

Pricing Methodology:

Service Billing Calculation Method: Total operations budget divided by estimated number of bills/letters to be mailed.

Billing method: Rate multiplied by actual mailings for appropriate clients. Billed monthly at actual usage.

Direct Client Incurred:

Third party costs for postage, envelopes, statements and inserts will be paid directly by the business unit or charged to the Business Unit.

Residual amounts are cleared monthly by planned activities.

Service Cost Drivers:

Service Provider Initiatives:

* Remain abreast of USPS regulations/requirements for mail preparation that will allow for the highest postage discount from the USPS.

* Ongoing cross-training of personnel.



CenterPoint Energy Service Company, LLC
Service Level Agreement
The best source of business services for CenterPoint Energy clients

Year: 2018

Service Provider Information

Company: CenterPoint Energy Service Co LLC
Organization: CNP Regulated Operations
Location: Houston
Center: Customer Service
Service: Print Output Management

Business Unit Information

Business Unit: Houston Electric

Scope of Service

-Print disconnect and power outage notices.
-White paper print jobs printed and packaged for delivery by next business day, provided output is queued by 12:00 a.m.

Responsibilities

Service Provider:

-Notices will be delivered to Insert Operations for delivery to Post Office

Business Unit:

-Notices will be processed and queued to Print Output Management by 12:00 a.m.

Performance Standards:

- * Operate within the approved budget, subject to changes in scope by client.
- * Track Cost of Print and Mail expense per customer.
- * Provided output is queued by 12:00 a.m., white paper will be printed and packaged for delivery by next business day.

Pricing Methodology:

- * Service Billing Calculation Method: 5% of total operations budget divided by estimated billable hour.
- *Billing method: Rate multiplied by number of hours used/actual pages printed by appropriate client. Billed monthly at actual usage.
- *Direct Client Incurred: Third party costs for notices and white paper will be charged directly to the business unit IO.
- *Residual amounts cleared monthly based on planned activities.

Service Cost Drivers:

Service Provider Initiatives:



CenterPoint Energy Service Company, LLC
Service Level Agreement
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Year: 2018

Service Provider Information

Company: CenterPoint Energy Service Co LLC
Organization: CNP Regulated Operations
Location: Houston
Center: Customer Service
Service: Contact Center

Business Unit Information

Business Unit: Houston Electric

Scope of Service

Scope of Service:

The Customer Service Contact Center is the primary channel by which electric customers (both end-use customers and Competitive Retail electricity providers) initiate service requests and report outages or emergencies. Customer Service provides 24-hour staffing seven days a week.

Responsibilities

Service Provider:

The Contact Center is responsible for the front-line communication with our customers. The primary means of communication with most customers is by telephone. Web-based applications are also utilized to allow customers 24/7 electronic access to specific information and transactions. The Contact Center provides full services from 7:00am to 7:00pm Monday through Friday, however customer service advisors are available 24 hours a day, 7 days a week to receive emergency calls. An automated interactive voice response unit is also available 24/7 to handle certain types of calls. The Contact Center will utilize the interactive voice response unit to handle various transactions. Customer Service will provide the following:

- Adequate staffing levels to meet call volume demands
- Training and Quality Assurance teams to provide initial and ongoing training to Contact Center personnel. The group is also responsible for monitoring and evaluating customer calls to identify coaching and development opportunities for customer service advisors and assure business rules and processes are followed.
- The Workforce Management teams are responsible for optimizing the productivity and staffing of the Contact Center operation through critical call volume and staffing forecasting reports, finding cost-effective solutions to customer needs and expectations.
- Could supplement Contact Center staffing with a third party vendor and/or Automated Technology Tool to handle certain call types and utilize as a resource in the business continuance plan.

The following types of calls are handled by the Contact Center to resolve customer requests and inquiries:

- Request or check the status of various service orders
- Request remove meter, customer meter and lockband removal and install
- Report emergencies
- Request meter reading and usage information on customer bills
- Inquiries concerning meter reads
- Discuss construction requirements

Business Unit:

Houston Electric Operations should maintain an open line of communication with the Contact Center to exchange pertinent information on field practices and/or events which may impact predefined expectations relayed to customers by Contact Center service advisors.

Performance Standards:

- Operate within the approved budget
- Service Level Measurements include: Average Speed of Answer, Call Handling Time, and Quality Assurance process to measure both technical and interpersonal Skill Levels of Contact Center personnel

Pricing Methodology:

While our Contact Center handles calls from both gas and electric utility customers, we are able to track electrical and gas call volumes and directly assign costs to each utility.

Service Cost Drivers:

- Increases or decreases in call volumes will affect costs
- Internally mandated service levels
- Average handle time

Service Provider Initiatives:

- Provide staffing to handle incoming calls impacting other Business Unit operations
- Provide training to update our staff on Business Unit operation practices/changes
- Provide training to update other Business Units on Contact Center practices and procedures



CenterPoint Energy Service Company, LLC
Service Level Agreement
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Year: 2018

Service Provider Information

Company: CenterPoint Energy Service Co LLC
Organization: CNP Regulated Operations
Location: Houston
Center: Marketing Communications
Service: Marketing Communications

Business Unit Information

Business Unit: Houston Electric

Scope of Service

Marketing Communications connects CenterPoint Energy with stakeholders (employees, customers, shareholders and communities) through effective marketing communications that help achieve business objectives and shape perceptions of CenterPoint Energy.

Responsibilities

Service Provider:

Marketing Communications will work with clients to identify their needs and implement timely, cost-effective solutions.

Business Unit:

Clients will provide information and resources in a timely manner as agreed upon in project communication plans to allow Marketing Communications to meet obligations for execution of communication plans.

Performance Standards:

Marketing Communications will meet mutually agreed-upon objectives as documented in project communication plans.

Pricing Methodology:

Direct charges are tracked and charged directly to the applicable business unit. Governance costs are allocated based on composite ratio. Other costs are allocated by headcount or asset values.

Service Cost Drivers:

Discretionary Corporate and Business Unit (BU) project costs are determined by project requirements. Cost variables include volume, frequency and medium. Discretionary costs can be controlled by:

- * Adopting communication plans to manage projects effectively and efficiently
- * Using in-house versus outsourced resources for design, production and distribution when possible
- * Leveraging existing materials, designs, templates etc., in lieu of customized materials when possible
- * Reducing the quantity of printed materials
- * Using black and white versus color print materials
- * Reducing the frequency of distribution of print materials
- * Cost-effective use of face-to-face communication, teleconference and streaming video.

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- * Using paperless electronic media (e-mail, Web) versus printed materials
 - * Using the most cost-effective advertising media channel mix integrated with all company campaigns.

Service Provider Initiatives:

Marketing Communications initiatives enhance the effectiveness of CenterPoint Energy's business plans.

