit peak loading and substation transformer peak loading may coincide with system peak, but in some cases, it does not.

Sponsor: Don Cortez

Responsive Documents:

CenterPoint Energy Distribution System Design Criteria

### **DISTRIBUTION SYSTEM DESIGN CRITERIA**

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### **DISTRIBUTION SYSTEM DESIGN CRITERIA**

Docket No. 32093 OPC10-05 Attachment Page 2 of 7

### **CHAPTER 1. GENERAL PROVISIONS**

### 1.01. Objectives of the Design Criteria

- (a) The Distribution System Design Criteria provide the guidelines followed by CenterPoint Energy to provide a cost-effective and reliable plan for accommodating the changes in distribution system load.
- (b) The Design Criteria will be applied in distribution capacity planning studies to identify problem areas, plan new facilities, and recommend distribution system improvements or retirements.

### 1.02. Review and Revisions to the Design Criteria

- (a) CenterPoint Energy personnel will review the Design Criteria periodically and recommend revisions as necessary.
- (b) Revisions to the Design Criteria require the approval of the Manager of Distribution Engineering.

### 1.03. System Conditions

- (a) Distribution capacity studies assume summer peak conditions to determine substation peak loadings.
  - (b) Winter peak and seasonal minimum conditions are considered when necessary.

### DISTRIBUTION SYSTEM DESIGN CRITERIA

Docket No. 32093 OPC10-05 Attachment Page 3 of 7

### CHAPTER 2. EXCEPTIONS TO THE DESIGN CRITERIA

### 2.01. Design Criteria as Guidelines

The Design Criteria are intended to be guidelines only. Exceptions to the Design Criteria may be approved in appropriate circumstances.

### 2.02. Minor Violations

Some Design Criteria violations are minor, and eliminating the violation may not provide a costeffective solution.

### 2.03. Temporary Conditions

Occasionally, operation in violation of the Design Criteria is necessary because of events, such as long-term forced outages of equipment, unforeseen load changes, and delays in project completion that are beyond CenterPoint Energy's control. If a Design Criteria violation will exist for a short period of time only, *i.e.*, one to two years, it may be possible to delay construction with operational solutions.

### 2.04. Facilities Built In Accordance With Earlier Design Standards

When facilities built in accordance with earlier design standards do not meet the Design Criteria, the facilities will be evaluated for an upgrade to current standards when either:

- (a) operational problems arise; or
- (b) major expenditures are required due to rehabilitation or expansion of a facility.

### DISTRIBUTION SYSTEM DESIGN CRITERIA

Docket No. 32093 OPC10-05 Attachment Page 4 of 7

### CHAPTER 3. DESIGN STANDARDS FOR DISTRIBUTION CIRCUITS

### 3.01. Definitions

- (a) A Distribution facility means any CenterPoint Energy equipment used to distribute electric energy to the public at a nominal line-to-line voltage of 34.5 (35) kV or below, excluding distribution substation facilities.
- (b) A Distribution substation facility means a facility used to connect distribution facilities to a transmission (345KV, 138KV, or 69KV) source. This includes switching devices and transformers.
- (c) An Emergency rating means the maximum current flow at nominal voltage as determined below.
  - (1) The emergency rating of overhead conductors is the ampacity listed under 90°C of the latest version of the "Table of Overhead Bare Conductor and Bus Tube Ampacity Ratings," which is attached as Exhibit A.
  - (2) The emergency rating of underground conductors is the normal rating of underground conductors.
- (d) A Normal condition means the steady state condition of the distribution system with all facilities in service and all loads being served.
  - (e) A Normal rating means the maximum current flow at nominal voltage as determined below.
  - (1) The normal rating of overhead conductors is the ampacity listed under 75°C of the latest version of the "Table of Overhead Bare Conductor and Bus Tube Ampacity Ratings," which is attached as Exhibit A.
  - (2) The normal rating of underground conductors is the maximum allowable ampacity at nominal voltage for continuous operation.
  - (f) A Section means a portion of a distribution circuit that is bounded by switching devices.
- (g) A Single contingency condition means the steady-state condition of the distribution system following the outage of any single distribution circuit or substation transformer. Single contingency conditions are preceded by normal conditions.
  - (h) A Switching device means switches or breakers.

### DISTRIBUTION SYSTEM DESIGN CRITERIA

Docket No. 32093 OPC10-05 Attachment Page 5 of 7

### 3.02. **Maximum Loading on Distribution Facilities**

- (a) Under normal conditions, no distribution facility shall be loaded to greater than its normal rating; and,
- (b) Under single contingency conditions, and following service restoration switching, no distribution facility shall be loaded to greater than its emergency rating.

### **Maximum Voltage Drop on Distribution Circuits** 3.03.

- (a) The voltage on the circuit shall be maintained to at least 120 volts, on a 120 volt base, under normal conditions; and,
- (b) The voltage on the circuit shall be maintained to at least 117.6 volts, on a 120 volt base, under single contingency conditions, and following service restoration switching.

### 3.04. Service Restoration Switching

- (a) Switching to restore service to non-faulted circuits or sections, following the outage of a circuit or transformer, should require no more than two hours.
- (b) Service restoration switching of non-faulted circuit sections shall be accomplished using no more than four pairs of pole-top switches.

### Power Factor on Overhead Distribution Circuits 3.05.

- (a) The power factor on an overhead distribution circuit shall not be leading; and,
- (b) The combined power factor of all overhead distribution circuits connected to the same substation transformer bus shall not be below 98% lagging.

### Service to Large Distribution Customers

Customers with loads in excess of 4,000 kVA (185 A) at 12 kV or 6,000 kVA (100 A) at 35 kV shall be requested to split their loads into approximately equal parts between two feeds.