Corporate initiatives are programs and activities undertaken on behalf of all of CenterPoint Energy. The costs for these programs are approved by the Executive Committee and allocated to the Business Units. Examples include marketing communication asset materials, such as broadcast, print, electronic and digital executions.

Business Unit Initiatives are programs and activities undertaken on behalf of one or several Business Units. These programs are approved by the Business Units, and costs are billed either directly to the Business Units or paid out of business unit cost centers.

Gas Operations Initiatives:

- *Develop marketing communications initiatives that support Gas Operations' strategy of pursuing innovative rate strategies

- *Develop marketing communications materials that support new products/services

- *Focus marketing communications and advertising programs on helping customers use energy wisely and education about account services and billing options

- *Focus marketing communications initiatives as needed on using natural gas safely

- *Focus on Conservation Improvement Programs, where applicable, in addition to using energy wisely

- *Provide marketing communication planning, advertising and Web consulting in support of CNP's new business planning

- *Conversion of TouchPoint, Business Link, and Scoop newsletters to html format

- *Online Billing e-mail notification redesign

- *Support design of Customer Preference Center



CenterPoint Energy Service Company, LLC
Service Level Agreement
The best source of business services for CenterPoint Energy clients

Year: 2018

Service Provider Information

Company: CenterPoint Energy Service Co LLC
Organization: CNP Regulatory & Government Affairs
Location: Houston
Center: Government Affairs
Service: Government Affairs

Business Unit Information

Business Unit: Houston Electric

Scope of Service

- * Maintain relationships with regulators, legislators, statewide elected officials, and third parties.
- * Develop company legislative planning and strategy.
- * Monitor and actively participate in legislative and political proceedings.
- * Perform lobbying activities related to electric transmission and distribution issues, natural gas delivery, natural gas pipeline safety and gathering, environmental issues, state and local taxes, tort reform, ethics, or other areas affecting the company.

Responsibilities

Service Provider:

Government Affairs meets the needs of corporate clients by continuing to perform services detailed above.

Business Unit:

All Business Units of CenterPoint Energy, Inc. need to remain responsive and timely in providing information for regulatory and legislative requests for information.

Performance Standards:

Pricing Methodology:

Direct charges are tracked and charged directly to the applicable business unit. All remaining costs are assigned based on total asset values of the Business Units.

Service Cost Drivers:

Cost Drivers for Government Affairs include:

- * Legislative initiatives - Number of bills impacting company
- * PAC - Reporting requirements of federal and state (TX, AR, OK) ethics commissions
- * Grassroots program - Communication of political issues

Service Provider Initiatives:

Initiatives by Government Affairs include:

- * Cross utilization of personnel

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- * Utilization of consultants for specific expertise
 - * Awareness of travel costs and employee expenses
 - * Utilization of phone conferencing capabilities, email, electronic viewing of meetings, and coordination of meetings for same-day travel
 - * Efficient use of automated processes



CenterPoint Energy Service Company, LLC
Service Level Agreement
The best source of business services for CenterPoint Energy clients

Year: 2018

Service Provider Information

Company: CenterPoint Energy Service Co LLC
Organization: CNP Regulatory & Government Affairs
Location: Houston
Center: Local Relations
Service: External Engagement and Planning

Business Unit Information

Business Unit: Houston Electric

Scope of Service

External Engagement and Planning will provide services including:

- * Assist greater Houston area regulators, mayors, city councils, county judges and commissioners, legislators, and third parties with service related issues.
- * Develop company local planning and strategy.
- * Monitor and actively participate in local government proceedings.
- * Help develop operational process improvements related to electric transmission and distribution issues, natural gas delivery, natural gas pipeline safety, environmental issues, local taxes, land uses, ethics, or other areas affecting the company.

Responsibilities

Service Provider:

External Engagement and Planning meets the needs of corporate clients by continuing to perform services detailed above.

Business Unit:

All Business Units of CenterPoint Energy, Inc. need to remain responsive and timely in providing information for regulatory and local relations requests for information.

Performance Standards:

Pricing Methodology:

Direct charges are tracked and charged directly to the applicable business unit. All remaining costs are assigned based on total asset values of the Business Units.

Service Cost Drivers:

Cost Drivers for External Engagement and Planning include:

- * Expanded responsibility and organization
- * Local government impacts on operations or land use
- * Regulatory requirements and filings
- * Advocacy efforts - Communication of local issues
- * Technology and infrastructure expansion
- * Identifying economic development opportunities

Service Provider Initiatives:

Initiatives by External Engagement and Planning include:

- * Cross utilization of personnel
- * Utilization of consultants for specific expertise
- * Awareness of travel costs and employee expenses
- * Utilization of phone conferencing capabilities, email, electronic viewing of meetings, and coordination of meetings for same-day travel or overnight travel.
- * Efficient use of automated processes



CenterPoint Energy Service Company, LLC
Service Level Agreement
The best source of business services for CenterPoint Energy clients.

Year: 2018

Service Provider Information

Company: CenterPoint Energy Service Co LLC
Organization: CNP Regulatory & Government Affairs
Location: Houston
Center: Regulatory
Service: Regulatory

Business Unit Information

Business Unit: Houston Electric

Scope of Service

Regulatory personnel operate in corporate offices in Houston and Austin in order to support the Business Unit (BU) to:

- *Provide the BU with regulatory and legislative strategy; Rules and Procedures oversight; litigation support; and coordinate administrative dockets, rule makings, and compliance filings with the Public Utility Commission of Texas (PUC) and other regulatory agencies.
- *Promote and maintain collaborative relationships with regulators and third parties.
- *Represent CNP's interests in interactions with national and regional trade, industry, and professional organizations.
- *Develop and execute regulatory and legislative policies and strategies that support CNP's corporate strategy, business model and processes, including monitoring and actively participating in regulatory, legislative, and political proceedings.
- *Develop and execute strategies for managing and mitigating regulatory risk.
- *Represent BU's position in regulatory matters before the PUC as a primary liaison with the PUC or any other regulatory agencies, counterparts at other jurisdictional utilities, and other key stakeholders.
- *Prepare and oversee all aspects of the rate case process (work plan, filing package, testimony, discovery, hearing, settlement, and implementation of rates) and legislative support process.
- *Prepare, review, and/or support regulatory filings (tariff filings, annual compliance filings, reports, earnings monitoring and other reports, etc.).
- *Allocate costs among rate classes, design rates, and maintain tariffs.
- *Monitor capital cost recovery, special surcharges, and other cost recovery mechanisms to ensure reasonable opportunity to recover costs and earn adequate return.
- *Respond to regulatory audits, reviews and other inquiries.
- *Provide support for other CNP process improvement initiatives, especially where they are linked to regulatory processes.
- *Other rate and regulatory services as requested by the BU or as required by law, regulation, order or best practices.