### 3.07. Installation of New Pole-Top Switches

A new pole-top switch shall be considered when four or more pair of pole-top switches must be opened to isolate a section under single contingency conditions.

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### **DISTRIBUTION SYSTEM DESIGN CRITERIA**

Docket No. 32093 OPC10-05 Attachment Page 6 of 7

### CHAPTER 4. DESIGN STANDARDS FOR DISTRIBUTION SUBSTATIONS

### 4.01. Definitions

- (a) A Distribution facility means any CenterPoint Energy equipment used to distribute electric energy to the public at a nominal line-to-line voltage of 34.5 (35) kV or below, excluding substation facilities.
- (b) A Distribution substation facility means a facility used to connect distribution facilities to a transmission (345KV, 138KV, or 69KV) source. This includes switching devices and transformers.
- (c) A Normal condition means the steady state condition of the substation with all substation facilities in service and all loads being served.
  - (d) A Protective equipment means breakers, relays, sectionalizing switches, or wave traps.
- (e) A Transformer rating means the maximum load that a transformer can serve continuously for a period of time without loss of operational life as determined below.
  - (1) A Continuous rating means the maximum load that a transformer can serve continuously without loss of operational life.
  - (2) A Firm rating means either the two-hour or five-day rating of a distribution substation transformer depending upon whether a substation facility has adequate overhead distribution ties with adjacent substation facilities. When the distribution load served by a distribution substation transformer can be reduced to below the five-day rating of the substation transformer within two hours by manually switching excess load to either other substation transformers within the same substation facility or adjacent substation facilities, the transformer firm rating equals the two-hour rating. Otherwise, the transformer firm rating equals the five-day rating.
  - (3) A Five-day rating means the maximum load that a transformer can serve continuously for five days without loss of operational life.
  - (4) A Two-hour rating means the maximum load that a transformer can serve continuously for two hours without loss of operational life.
- (f) A Transmission facility means any facility used to distribute electrical energy to a substation facility at a nominal line-to-line voltage of 69 kV or greater, excluding substation facilities.

### 4.02. Transmission System Connection Criteria

### **DISTRIBUTION SYSTEM DESIGN CRITERIA**

Docket No. 32093 OPC10-05 Attachment Page 7 of 7

- (a) After the outage of any single transmission facility that serves a distribution substation facility, service shall be restored to all distribution facilities that are served by the substation facility following either:
  - (1) normal automatic operation of protective equipment; or
  - (2) manual switching that does not exceed two hours.
- (b) Distribution substation connections to transmission sources shall preclude a single transmission line outage, followed by normal automatic sectionalizing and switching, from outaging both the primary substation transformer and its alternate.

### 4.03. Maximum Loading on Substation Transformers

- (a) Under normal conditions, no substation transformer shall be loaded to greater than its continuous rating.
- (b) After the outage of a substation transformer, no substation transformer shall be loaded to greater than its firm rating. Service shall be restored to all outaged distribution facilities following either normal automatic operation of protective equipment or manual switching that does not exceed two hours.

### CENTERPOINT ENERGY HOUSTON ELECTRIC, LLC PUC DOCKET NO. 32093 SOAH DOCKET NO. 473-06-2043

### OFFICE OF PUBLIC UTILITY COUNSEL

### QUESTION:

Please provide examples of the demand data (including sources for the data) for various types of residential subdivisions, businesses, and mixed used areas which are used to plan the sizing of distribution facilities.

### ANSWER:

The attached document, New Loads West 2006, provides specific examples of new loads (subdivisions, schools, businesses, office buildings, etc.) on the CenterPoint TDU distribution system. This information is provided by Service Consultants located at the Service Centers and is provided to distribution planning personnel who perform studies to ensure that the distribution facilities are adequate to serve the load. Also attached is the document, Bridgeland Project, which is an example of future demand data for a very large scale project that will develop over a number of years. This information is provided by the developer, General Growth Properties. This information is used to do long term planning. As different sections of the project develop, individual new load requests will be sent to the planners for real time planning purposes.

Sponsor: Don Cortez

Responsive Documents:

New Loads West 2006 Bridgeland Project

REQUEST	NEW COAD REQUEST	ADDRESS	MEMO/	RECEIVED	RCVD	CONTACT	3/5		KVA	CIRCUIT
NUMBER	×		INQUIRY	DATE	ALL INFO	PERSON		EXIST	NEW	
			DATE		DATE				1	
W06001	GRAND MISSION ESTATES SECTION 1	BELLAIRE BLVD. @ MISSION MEADOW LN.	01/10/06	01/10/06	01/10/06	PEARSON			1,900	OB-43
W06002	HOUSTON I.S.D.	6302 SKYLINE DR.	01/12/06	01/12/06	01/12/06	GAIDO	BEL		905	UL-02
W06003	BALZERS	9454 KIRBY @ HOLMES	01/12/06	01/12/06	01/12/06	BRAXTON	S S		692	KN-04
W06004	SUMMIT PLAZA	TIMMONS ST & HWY 59	01/12/06	01/12/06	01/12/06	GAIDO	BEL		412	BI-47
W06005	THE METHODIST HOSPITAL RESEARCH INSTITUTE	BERTNER @ JOHN FREEMAN	01/13/06	01/13/06		MEADOR	၅		4,100	S
W06006	MONIER LIFETITLE	30595 FM 529	01/16/06	01/16/06	01/16/06	SHORT	ΚŢ	500	820	FM03
W06007	GULF STATES TUBULAR	FM 529 @ FM362	01/17/05	01/17/05	02/07/06	KATSUS	ξŢ		3,000	FM-03
VV06008	SOUTH FORK SECTION 5	KIRBY DR. @ SOUTHFORK PKWY.	01/17/06	01/17/06	01/17/06	MORENO	НОС		1,320	SO-41
60090W	LAND TEJAS DEVELOPMENT	STERLING LAKES @ IOWA COLONY	01/17/06	01/17/06		YOUNG	НОС		750	AR-41
W06010	BELLA TERRA SEC. 1	GRAND PARKWAY @ BELLAIRE BLVD.	01/17/05	01/30/06		STIMACH	ΚŢ		840	FL-43
W06011	BELLA TERRA SEC. 2	GRAND PARKWAY @ BELLAIRE BLVD.	01/17/05	01/30/06		STIMACH	ΚŢ		980	FL-43
W06012	BELLA TERRA SEC. 3	GRAND PARKWAY @ BELLAIRE BLVD.	01/17/05	01/30/06		STIMACH	ΚŢ		5	FL-43
W06013	BELLA TERRA SEC. 5	GRAND PARKWAY @ BELLAIRE BLVD.	01/17/05	01/30/06		STIMACH	ΚΤΥ		240	FL-43
1000014	BELLA TERRA SEC. 6	GRAND PARKWAY @ BELLAIRE BLVD.	01/17/05	01/30/06		STIMACH	ΚŢ		340	FL-43
VA/06015	BELLA TERRA SEC. 7	GRAND PARKWAY @ BELLAIRE BLVD.	01/17/05	01/30/06		STIMACH	ΚΤΥ		280	FL-43
100018	BELLA TERRAS NEC. 8	GRAND PARKWAY @ BELLAIRE BLVD.	01/17/05	01/30/06		STIMACH	КТY		350	FL-43
10,06017	OPTION 1 REALTY	1925 AND 1935 HIGHWAY 6 SOUTH	01/19/06	01/19/06	01/19/06	FLORESLOVO	SUG		525	WI-42
W06018	WATERS AKE 25B	CAMP SIENNA TRL. @ GREY HAWK WAY	01/23/06	01/23/06	01/23/06	TARVER	НОС		578	AR-44
VA/06019	HOLISTON MEMORIAL CONDOMINIUMS	440 STUDEMONT	01/19/06	01/19/06		GONZALEZ	DGN		2,900	HP-02
100000	MENT AND RICHARD SUBDIVISION	PITT RD	01/23/06	01/24/06	01/24/06	HUMBLE	KAT≺		475	KT-41
W06021	BRIDGEWATER MEADOW 2	WATERPORT LN & IMPERIAL LNDG	01/26/06	01/26/06	01/26/06	STIMACH	KATY		1,580	FZ47/FZ49 NEW
W06022	FRESHPAK	16240 PORT NORTHWEST	01/24/06	01/27/06	01/27/06	GAIDO	SPB		4,508	SA-41
VV06023	OFFICE BLDG & PARKING GARAGE	3201 LOUISIANA	01/27/05	01/31/06	01/31/06	STEPHENSON	BEL		1,200	MID
W06024	CYPRESS FAIRBANKS ISD	FRY RD. @ RUSTIC LAKE LN.	01/31/06	01/31/06	01/31/06	GAIDO	CYP		1,383	GE-42
W06025	LAKEMONT SEC.3	MASON RD @ FM1093	02/02/06	02/02/06	02/02/06	CERNY	FTB		800	FL-44
W06026	BRAZOS TOWN CENTER - TARGET TRACT	TOWN CENTER BLVD @ COMMERICAL DR.	02/01/06	02/08/06	02/08/06	GAIDO	FTB		1,400	CRB-45
W06027	BELTWAY PLAZA CENTER PHASE III	BELTWAY 8 @ SPICE LANE	02/06/06	02/06/06	02/06/06	ESTES	sug		2,540	RO41
W06028	CAMDEN PLAZA	TIMMONS ST @ NORFOLK	02/08/06	02/08/06	02/08/06	PENA	BEL		1,440	81-47
W06029	CARRIAGE INN COTTAGES	KATY-FLEWELLEN RD	02/10/06	02/13/06	02/13/06	KATSUS	KATY		009	KT-44
VV06030	FIRETHORNE SEC 6	S. FIRETHORNE WEST OF FM 1463	02/10/06	02/13/06	02/13/06	KATSUS	KATY		924	KT-45
W06031	GRAND MISSION SEC. 12, 13, 14	GRAND MISSION @ BRETON FALLS	02/13/06	02/13/06	02/13/06	PEARSON	FTB		4,186	OB-43
W06032	SYSCO	1390 ENCLAVE PKWY	02/10/06	02/10/06	02/10/06	BEZECNY	sug		2,400	WI41
W06033	FOUR SEASONS BUSINESS PARK	11050 W. LITTLE YORK	02/07/06	02/13/06	02/13/06	WINKELMANN	SPB		1,550	SA-43
W06034	CONCRETE REINFORCEMENTS INC	12350 AMELIA	02/13/06	02/13/06	02/13/06	RAINES	HQC		2,500	AM-07
W06035	NEW DOWNTOWN FIRE STATION	ST. JOSEPH PKWY @ MILAM	02/14/06	02/14/06	02/14/06	GONZALEZ	၅		200	DT32/34
W06036	NEWLAND COMMUNITIES - TELFAIR DEVELOPMENT	University Blvd in Telfair Subdivision	02/08/06	02/13/06	02/13/06	HEBERT	SUG		6,500	CRB-44
W06037	BROADSTONE APARTMENTS	W 18th St @ W Loop N	02/13/06	02/13/06	02/15/06	SHILLING	MPK		2,352	EU-07
W06038	THREE SUGAR CREEK CENTER	CENTURY SQUARE BLVD & PARKLANE BLVD	02/16/06	02/16/06	02/16/06	GAIDO	sne		1,747	DL-46
W06039	MAIN ST. PARKING GARAGE-METHODIST HOSPITAL	6701 MAIN ST.	02/16/06	02/16/06	02/16/06	GONZALEZ	ng		400	GN15/18
W06040	RHONE AT THE VINEYARDS PHASE 1 OF 3	NEC OF REED ROAD AND ALMEDA RD	02/16/06	02/16/06	02/06/06	RAINES	HOC		400	AM-06
W06041	OAKS OF ROSENBERG SECTION 4	BRYAN RD. @ SPACEK RD.	02/17/06	02/17/06	02/17/06	ANDERSON	FTB		009	CRB-45
W06042	CANYON LAKES WEST SEC. 3	8500 FRY RD.	02/20/06	02/20/06	02/20/06	LEVERTON	CYP		550	GE-42
W06043	OLD ORCHARD SECTION 1,2,3	13020 FM 1464	02/21/06	02/21/06	02/21/06	TARVER	FTB		2,500	CRB-41
W06044	ALEXAN 288 APTS	7425 ARDMORE @ CORDER	02/17/06	02/21/06	02/21/06	BRAXTON	얼		2,471	PZ-41
W06045	RIVERSIDE RANCH SEC 2	3410 FM 723	02/20/06	02/21/06	02/21/06	PEARSON	FTB		735	BV41
W06046	TRAILS OF RIVER FOREST	2620 FOREST VIEW DR	02/20/06	02/21/06	02/21/06	PEARSON	FTB		768	BV41