Responsibilities

Service Provider:

Regulatory - meet needs of BU by continuing to perform services detailed above.

Business Unit:

BU needs to remain responsive and timely in providing information for regulatory and legislative requests for information.

Performance Standards:

Pricing Methodology:

Direct charges are tracked and charged directly to the applicable business unit. All remaining costs are assigned based on planned billings.

Service Cost Drivers:

Cost Drivers for Regulatory include:

- *PUC docketed proceedings - rate cases, number of managed dockets, process meetings, and compliance filings.
- *Regulatory operations - cost analysis, rates, tariffs, and load research.
- *Legislative initiatives - number of bills impacting company.
- * Business Unit initiatives - number of requests by BU to support its initiatives as they may be impacted by regulatory bodies, including ERCOT.

Service Provider Initiatives:

Initiatives by Regulatory include:

- Cross utilization of personnel
- Utilization of consultants for specific expertise
- Awareness of travel costs and employee expenses
- Utilization of phone conferencing capabilities, email, electronic viewing of meetings, and coordination of meetings for same-day travel
- Efficient use of automated processes.



CenterPoint Energy Service Company, LLC
Service Level Agreement
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Year: 2018

Service Provider Information

Company: CenterPoint Energy Service Co LLC
Organization: CNP Technology Operations
Location: Houston
Center: Technology Operations
Service: Multifunction Devices

Business Unit Information

Business Unit: Houston Electric

Scope of Service

This service is to provide support for multifunction devices in various locations which includes administrative oversight for vendor contract compliance, device maintenance and repairs.

Responsibilities

Service Provider:

- * Recommend and communicate status on equipment relocation, removal, upgrade or downgrade.
- * Conduct on-going product evaluations
- * Coordinate lease or purchase of equipment
- * Administer maintenance and lease contract
- * Work with vendors to maintain adequate support level on equipment for repair service, parts and supplies.
- * Maintain accurate equipment inventory and volume counts.
- * Ensure the processing of equipment maintenance and capital purchase invoices to the appropriate charge codes.
- * Ensure accuracy of vendor billings
- * Submit monthly meter counts to ensure accurate billing

Business Unit:

- * Assign a key operator to each device who will be responsible for ordering supplies (toner, staples, waste toner bottles).
- * Communicate reoccurring device issues to the Technology Service Desk (713-207-4357).
- * Contact the appropriate support group (Vendor or Technology Service Desk - 713-207-4357) to report service, network or maintenance issues.

Performance Standards:

Operate within the approved budget (subject to changes in scope by client).

Measures:

- * Vendor will provide repair response time reports on a quarterly basis.

Variation:

- * Vendor response time for service calls (4 hours in Metro Houston - 8 hours outside Metro Houston)
- * Rush orders for devices

Pricing Methodology:

Service Billing Rate Calculation Method:

* Total labor and expenses for administrative oversight divided by the total number of devices owned/leased.

Billing method:

* Rate multiplied by devices owned/leased by client. Billed monthly.

Direct Client Incurred:

* Third party cost for maintenance and lease or acquisition costs will be charged directly to the appropriate client.

Service Cost Drivers:

* Requests for non-contract multifunctional machines without contacting Technology Operations for contract pricing.

* Equipment repairs due to abuse identified as out of scope of normal use.

* Purchase of multifunctional equipment from vendors outside of the CNP approved vendor selections.

Service Provider Initiatives:

* Continue equipment evaluation to ensure standardization and optimization.

* Reduce overall cost to CNP by reducing printer usage and increase volume on digital multifunction devices.



CenterPoint Energy Service Company, LLC
Service Level Agreement
The best source of business services for CenterPoint Energy clients.

Year: 2018

Service Provider Information

Company: CenterPoint Energy Service Co LLC
Organization: CNP Technology Operations
Location: Houston
Center: Technology Operations
Service: Enterprise Computing

Business Unit Information

Business Unit: Houston Electric

Scope of Service

These service levels apply to support for hardware and software acquired and installed by Technology Operations (TO) in CenterPoint Energy offices and other contracted locations. These service levels apply only to CenterPoint Energy production systems and not test or development environments. Support of test and development environments will be on a "best effort" basis only and will not be factored into performance calculations. TO reserves the right to temporarily redirect test resources for other purposes when deemed necessary.

1. Mainframe CPU Utilization

This service provides use and support of mainframe computing, along with related hardware and software, staff, environmental elements, and backup and recovery of data. Included are the mainframe processors, peripheral devices, operating system, and related software as well as operations and technical support functions.

2. Mainframe Data Storage

This service provides the use and support of mainframe storage platforms, along with related hardware and software, staff, environmental elements, and backup/recovery of data. Included are the mainframe storage media (i.e., tape, disk), automated tape libraries, operating system, related software, and operations and technical support functions.

3. Unix/Linux Client Specific

This service identifies hardware and software that is managed by Technology Operations and is unique to the business unit. It provides use and support of the mainframe and midrange (SAP, UNIX, Linux, Gateways and specialized servers) platforms DIRECTLY attributable to specific clients, along with related hardware and software, staff, and environmental elements. Included are the hardware systems, data storage (i.e. tape, disk), automated/virtual tape libraries, operating systems, related software, operations and technical support functions. This service also includes any specialized software that is required by the business unit.

Responsibilities

Service Provider:

1. Nonstandard Hardware/Software

The TO Corporate Technology Review Council, comprised of management representation from both Business Units and TO, have delegated responsibility to develop and enforce CenterPoint Energy Technology Operations standards to the Solution Review Board (SRB) / Technology Assessment Council (TAC). All TO work requests involving new or nonstandard technology will require a SRB / TAC review as part of the TO methodology and process. SRB / TAC will assess and recommend new or nonstandard technology consistent with the SRB / TAC assessment processes and procedures. The client may appeal SRB / TAC decisions to either the CIO or the Corporate Technology Review Council (CTRC). The CTRC recognizes the potential support and financial

implications of nonstandard technology. Further information can be found under the TO SharePoint forum.

1.1 Unsupported Hardware/Software

TO support for hardware or software which is unsupported by the vendor will be provided on a "best effort" basis and will not be included in SLA performance calculations.

2. Maintenance

Preventive maintenance and upgrades of an enterprise nature will be conducted during Block Maintenance Time (BMT). Such maintenance will be excluded from availability calculations and will require no advance notification. System access will be unavailable for client use during BMT. The Client or TO management may issue a request to have the application processing schedule and/or online availability schedule altered on a given date. Such mutually-agreed-upon revisions will not be counted as downtime against the Service Level Agreement. Changes to application processing schedules and/or online availability schedules will be documented according to Technology Operations's Change Management System. TO also will work with the Business Units to coordinate maintenance to minimize downtime on any given date.

BMT for the Gas Operations mainframe environment is 03:00 - 06:00 every other Sunday.