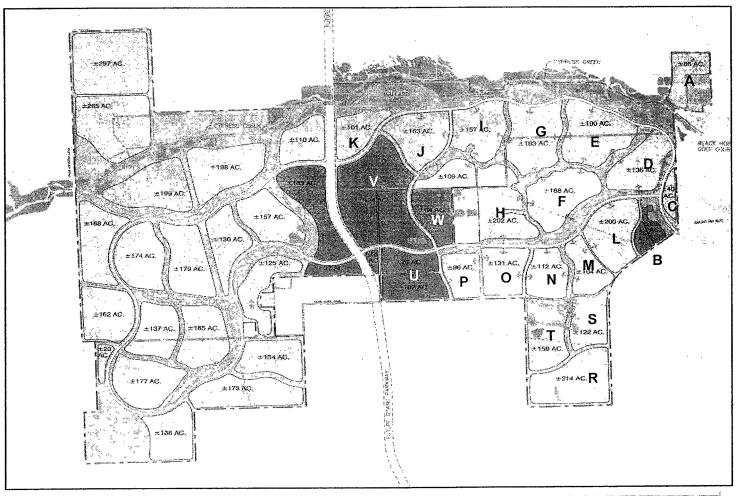
CHOMIN			SEE SEE	אביבועבט	RCVD	CONTACT	S/C	S/C KVA KVA	KVA	CIRCUIT
TOWOY!	The second secon		INQUIRY	DATE	ALL INFO	PERSON		EXIST	NEW	
**			DATE		DATE					
N06047	SOUTH POST OAK MULTI SERVICE CENTER	3700 WEST FUQUA	02/10/06	02/22/06	02/22/06	RAINES	9 9		719	IR-02
A06048	COVENANT CREST SEC. 1 & 2	FONDREN RD. @ COVENANT CREST	02/15/06	02/22/06	02/22/06	MORENO	HOC		1,000	MC-03
W06049	HIGHLAND CREEK RANCH 6	FM 529 @ FRY ROAD.	02/23/06	02/23/06	02/23/06	STIMACH	ΚΑΤ		888	GE-42
N06050	OPTION 1 REALTY	406 W. GRAND PKWY,	02/28/06	03/01/06	03/01/06	HUMBLE	ΚΑΤ		2,500	KT42
A06051	CLARKE SPRINGS SECTION 3	FM 2234 RD. @ SINONE DR.	03/03/06	03/03/06	03/03/06	SPEARS	190 190		300	SO-41
VV06052	THE VILLAS AT RIVERPARK WEST APARTMENTS	21811 WILDWOOD PARK BLVD.	90/60/60	03/03/06	90/60/60	ANDERSON	FTB		2,200	CRB-45
W06053	BRAZOS RANCH APARTMENTS	7404 TOWN CENTER BLVD.	90/60/60	03/03/06	03/03/06	ANDERSON	FTB		2,800	CRB-45
W06054	GALLERIA II SWITCH ROOM (BL0202) LORD \$ TAYLOR)	5061 WESTHEIMER	03/01/06	90/60/60	90/60/60	GAUTHIER	ng		2,209	SF10/SF09
W06055	OASIS ASSISTED LIVING FACILITY	11919 WEST AIRPORT	90/90/20	03/06/06	90/90/20	GAIDO	വര		975	RO43
W06056	MEDICAL PROFESSIONAL BUILDING	7501 FANNIN	90/00/00	90/90/00	90/80/20	RAINES	эон		1,120	PZ-44
W06057	NEWLAND COMMUNITIES - TELFAIR SEC 3,4,6 & 7	University Blvd in Telfair Subdivision	90/80/20	90/80/00	90/80/20	HEBERT	SUG		4,000	CRB-44
W06058	MORTON CREEK RANCH SECS 1 & 2	MORTON RD @ @ PORTER RD	90/90/20	90/90/60	90/80/00	STIMACH	KATY		2,385	FZ41
W06059	BRENWOOD TRAILS 1	TOBACCO RD @ GREENHOUSE RD	90/80/60	03/08/06	03/13/06	STIMACH	KATY		4,000	GE-44
W06060	FAWNLAKE SECTION 3A AND 3B	FAWNLAKE DR WEST OF AVE. D	90/60/20	90/60/20	90/60/20	HUMBLE	KATY		950	KT41
W06061	BLOCK 128 TOWER	AUSTIN @ MCKINNEY	90/60/80	03/14/06	03/14/06	HENDERSON	οn		6,065	PK44/PK50
W06062	HERITAGE SOCIETY	1204 BAGBY ST	90/60/20	03/13/06	03/14/06	R. POPE	BELLAIR		1,500	HP-01
W05063	PARKWAY MANOR PHASE 1 & 2	BELTWAY 8 EAST FONDREN RD	03/10/06	03/13/06	03/13/06	SOLLINS	нос		1,500	BL-03
W06064	WYNHAVEN @ FORT BEND APT	HILLCROFT AND SOUTH BELTWAY 8	03/10/06	03/13/06	03/13/06	DAVIS	нос		2,365	BL-09
W06065	LAPAGLIA ELECTRIC, INC.	1316 STAFFORSHIRE	03/10/06	03/13/06	03/13/06	LUNA	ЭОН	300	009	MC-01
W06066	FORT BEND ISD, ELEMENTARY SCHOOL #39	LEXINGTON BLVD @ 5TH ST.	03/10/06	03/13/06	03/13/06	LUNA	НОС		1,578	DL-43
W06067	ALIEF ELEMENTARY #24	WESTPARK @ ADDICKS CLODINE	03/15/06	03/15/06	03/15/06	GAIDO	ഉറട		1,000	BAR-46
W06068	GRAND MISSIONS SECTION 15	GRAND MISSIONS BLVD. @ BRETON FALLS LN.	03/16/06	03/16/06	03/16/06	SMITH	FTB		875	OB-43