BMT for SAP (Unix hardware and application) is 00:00 - 04:00 Sunday.

BMT for Telecommunications/Network is 01:00 - 05:00 Sunday.

BMT for Wintel servers is 00:00 - 06:00 Friday and Sunday.

BMT for Linux servers is 00:00 - 06:00 Friday and Sunday.

BMT for UNIX servers is 18:00 - 24:00 Saturday.

2.1 Maintenance Outside Block Time

Business-unit-driven projects approved by the CTRC, essential infrastructure and environmental upgrades, and preventive maintenance may require outages or reboots outside or beyond scheduled Block Maintenance Time (BMT). Site-specific maintenance may be conducted during regular business hours with business unit approval and coordination. Maintenance conducted outside BMT will be coordinated and scheduled (usually during slow or weekend periods) with the client's designated representative, will be subject to postponement in the event of significant storm activity or gas outage, and will be excluded from availability calculations if the client agrees to do so.

2.2 Communication of Changes

Changes to the production infrastructure environment will be communicated to clients according to TO's Change Management System. A Corporate Communiqué may be issued for infrastructure changes designated risk level 1 or 2 with widespread potential impact.

2.3 Downtime Statistics

Clients may obtain access to available statistics indicating the number, frequency, timing, duration, etc. of TO service outages -- planned and unplanned, approved and unapproved, during and outside Block Time.

3. Problem Resolution

The Client Support Center (CSC) help desk will receive, record, resolve or assign/dispatch, monitor, and track all Technology Operations related trouble calls and service requests. A service ticket will be created for all problems and requests. Standard Client Support Center hours of operation are Monday - Friday 07:00 - 17:00. After hours support will be provided only for critical production systems at designated critical sites. A 24x7 hotline has been established for designated representatives at critical sites to address critical production system issues. On-call TO personnel and a designated client representative will be paged automatically upon entry of any critical problem in TO's problem management system. The CSC maintains a list (provided by BUs) of designated critical sites, applications, and client representatives. In the event of multiple concurrent critical problems under the responsibility of the same TO work group, TO will prioritize the problems based on available resources and resolve the problems on a "best effort" basis.

4. Performance Reporting

Technology Operations will track and report service performance on a monthly basis. Service performance will be cumulative: each standard will be met or not met on an annual basis.

5. Emergency Conditions

This agreement will be suspended for a mutually-agreed-upon time period in cases of gas or power outages, "acts of God," declaration by the company of an "Emergency Condition, " or initiation of Technical Recovery procedures -- unless otherwise stated in the agreement.

Business Unit:

1. Nonstandard Hardware/Software

The Performance Standards described below apply only to CenterPoint Energy standard hardware and software that has been approved by the Solutions Review Board (SRB) / Technology Assessment Council (TAC). Additional support costs of nonstandard equipment authorized for implementation will be the responsibility of the client. In addition, nonstandard hardware and software are not covered by the terms of this Service Level Agreement, and nonstandard items will not be factored into any SLA computations. Unsupported nonstandard software runs the risk of being lost in cases in which re-imaging is required.

2. Maintenance

The Client or TO management may issue a request to have the application processing schedule and/or online availability schedule altered on a given date. Such mutually-agreed-upon revisions will not be counted as downtime against the Service Level Agreement. If the client requests a delay or postponement of Block Maintenance Time (BMT), time will be added to BMT equal to the length of the delay. For example, if the start of BMT for SAP is delayed from 00:00 to 01:00, the conclusion of BMT will be 05:00 instead of 04:00. If BMT is canceled altogether on a given date, TO may bring down the system prior to the next scheduled BMT at a time to be negotiated with the client for whatever time required up to the usual duration of BMT. **3. Problem Resolution** The following Performance Standards are based upon the assumption that user-identified problems are promptly reported to the Client Support Center at (713) 207-HELP (4357) or 1-888-207-HELP. Problems will be addressed only after the creation of a service ticket.

Performance Standards:

1. General Problem Resolution

Resolution of Incident Management (IM) tickets opened by the TO Client Support Center will be measured according to Internal Priority level.

A Priority 1 event occurs when a designated business critical application is unavailable in total or at a designated critical site, or when a significant "safety event" occurs that requires immediate action. The TO Client Support Center maintains a list of designated critical sites and applications. Updates to this list will be accepted only from the Business Unit Technical Directors.

Corporate TO will respond to Priority 1 events within 30 minutes of notification and work to resolve the issue so that total system availability metrics are met for each particular application.

Priority 1 events are provided 24x7 TO support. All downtime resulting from a Priority 1 event is counted against SLA availability. In the event of multiple concurrent Priority 1 incidents under the responsibility of the same TO work group, TO will prioritize the incidents based on available resources and resolve them on a "best effort" basis.

A Priority 2 event occurs when a component or function of a system or business critical application is unavailable. (See the Applications SLA for a list of critical applications or request one from the TO Client Support Center.) A Priority 2 event also occurs when a designated business critical application is unavailable to BU location(s) that have not been designated as critical.

Corporate TO will respond to Priority 2 events within 1 business hour of notification and work to resolve the issue so that total system availability metrics are met for each particular application. Ninety percent (90%) of Priority 2 events will be resolved within one (1) business day of the opening of a problem ticket or arrival of TO personnel on site (see Travel Time below). One business hour refers to a 60-minute period between 7:00 a.m. and 5:00 p.m. excluding weekends and official company holidays. Priority 2 events are provided TO support during business hours Monday

through Friday (excluding weekends and holidays). Downtime during these periods is counted against SLA availability.

A Priority 3 event occurs when a component issue occurs that impacts an individual's ability to perform work or when a procedural issue has significant potential to impact TO's ability to deliver service to the client. Corporate TO will respond to Priority 3 events within 1 business day of notification and work to resolve the issue so that total system availability metrics are met for each particular application. Ninety percent (90%) of Priority 3 events will be resolved within three (3) business days of the opening of a problem ticket or arrival of TO personnel on site (see Travel Time below). Priority 3 events are provided TO support during business hours Monday through Friday (excluding weekends and holidays). Downtime during these periods is counted against SLA availability.

A Priority 4 event occurs when a component issue occurs that has minimal impact (the client can continue to perform the job), or when an incident occurs that requires extended resolution time (e.g. parts on order) for which the client has an available workaround (e.g. another printer to use). Corporate TO will respond to Priority 4 events within two (2) business days of notification and work to resolve the issue so that total system availability metrics are met for each particular application. Ninety percent (90%) of Priority 4 events will be resolved within five (5) business days of the opening of a problem ticket or arrival of TO personnel on site (see Travel Time below). One business day refers to a 24-hour period excluding weekends or official company holidays.