W06069	AMERICAN FIRST NATIONAL BANK	9999 BELLAIRE BLVD	03/13/06	03/21/06	03/21/06	GAIDO	SUG		1,993	WZ48
W06070	HANOVER TOWN HOMES, SEC. 1	WEST RD. @ JACKRABBIT RD.	03/22/06	03/22/06	03/22/06	GRAY	CYP		1,500	SA-42
W06071	CLEE COOK	65 SOUTHBELT INDUSTRIAL DR. #1	03/23/06	03/23/06	03/23/06	MORENO	НОС		456	IR-04
W06072	MiSWACO	5950 NORTH COURSE DRIVE	03/24/06	03/24/06	03/24/06	GAIDO	SUG		1,500	WZ43
W06073	SHADOW CREEK RANCH 42, 43, 44 & REC CTR #3	FM 518 @ WINDWARD BAY DR.	03/28/06	03/28/06	03/28/06	MORENO	НОС		2,500	SO-46
W06074	GRUNDFOS/PACO	902 KOOMEY RD	03/24/06	03/27/06	03/27/06	GAIDO	KATY	1230	2,591	KT-43
W06075	ELDRIDGE PARKWAY MULTI-FAM. COMMUNITY	ELDRIDGE PARKWAY @ BRIAR FOREST DR.	03/27/06	03/28/06	03/28/06	FLORESLOVO	SUG		2,000	WI-41
W06076	CANAL PLACE APARTMENTS	2110 CANAL STREET	04/03/06	04/05/06	04/05/06	ERRY WILLIAM	MAG		2,464	GS22
W06077	BRUNSWICK LAKES SECTION 6	3900 SCHURMIER @ CULLEN	04/03/06	04/03/06	04/03/06	BRAXTON	9 1		1,700	SO-42
W06078	DAVID GREEN EXXON STATION	MASON RD @ GRAND PKWY.	04/03/06	04/03/06	04/03/06	SMITH	FTB		300	OB-41
W06079	SHADOW CREEK TOWN CENTER	HWY. 288 @ BROADWAY	04/04/06	04/04/06	04/04/06	MORENO	НОС		741	SO-41
W06080	TEMPORARY SERVICE FOR SYSCO	1390 ENCLAVE PKWY #C	04/05/06	04/05/06	04/06/06	FLORESLOVO	SUG		1,100	WI-41
W06081	BRADFORD PARK SECTION 3	HARLEM RD @ STONE MISSION LN.	04/05/06	04/05/06	04/05/06	SMITH	FTB		1,600	OB-43
W06082	SECOND BAPTIST CHURCH	19449 KATY FRWY	04/06/06	04/06/06	04/06/06	GAIDO	KATY		2,250	FZ48
W06083	SUNRISE ASSISTED LIVING	S. MASON RD@ CINCO RANCH	04/06/06	04/06/06	04/06/06	GAIDO	KATY		497	MAR43
W06084	FIBERSPARE	12239 FM 529	04/06/06	04/06/06	04/06/06	GAIDO	SPB	994	920	SA-48
W06085	PARK TEN PHASE II	PARK TEN BLVD. @ PARK TEN PLACE	04/06/06	04/06/06	04/06/06	GAIDO	SPB		1,162	WD-43
W06086	BALLY'S PARKING GARAGE	KATY FWY, @ MEMORIAL WAY DR.	04/06/06	04/06/06	04/06/06	GAIDO	BdS		1,159	EC-12
W06087	NAVASOTA ENERGY TRANSFER STATION	3500 BLOCK HWY 60S	04/05/06	04/05/06	04/05/06	CERNY	FTB		2,000	WR-09
W06088	6356 CLARA	NE CORNER OF CLARA AND OKANELLA	04/07/06	04/07/06	04/07/06	WINKELMANN	SPB		700	SA-43
W06089	7711 1/2 RAVEN ROCK LANE	7711 1/2 RAVEN ROCK LANE	04/07/06	04/07/06	04/07/06	TOMCZYSZYN	СУР		750	GE-42
W06090	ALEXAN SOUTH APARTMENTS	8333 BRAESMAIN	04/07/06	04/07/06	04/07/06	M. JONES	BEL	.,,	300&1257	GN-11
W06091	HEB GROCERY	GRANDPARKWAY @ FRY RD	04/06/06	04/06/06	04/06/06	GAIDO	ΚTΥ		1,249	FL-43
W06092	RETAIL CENTER	1531 AND 1535 ELDRIDGE PARKWAY	04/05/06	04/11/06	04/11/06	FLORESLOVO	SUG		200	WI-41