1.1 Travel Time

These performance standards apply to locations that have Technology Operations personnel on site or Business Unit technical representatives acting on behalf of TO. At these locations, response timing begins when a service ticket is opened by the Help Desk and routed to the correct department. For all other locations, delivery of services will be delayed by the travel time to the location, if travel is required. While a service ticket will be created promptly and response resources dispatched as agreed upon, response timing begins when the TO personnel or proxy arrives on site.

2. System Availability

Mainframe system availability will be 99.9% exclusive of scheduled maintenance (also excluded are applications/platforms running software not supported by the vendor), which equates to less than one (1) hour unplanned downtime per month. Scheduled availability for specific applications is defined in the Programming/Applications SLA. Mainframe system availability is measured through the Problem Management system. System downtime will be entered into a problem ticket, calculated utilizing the Reporting function, and incorporated into Monthly SLA Reporting documents.

3. Off-site Tape Retrieval

The user will be notified if a tape is stored offsite, and the tape will be retrieved within two (2) hours.

4. Dedicated Server Availability

Availability of all, aggregated dedicated servers will be at least 99.9% at BU-designated critical sites and 99% at other, non-critical sites. Critical sites are provided 24x7 support; 99.9% equates to less than 44 minutes of unplanned downtime per month. Non-critical sites are supported 7:00 a.m.- 5:00 p.m., Monday-Friday (except official company holidays); 99% equates to less than 1 hour, 54 minutes per month of unplanned downtime during 7-5/M-F. Downtime calculations exclude scheduled maintenance as well as applications/platforms running software not supported by the vendor. TO does not provide on-call support for Development and Test Servers. These servers have no availability guarantees and are not reported on.

5. Sample Availability Calculation (99.9% and 99%)

Incident resolution provides 24x7 support for access to critical applications from designated critical locations only. Consequently, the calculation varies by critical versus non-critical sites. Critical Site: 31 days x 24 hours - 16 hours block time = 728 hours per month. $728 \times 0.999 = 727.27$ target hours of availability. $728 - 727.27 = 0.73$ hours (43.7 minutes) allowable downtime.

Non-Critical Site: 21 days x 9 hours (7 a.m. to 5 p.m.) = 189 hours per month. $189 \times 0.99 = 187.11$ target hours of availability during M-F/8-5 business days. $189 - 187.11 = 1.89$ hours (1 hour, 45 minutes) allowable downtime per month during M-F/7-5 business days.

Pricing Methodology:

1. Mainframe Utilization

Usage (in CPU seconds) for mainframe utilization is captured by billing point and totaled on a monthly basis. An average is taken of the most recent two quarters' usage. This average is then assigned to the appropriate BU owner.

2. Data Storage

A snapshot of disk allocations is matched to the appropriate BU to determine the owner of the storage. Storage reflects disk, tape, and offsite storage. The unit of measure for mainframe data storage is the megabyte (Mb). Usage is estimated by annualizing the most recent quarter of the current year.

3. Unix/Linux Client Specific

Mainframe software is direct billed, based on business unit specific requirements. Specific software that is shared among Business Units is distributed. Hardware services are direct billed based on calculated percentages.

4. Residuals

Residual amounts are cleared monthly based on planned activities

5. Rent & Depreciation

Rent and depreciation associated with each service are included in the total cost of the service. The service rates applied to the BU's volumes per service include rent and depreciation.

Service Cost Drivers:

1. Mainframe CPU Utilization

1.1 Automating corporate data retention parameters to limit the magnitude of data stored and avoid costly purchases of additional CPU capacity

1.2 Decommission applications or application tools that have not been kept at a current version as they drive more CPU cycles and contribute to production problems due to their incompatibility with newer applications

1.3 A focused effort on accelerating the decommissioning of applications will help provide available capacity for growth

1.4 Standardization of environments across businesses will simplify technical support processes

2. Unix / Linux Client Specific

2.1 Adopt common software products (i.e. database, reporting etc.) to eliminate unique business unit costs and encourage common processes

2.2 Share servers across Business Units to enable full utilization

2.3 Maintain consistent version levels of standard software across Business Units to simplify the environment and reduce support costs

Service Provider Initiatives:



CenterPoint Energy Service Company, LLC
Service Level Agreement
The best source of business services for CenterPoint Energy clients.

Year: 2018

Service Provider Information

Company: CenterPoint Energy Service Co LLC
Organization: CNP Technology Operations
Location: Houston
Center: Technology Operations
Service: Programming/Applications

Business Unit Information

Business Unit: Houston Electric

Scope of Service

1. Production Support

Production Support includes problem identification and resolution for existing functionality, monitoring systems, and routine maintenance.

2. SAP Support

Technology Operations (TO) provides ongoing baseline support for enterprise applications (SAP) that run numerous critical business systems including general ledger, asset management, payroll, accounts payable, accounts receivable, human resources, materials management, purchasing and logistics, budgeting, work management, customer care, customer relationship management, electric commercial and industrial, sales/distribution, SRM, GRC,SPM,EWM and business warehouse reporting. Functions include deployment and training as well as configuration and programming teams.

3. Strategic Data Services (SDS)

SDS provides Database administration (DBA) services.

3.1 Database Administration

Database Administration involves creating, updating, monitoring, and tuning databases through the phases of initiation, assessment, design, development, deployment, and maintenance on both the mainframe and distributed platforms and includes the maintenance and support of the Database Management System (DBMS) hardware and software. Sub-services include database maintenance, performance and tuning services, operating system interfacing, security interfacing, and backup and recovery. SDS supports the following database platforms and their respective database tools: DB2, MS-SQL Server, and Oracle. SDS maintains the physical databases following their implementation.

4. FileNet Enterprise Document Management System (EDMS) Technology Operations provides an Enterprise Document Management System (EDMS) service that is scalable to the current and future needs of CenterPoint Energy. EDMS reduces handling of paper documents and paper storage costs, eliminates microfilming activities, supports online access to all document records and multiple online users, and improves customer support and access time to stored documents. EDMS utilizes FileNet Paragon IDM software and provides two separate platforms for document management: FileNet Image Services, which runs on a UNIX platform, and FileNet P8 Services, which also runs on UNIX. EDMS services for Image Services include hardware and software support, FileNet IDM desktop software and custom application support, scan/indexing support, and Print Manager support. EDMS FileNet P8 services include document storage, versioning and records management.

5. NAESB Texas Market Interface System (NAESB)

Effective June 23, 2007:

The NAESB Texas Market Interface system includes NAESB, TMH and the firewalls, routers, switches, servers, databases, hardware, software and networks that support those systems. It does not include CIS, SAP/CCS (Industrial Clients and EMR formerly BES) or MDSI. In other words, the

NAESB Texas Market Interface system needs to be single fault tolerant. For single failures the NAESB Texas Market interface system needs to be up and running in one hour. For multiple failures (which should be rare given proper maintenance and a single fault tolerant configuration) the NAESB Texas Market Interface system needs to be back up and operating within 4 hours. In the event of a major disaster CNP would declare force majeure. However, with regard to the Houston Electric Market Interface systems only, the focus of TO should be to restore NAESB first and then endeavor to provide restoration of service to the other Electric Market Interface systems within 4 hours of an outage.