REQUEST	NEW LOAD REQUEST	ADDRESS	MEMO/	RECEIVED	RCVD.	CONTACT	S/C	KVA	KVA	CIRCUIT
NUMBER		The second of th	NAUIRY .	DATE	ALLINFO	PERSON		EXIST	NEW	
		The second of th	DATE	Same and the	DATE					a constant of the constant of
W06093	SOUTH COURSE NURSING CENTER	ELMSWORTH DR. & SOUTH COURSE DR.	04/06/06	04/11/06	04/11/06	LAJAUNIE	SUG		490	AF-01
W06094	CANYON VILLAGE AT CYPRESS SPRINGS SEC. 8	APPLEBERY DR. & RUSTIC LAKE LN	04/12/06	04/13/06	04/13/06	LEVERTON	СУР		1,008	GE-42
W06095	ALEXAN BUNKE HILL APARTMENT COMPLEX	9757 PINE LAKE DR.	04/13/06	04/13/06	04/13/06	MARINO	SPB		2,100	EC-08
96090/	RICEWOOD VILLAGE SECS 2 & 3	KEITH HARROW BLVD & FRY RD	04/17/06	04/17/06	04/17/06	STIMACH	ΥT		1,908	F247
W06097	2600 TRAVIS		04/24/06	04/24/06	04/24/06	FAVRE	BEL	300	200	MID02
W06098	TURNBERRY TOWER TEMP SERVICE	HIDALGO @ McCUE	04/21/06	04/21/06	04/21/06	GONZALEZ	BEL		976	Bi42,SF45
66090W	LA FITNESS	BARKER CYPRESS @FM 529 / LANGHAM CREEK	04/20/06	04/25/06	04/25/06	GRAY	СУР		565	GE-42
W06100	HOME DEPOT DISTRIBUTION CENTER	8518 W LITTLE YORK	04/10/06	04/27/06	04/27/06	HILL	GPT		860	SA-50
W06101	BROADSTONE MEMORIAL APARTMENTS	N. ELDRIDGE PKWY BETWEEN MEMORIAL DR & KA	04/25/06	04/25/06	04/25/06	WHITED	SPB		2,500	WD-46
W06102	PARKWAY TRAILS SUBDIVISION	SCANLIN RD. AT TEXAS PARKWAY 2234	04/27/06	04/27/06	04/27/06	LUNA	SUG		1,725	MC-05
W06103	RETAIL BUILDINGS	13070 BELLAIRE BLVD. @ SYNOTT	04/27/06	04/27/06	04/27/06	ESTES	SUG		661	AF-06
W06104	AVONDALE SUBDIVISION	W. FUQUA @ AL ROVER	04/27/06	04/27/06	04/27/06	RAINES	HQC		1,700	IR-02
W06105	KATY SPRING & MANUFACTURING	5354 FIRST STREET	05/01/06	05/01/06	05/02/06	SCOTT HUMBLE	ΚŢ		1,500	KT-47
W06106	GRAND MEADOWS SEC 2	DESCARTES DR @ PICO LANDING ST	05/02/06	05/02/06	05/02/06	RAMON	FTB		822	FL-44
W06107	OASIS ASSISTED LIVING OFFICE AND GARAGE	11929 WEST AIRPORT	05/01/06	05/04/06	05/04/06	GAIDO	SUG		3,000	RO44
W06108	Fort Bend ISD, EA Jones Elm. & Missouri City Mid. Sch.	Highway 90 & Martin Ln.	05/01/06	05/04/06	05/04/06	GAIDO	SUG		2,657	MC02
W06109	THE HOME DEPOT - KINGSBRIDGE	HIGHWAY 6 & BELLFORT	05/01/06	05/04/06	05/04/06	GAIDO	SUG		692	IM45
W06110	BRAZOS TOWN CENTER - BEST BUY	TOWN CENTER BLVD @ COMMERICAL DR.	05/11/06	05/11/06	05/11/06	GAIDO	FTB		700	CRB-45
W06111	SHADOW CREEK RANCH - STRIP CENTER	11601 SHADOWN CREEK PKWY	05/11/06	05/11/06	05/11/06	DAVIS	HOC		370	SO-41
W06112	MILAN WEST L.P.	9099 WESTHEIMER	90/60/50	05/11/06	05/11/06	SUTER	BEL		1,500	DV-07
W06113	BALLY PARK	I-10 @ BARKER-CYPRESS	90/60/50	90/60/50	05/11/06	Mc GEE	SPB		2,346	WD-45
W06114	WEST OREM PLACE, SEC 4	NWC OF WEST OREM AT ALMEDA RD	90/60/50	02/09/06	05/11/06	RAINES	HOC		775	AM-06
W06115	CREEKMONT SECTION 1	HWY, 6 @ CREEKMONT	05/15/06	05/15/06	05/15/06	TARVER	HOC		1,700	SIE-41
W06116	WEST DALLAS APTS	2221 W DALLAS APTS	05/12/06	05/16/06	05/16/06	FAVRE	BEL		1,700	HP03
W06117	BEECHNUT CROSSING	13900 BEECHNUT	05/18/06	05/17/06	05/16/06	ESTES	SUG		999	BAR-45
W06118	DAVID GRAY	15028 HWY. 6	05/23/06	05/23/06	05/23/06	TARVER	9 일		150	AR-42
W06119	CORE REAL ESTATE	17000 KATY FRWY	05/25/06	05/25/06	05/25/06	ALLEN	SPB		2,300	WD-43