6. Portals, Collaboration & Web Content Management Support

TO provides ongoing baseline support for enterprise portals and team collaboration sites that interface with numerous critical business systems including SharePoint, My Account Online, Regulatory sites and SAP human resources. Functions include deployment and training as well as system administration, monitoring through the Technology Systems Control Center (TSCC) and application development teams.

Responsibilities

Service Provider:

1. Production Support

Production Support includes problem identification and resolution for existing functionality, monitoring systems, and routine maintenance.

2. SAP Support

Technology Operations (TO) provides ongoing baseline support for enterprise applications (SAP) that run numerous critical business systems including general ledger, asset management, payroll, accounts payable, accounts receivable, human resources, materials management, purchasing and logistics, budgeting, work management, customer care, customer relationship management, electric commercial and industrial, sales/distribution, SRM, GRC,SPM,EWM and business warehouse reporting. Functions include deployment and training as well as configuration and programming teams.

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5. NAESB Texas Market Interface System (NAESB)

Effective June 23, 2007:

The NAESB Texas Market Interface system includes NAESB, TMH and the firewalls, routers, switches, servers, databases, hardware, software and networks that support those systems. It does not include CIS, SAP/CCS (Industrial Clients and EMR formerly BES) or MDSI. In other words, the NAESB Texas Market Interface system needs to be single fault tolerant. For single failures the NAESB Texas Market Interface system needs to be up and running in one hour. For multiple failures (which should be rare given proper maintenance and a single fault tolerant configuration) the NAESB Texas Market Interface system needs to be back up and operating within 4 hours. In the event of a major disaster CNP would declare force majeure. However, with regard to the Houston Electric Market Interface systems only, the focus of TO should be to restore NAESB first and then endeavor to provide restoration of service to the other Electric Market Interface systems within 4 hours of an outage.

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TO provides ongoing baseline support for enterprise portals and team collaboration sites that interface with numerous critical business systems including SharePoint, My Account Online, and SAP human resources. Functions include deployment and training as well as system administration, monitoring through the Technology Systems Control Center (TSCC) and application development teams.

Business Unit:

1. Nonstandard Hardware/Software The Performance Standards described below apply only to CenterPoint Energy standard hardware and software that has been approved by the IT Architecture Council (ITAC). Additional support costs of nonstandard equipment authorized for implementation will be the responsibility of the client. In addition, nonstandard hardware and software are not covered by the terms of this Service Level Agreement, and nonstandard items will not be factored into any SLA computations. Unsupported nonstandard software runs the risk of being lost in cases in which re-imaging is required.

2. Maintenance

The Client or TO management may issue a request to have the application processing schedule and/or online availability schedule altered on a given date. Such mutually agreed upon revisions will not be counted as downtime against the Service Level Agreement. If the client requests a delay or postponement of Block Maintenance Time (BMT), time will be added to BMT equal to the length of the delay. For example, if the start of BMT for SAP is delayed from 00:00 a.m. to 3:00 a.m., the conclusion of BMT will be 7:00 a.m. instead of 4:00 a.m. If BMT is canceled altogether on a given date, TO may bring down the system prior to the next scheduled BMT at a time to be negotiated with the client for whatever time required up to the usual duration of BMT.

3. Problem Resolution

The following Performance Standards are based upon the assumption that user-identified problems are promptly reported to the Business User Support at (713) 207-HELP (4357) or 1-888-207-HELP. Problems will be addressed only after the creation of a service ticket.

4. New EDMS (FileNet) Users

Clients adding new FileNet users will need to contact the EDMS team for an estimate of costs. These could include scanning device and software costs, FileNet user licenses, and EDMS support for document class and user setup. Other costs may be applicable based on client requirements.

Performance Standards:

1. General Problem Resolution

Resolution of Incident Management (IM) tickets opened by the IT Client Support Center will be measured according to Internal Priority level.

A Priority 1 event occurs when a designated business critical application is unavailable in total or at a designated critical site, or when a significant "safety event" occurs that requires immediate

action. The IT Client Support Center maintains a list of designated critical sites and applications. Updates to this list will be accepted only from the Business Unit Technical Directors. Corporate IT will respond to Priority 1 events within 30 minutes of notification and work to resolve the issue so that total system availability metrics are met for each particular application. Priority 1 events are provided 24x7 IT support. All downtime resulting from a Priority 1 event is counted against SLA availability. In the event of multiple concurrent Priority 1 incidents under the responsibility of the same IT work group, IT will prioritize the incidents based on available resources and resolve them on a "best effort" basis.

A Priority 2 event occurs when a component or function of a system or business critical application is unavailable. (See the Applications SLA for a list of critical applications or request one from the IT Client Support Center.) A Priority 2 event also occurs when a designated business critical application is unavailable to BU location(s) that have not been designated as critical.

Corporate IT will respond to Priority 2 events within 1 business hour of notification and work to resolve the issue so that total system availability metrics are met for each particular application. Ninety percent (90%) of Priority 2 events will be resolved within one (1) business day of the opening of a problem ticket or arrival of IT personnel on site (see Travel Time below). One business hour refers to a 60-minute period between 7:00 a.m. and 5:00 p.m. excluding weekends and official company holidays. Priority 2 events are provided IT support during business hours Monday through Friday (excluding weekends and holidays). Downtime during these periods is counted against SLA availability.

A Priority 3 event occurs when a component issue occurs that impacts an individual's ability to perform work or when a procedural issue has significant potential to impact IT's ability to deliver service to the client. Corporate IT will respond to Priority 3 events within 1 business day of notification and work to resolve the issue so that total system availability metrics are met for each particular application. Ninety percent (90%) of Priority 3 events will be resolved within three (3) business days of the opening of a problem ticket or arrival of IT personnel on site (see Travel Time below). Priority 3 events are provided IT support during business hours Monday through Friday (excluding weekends and holidays). Downtime during these periods is counted against SLA availability.

A Priority 4 event occurs when a component issue occurs that has minimal impact (the client can continue to perform the job), or when an incident occurs that requires extended resolution time (e.g. parts on order) for which the client has an available workaround (e.g. another printer to use). Corporate IT will respond to Priority 4 events within two (2) business days of notification and work to resolve the issue so that total system availability metrics are met for each particular application. Ninety percent (90%) of Priority 4 events will be resolved within five (5) business days of the opening of a problem ticket or arrival of IT personnel on site (see Travel Time below). One business day refers to a 24-hour period excluding weekends or official company holidays.

1.1 Travel Time These performance standards apply to locations that have Information Technology personnel on site or Business Unit technical representatives acting on behalf of IT. At these locations, response timing begins when a service ticket is opened by the Help Desk and routed to the correct department. For all other locations, delivery of services will be delayed by the travel time to the location, if travel is required. While a service ticket will be created promptly and response resources dispatched as agreed upon, response timing begins when the IT personnel or proxy arrives on site.

2. SAP and Legacy Application and Database Availability Availability of SAP and legacy applications and databases designated as "critical" will be 99.8%* outside scheduled maintenance, which equates to less than 90 minutes unscheduled downtime per month. Availability of non-critical applications will be maintained on a "best effort" basis.

3. Critical Applications

The following applications have been designated as "critical" and will be available 99.8% outside scheduled maintenance, which equates to less than 90 minutes unscheduled downtime per month. Applications not designated as critical will be maintained on a "best effort" basis.

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unscheduled downtime per month. Applications not designated as critical will be maintained on a "best effort" basis.

CRITICAL APPLICATIONS	AVAILABILITY
Customer Information System (CIS).....	07:30 - 21:30 Mon-Fri 07:30 - 24:00 Sat-Sun
NAESB (formerly known as InsideAgent / (GISB) Internet Application)	
.....	24 x 7, except for 2 hours per week as needed after 19:00 for maintenance with the prior approval of client
Enterprise Application Integration (EAI).....	24X7 except for scheduled maintenance 3 hours on the first and third Sunday of the month with prior approval from clients
LD-Pro.....	07:00 - 19:00 Mon-Fri
Distribution Design Studio (DDS).....	07:00 - 19:00 Mon-Friday
LD-Track.....	07:00 - 19:00 Mon-Fri
Mobile Data System (MDSI).....	24 x 7, except 2 hours per week after 19:00 with agreement of client.
Field Collection System (FCS).....	
.....	24 x 7, except 2 hours per week after 19:00 with agreement of client.
Remittance System (CIS).....	24 x 5 Mon-Fri, 05:00 - 01:00 Sat-Sun
Underground Locating and Ticket Research Application.....	24x7
CNP Internet Web site (centerpointenergy.com).....	24x7 except 4 hours per month Sat 8:00 - Sat 12:00 for maintenance
CNP Intranet Web site (cnptoday.com).....	24x7 except 4 hours per month Sat 8:00 - Sat 12:00 for maintenance
SharePoint.....	24x7 except 12 hours per month Sat 8:00 - Sat 20:00 for maintenance
CNP - My Account Online 24/7 except for scheduled maintenance (servers & SAP) typically Fridays and Sundays	
Enterprise Document Management System (FileNet).....	24x7, except 18 hours per month Sat 18:00 - Sun 12:00 for maintenance
SAP(ECC,BW,SRM,CRM,EWM).....	24x7, except 4 hours per week Sunday 00:00 - 04:00 for maintenance
Advance Metering Systems (AMS).....	24X7 except for scheduled maintenance 8 hours on Sundays with prior approval from clients for the MDM and DCE. AMS Services scheduled maintenance 2 hours on week day mornings with prior approval from clients.
*If a "Storm Condition" is declared by Distribution Dispatching, the ADMS will remain available until mutually agreed upon by Distribution Dispatching and Technology Operations.	

4. Technical Recovery

In the event of a disaster, applications will be recovered within the Recovery Time and Recovery Point specified in the TO Application Portfolio. The Recovery Time Objective (RTO) is the total elapsed time (expressed in hours) from the event to restoration of the business operation. RTO includes the time required to evaluate the event, mobilize and deploy resources, and re-establish the environment at an alternate location. The RTO requires a recovery plan supported by the technical teams (see Provider Responsibilities above) assigned to recover the environment and applications. The Recovery Point Objective (RPO) is the amount of data that the business can afford to lose. The RPO is based on the data captured by the system since the last backup and off-site storage movement. An application that is backed up nightly has a 24-hour RPO. The formula to compute RTO is "frequency of backup + duration of backup + time to move off-site." Below is a list of 72-hour applications supporting this business unit. See TO's Application Portfolio for a complete list of application RTO/RPOs.

APPLICATION	RTO	RPO
InsideAgent (formerly known as GISB/NAESB).....	24	
Customer Information System	120	24
System of Record Lookup.....	120	24

Enterprise Application Integration (EAI).....	120 24
Distribution Design Studio (DDS)	144 24
Graphical Switching.....	120 48
OASIS /EAI.....	120 48
U.L.T.R.A. Metro Gas and Electric.....	120 24
CNP Internet Web site (centerpointenergy.com).....	120 24
CNP Intranet Web site (mycenterpointenergy.com).....	120 24
Enterprise Document Management System (FileNet).....	120 24
SAP (except GRC).....	120 24
SAP BW.....	120 24
AMS-Stratavia.....	120 24
AMS-Services.....	120 24
AMS-Radius.....	120 24
AMS-Pulsenet.....	120 24
AMS-DCE.....	120 24
AMS-MDM.....	120 24
Consolidated Deregulated Market Revenue Reporting.....	120 24
Darts 3.0.....	120 24
Industrial Commercial Accounts Receivable.....	120 24
MV90.....	120 24
Employee Storm Roster.....	120 24
Communications Management Systems.....	120 24
Marketing Information System.....	144 24
Demand and Energy Information System.....	144 24
Meter Set Inquiry System.....	144 24
Competitive Retailer Information Portal.....	144 24
Regulatory Electronic Mgmt System.....	144 24
Consolidated Joint Trenching.....	144 24
Regulatory Load Data Analysis System (LDA).....	144 24
RDD-FileNet Import.....	144 24
RDD-PUC Extract.....	144 24
RDD to FileNet Linker.....	144 24
Riskmaster.....	144 24
Teamconnect Enterprise.....	144 24

Pricing Methodology:

1. General Problem Resolution

Resolution of Service Request tickets opened by the Business User Support will be measured according to severity level.

A Severity Level 1 event occurs when a designated business critical application is unavailable in total or at a designated critical site or a significant "safety event" occurs which requires immediate action. The TO Technology Service Desk maintains a list of designated critical sites and applications.

Ninety percent (90%) of Severity Level 1 events will be resolved within four (4) hours of the opening of a Service Request ticket or arrival of TO personnel on site (see Travel Time below). Severity Level 1 events are provided 24x7 TO support. All downtime resulting from a Severity Level 1 event is counted against SLA availability. In the event of multiple, concurrent Severity Level 1 problems under the responsibility of the same TO work group, TO will prioritize the problems based on available resources and resolve the problems on a "best effort" basis. A Severity Level 2 event occurs when a component or function of a system or business critical application is unavailable. (See below for a list of critical applications.)