### A New Master Planned Community BRIDGELANDS

Development of this new master planned community began in 2004 and is located within the Cypress Service Center area. The first phase of construction for Bridgelands, a 10,000 acre community to be located off U.S. Highway 290 at Fry Road, is under construction and will be completed by the end of 2005. The theme for the project is based on 900 acres of lakes with bridges over all lakes. The project is being developed by The Rouse Company and will have a build out period of 20 years.

The project will consist of approximately 18,000 residential lots with home costs in the range of \$175,000 - \$500,000. There will be 900 acres of retail and office buildings in the project. The estimated population of the community will exceed 70,000.



	DEVELOPMENT	ACREAGE WEST OF GRAND PARKWAY	ACREAGE EAST OF GRAND PARKWAY
	SHICLE-FAMILY RESIDENTIAL DEVELOPMENT	3,111	2,673
	CONMERCIAL/ BRITE FAMILY DEVELOPMENT	220	757
,	AMENITY LAKE/ DETENTION POND	N/A	N/A
TOTAL		3,331	8,430

### **Total Projected Load**

Eastern Se	ctions - East of	Proposed	Grand Par	kway	
Section	Year	Acres	Lts/Ac	Lots	Est. Div. Load kVA
Α	Unknown	91	3.07	279	3218.3
В	Unknown	28	3.07	86	990.3
С	Unknown	40	3.07	123	1414.7
D	2007	136	3.07	480	5529.6
E	2006	190	3.07	583	6719.6
F	2008	168	3.07	516	5941.6
G	2009	168	3.07	516	5941.6
Н	2013	202	3.07	620	7144.0
1	2012	157	3.07	482	5552.5
J	2011	148	3.07	454	5234.2
K	2010	101	3.07	310	3572.0
L	2007	183	3.07	562	6472.1
M	Unknown	104	3.07	319	3678.1
N	2010	102	3.07	313	3607.4
0	2012	131	3.07	402	4633.0
Р	Unknown	96	3.07	295	3395.2
Q	Unknown	102	3.07	313	3607.4
R	Unknown	214	3.07	657	7568.4
S	Unknown	122	3.07	375	4314.7
T	Unknown	159	3.07	488	5623.3
W	Unknown	113	3.07	347	3996.4
	TOTAL:	2755		8520	98,154.2

Section	Year	Acres	Lts/Ac	Lots	Est. Div. Load kVA
All	2014-2025	3088	3.07	9480	109,211.4
Total Estim Total Estim	per of Residentia nated Residentia nated Commercia pject Load,	l Load, MV al Load, M			18,000 207.4 40.0 <b>247.4</b>
New 35	kV Feeder Re	equireme	nts for Pr	oject:	7.8
	s consist of 50', (			diversity fa	actor of 80%.

### **Projected Load Growth**

### Load Analysis and Growth Rate of Scheduled Sections

Section	Year	Acres	Lts/Ac	Lots	Section Load kVA	Cumulative Load kVA	Peak Year
E	2006	190	3.07	583	6719.6	6719.6	2007
D	2007	136	3.07	418	4809.8		
L	2007	183	3.07	562	6472.1	18001.5	2008
F	2008	168	3.07	516	5941.6	23943.1	2009
G	2009	168	3.07	516	5941.6	29884.6	2010
К	2010	101	3.07	310	3572.0		
N	2010	102	3.07	313	3607.4	37064.0	2011
J	2011	148	3.07	454	5234.2	42298.2	2012
ı	2012	157	3.07	482	5552.5		
0	2012	131	3.07	402	4633.0	52483.7	2013
Н	2013	202	3.07	620	7144.0	59627.8	2014

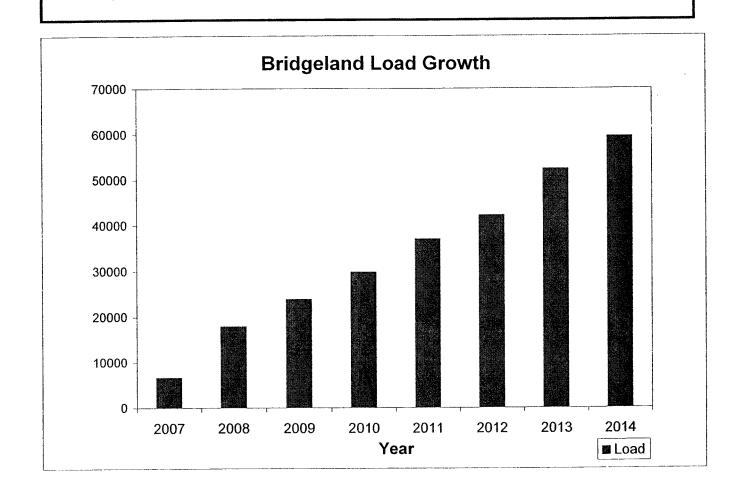
TOTAL:

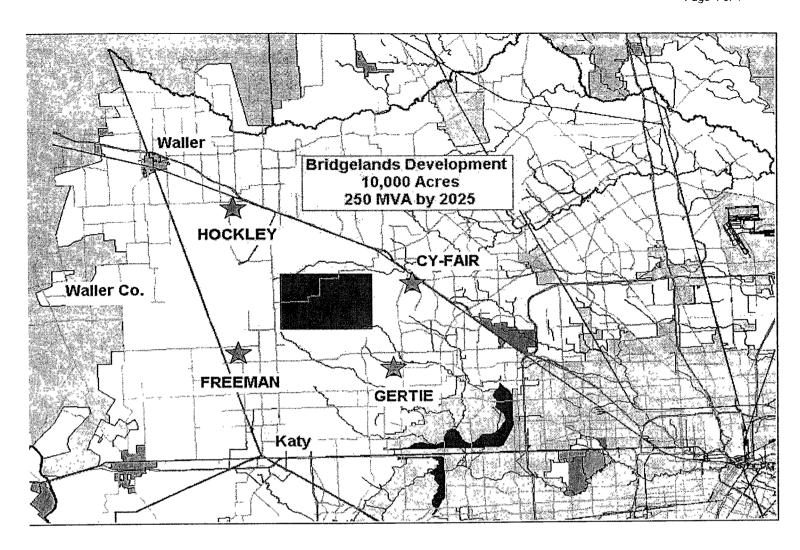
1686

5176

59627.8

Load Growth: Lots / Year: 7,453 647 kVA / Year LTS / Year





### CENTERPOINT ENERGY HOUSTON ELECTRIC, LLC PUC DOCKET NO. 32093 SOAH DOCKET NO. 473-06-2043

### OFFICE OF PUBLIC UTILITY COUNSEL

### QUESTION:

Does CNP have different planning guidelines for installing and replacing distribution facilities in areas in which space heating is exclusively electric? Please explain in detail how that characteristic affects distribution planning.

### ANSWER:

No. CenterPoint TDU does have a couple of distribution substations that peak in the winter; however, those peak values are not significantly higher than the summer peak values. Electrical equipment rating is impacted by the ambient temperature and because the temperature is much lower during winter, the primary concern is the load during the summer. So, distribution planning personnel recognize an area as being all electric, but plan for summer peak loading.

Sponsor: Don Cortez

Responsive Documents:

### CENTERPOINT ENERGY HOUSTON ELECTRIC, LLC PUC DOCKET NO. 32093 SOAH DOCKET NO. 473-06-2043

### OFFICE OF PUBLIC UTILITY COUNSEL

### QUESTION:

Did CNP consider updating the rates for the nuclear decommissioning charge? Please provide any internal memoranda, reports, or correspondence which discusses the potential effects of such an update. Please provide a schedule showing the current class allocation for the nuclear decommissioning charge, and an updated version of the allocation factors.

### ANSWER:

No. With respect to nuclear decommissioning charges, CenterPoint Energy Houston Electric, LLC now serves as the collection agent for NRG South Texas LP, pursuant to the Decommissioning Funds Collection Agreement dated June 9, 2005. For the reasons described on pages 54-63 (Bates pages 862-871) of Mr. Kilbride's testimony, CenterPoint Energy Houston Electric, LLC expects any future requests for changes in the amount of the nuclear decommissioning charge to be filed by NRG South Texas LP.

Please refer also to Figure MK-19 ("Response to Notice Pursuant to Public Utility Substantive Rule 25.303(g)(4)"), in which Texas Genco (now NRG South Texas LP) states in relevant part, "...Texas Genco will not be preparing a nuclear decommissioning funding analysis for inclusion in CenterPoint's upcoming rate proceeding," and, "To the extent that Texas Genco proceeds with commissioning an updated cost study and funding analysis, we will contact you [CenterPoint Energy] upon its completion prior to the initiation of any Commission proceeding for review of the annual decommissioning funding amount pursuant to PUC Substantive Rule 25.303(f)(3)."

The class allocation for the nuclear decommissioning charge contained in the rate filing package is unchanged from the class allocation approved in Docket No. 22355. The class allocation percentages are shown as AF# 84, "Docket 22355 A&E 4CP" in Schedule II-I-2 on Bates page 2906 of the rate filing package. An updated A&E 4CP allocator is AF# 1, "Generation Demand - A&E 4CP" on Bates page 2904.

Sponsor: Marc Kilbride - Decommissioning Funds Collection Agreement.

James N. Purdue - Class Allocation Percentages.

Responsive Documents:

### CENTERPOINT ENERGY HOUSTON ELECTRIC, LLC PUC DOCKET NO. 32093 SOAH DOCKET NO. 473-06-2043

### OFFICE OF PUBLIC UTILITY COUNSEL

### QUESTION:

Prior to the previous UCOS case, Center Point had not separated primary and secondary classes in the class cost of service study. Please provide a thorough description of the manner in which CenterPoint separated primary and secondary facilities. Did CenterPoint change the assignment of facilities to primary or secondary voltage classification after the UCOS case? If yes, please explain.

### ANSWER:

Engineering personnel reviewed the plant accounting records provided at Bates pages 6289-6296 and separated the facilities into primary/secondary at Bates pages 6285-6288. The assignment of facilities has not changed since the UCOS case.

Sponsor: James N. Purdue

Responsive Documents:

### CENTERPOINT ENERGY HOUSTON ELECTRIC, LLC PUC DOCKET NO. 32093 SOAH DOCKET NO. 473-06-2043

### OFFICE OF PUBLIC UTILITY COUNSEL

### QUESTION:

Did CenterPoint perform a review of the accuracy of its estimated loads in the UCOS case associated with the separation of commercial classes into secondary and primary voltages?

### ANSWER:

No. CenterPoint TDU's estimates in the UCOS case were reviewed and approved by the Commission and no review was necessary for this case.

Sponsor: James N. Purdue

Responsive Documents:

### 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 hand delivery, overnight delivery, or United States first class mail on this 14<sup>th</sup> day of June 2006.

Linda I Shriston