A Severity Level 2 event also occurs when a designated business critical application is unavailable to BU location(s) that have not been designated as critical. Ninety percent (90%) of Severity Level 2

events will be resolved within one (1) business day of the opening of a Service Request ticket or arrival of TO personnel on site (see Travel Time below). One business day refers to a 24-hour period not including weekends or official company holidays. Severity Level 2 events are provided TO support between 7:00 a.m. and 5:00 p.m., Monday - Friday. Downtime during these periods is counted against SLA availability.

A Severity Level 3 event occurs when a component problem occurs which impacts an individual's ability to perform work or a procedural problem has significant potential to impact TO's ability to deliver to the client. Ninety percent (90%) of Severity Level 3 events will be resolved within three (3) business days. One business day refers to a 24-hour period not including weekends or official company holidays.

A Severity Level 4 event occurs when a component problem occurs which has minimal impact (the client can continue to perform the job), or a problem occurs which requires extended resolution time (e.g. parts on order) for which the client has an available work around (e.g. another printer to use).

Ninety percent (90%) of Severity Level 4 events will be resolved within five (5) business days. One business day refers to a 24-hour period not including weekends or official company holidays.

1.1 Travel Time

These performance standards apply to locations that have Technology Operations personnel on site or Business Unit technical representatives acting on behalf of TO. At these locations, response timing begins when a service ticket is opened by the Technology Service Desk and routed to the correct department. For all other locations, delivery of services will be delayed by the travel time to the location, if travel is required. While a service ticket will be created promptly and response resources dispatched as agreed upon, response timing begins when the TO personnel or proxy arrives on site.

2. SAP and Legacy Application and Database Availability

Availability of applications and databases designated as "critical" will be 99.8% outside scheduled maintenance, which equates to less than 90 minutes unscheduled downtime per month.

Availability of non-critical applications will be maintained on a "best effort" basis. Application-related problem calls to the Business Technology Support will be resolved according to severity level (see General Problem Resolution above).

3. Critical Applications

The following applications have been designated as "critical" and will be available 99.8% outside scheduled maintenance, which equates to less than 90 minutes unscheduled downtime per month. Applications not designated as critical will be maintained on a "best effort" basis.

CRITICAL APPLICATIONS	AVAILABILITY
Billing Expert System (BES).....	08:00 - 17:00 Mon-Fri
Customer Information System (CIS).....	07:30 - 21:30 Mon-Fri
	07:30 - 24:00 Sat-Sun
NAESB (formerly known as InsideAgent / (GISB) Internet Application)	24 x 7, except for 2 hours per week as needed after 19:00 for maintenance with the prior approval of client
Enterprise Application Integration (EAI).....	24x7 except for scheduled maintenance 3 hours on the first and third Sunday of the month with prior approval from clients
LD-Pro.....	07:00 - 19:00 Mon-Fri
LD-Track.....	07:00 - 19:00 Mon-Fri
Mobile Data System (MDSI).....	24 x 7, except 2 hours per week after 19:00 with agreement of client.
Outage Analysis System (OAS) (mainframe).....	05:00 - 02:00 Tue-Fri*, 05:00 - 01:00 Sat - Mon*
Remittance System (CIS).....	24 x 5 Mon-Fri, 05:00 - 01:00 Sat-Sun
Underground Locating and Ticket Research Application.....	24x7
CNP Internet Web site (centerpointenergy.com).....	24x7 except 4 hours per month Sat 8:00 - Sat 12:00 for maintenance

CNP Intranet Web site (mycenterpointenergy.com).....24x7 except 4 hours per month Sat 8:00 - Sat 12:00 for maintenance
 SharePoint.....24x7 except 12 hours per month Sat 8:00 - Sat 20:00 for maintenance
 CNP - My Account Online 24/7 except for scheduled maintenance (servers & SAP) typically Fridays and Sundays
 CNP - Customer Self Service 24/7 except for scheduled maintenance (servers & SAP) typically Fridays and Sundays
 Enterprise Document Management System (FileNet).....24x7, except 18 hours per month Sat 18:00 - Sun 12:00 for maintenance
 SAP(ECC,BW,SRM,CRM,EWM).....24x7, except 4 hours per week Sunday 00:00 - 04:00 for maintenance
 *If a "Storm Condition" is declared by Distribution Dispatching, OAS online will remain available until mutually agreed upon by Distribution Dispatching and Technology Operations.

4. Technical Recovery

In the event of a disaster, applications will be recovered within the Recovery Time and Recovery Point specified in the TO Application Portfolio. The Recovery Time Objective (RTO) is the total elapsed time (expressed in hours) from the event to restoration of the business operation. RTO includes the time required to evaluate the event, mobilize and deploy resources, and re-establish the environment at an alternate location. The RTO requires a recovery plan supported by the technical teams (see Provider Responsibilities above) assigned to recover the environment and applications. The Recovery Point Objective (RPO) is the amount of data that the business can afford to lose. The RPO is based on the data captured by the system since the last backup and off-site storage movement. An application that is backed up nightly has a 24-hour RPO. The formula to compute RTO is "frequency of backup + duration of backup + time to move off-site." Below is a list of 72-hour applications supporting this business unit. See TO's Application Portfolio for a complete list of application RTO/RPOs.

APPLICATION	RTO	RPO
InsideAgent (formerly known as GISB/NAESB).....	24	N/A
Customer Information System TDU.....	120	24
System of Record Lookup.....	120	24
Enterprise Application Integration (EAI).....	120	24
Remittance System - CIS.....	120	24
OASIS / CR Outage Option 1.....	120	0
OASIS / Outage Twenty First Century.....	120	0
Billing Expert System (Lodestar).....	120	24
LD-Pro / LD-Track.....	120	24
OASIS / Outage Analysis - MF.....	120	24
OASIS / Outage Communication System.....	120	24
OASIS / Outage Inquiry System.....	120	24
OASIS / Graphical Switching.....	120	48
OASIS /EAI.....	120	48
Underground Locating & Ticket Research.....	120	24
CNP Internet Web site (centerpointenergy.com).....	120	24
CNP Intranet Web site (mycenterpointenergy.com).....	120	24
Enterprise Document Management System (FileNet).....	120	24
SAP (except e-recruitment & GRC).....	120	24
SAP BW.....	120	24
Altra Gas Management.....	120	24
Price Load Repository.....	120	24
CES Online.....	144	24

1. Programming

Programming Usage of this service is determined by estimating the work effort required to support ongoing baseline activities. Costs are calculated by estimating the number of full-time employees

(FTEs) and contractors required for the baseline applications for each given business unit. The number of available annual work hours is considered to be 1720 per FTE (2080 available hours in the year minus 360 hours for vacations, holidays, illness, and general training).

2. Billable Hour Rate

The billable hour rate is calculated by dividing the total incurred applications budget by the total number of billable hours.

3. Residuals

Residual amounts are cleared monthly based on planned activities

4. Rent & Depreciation

Rent and depreciation associated with each service are included in the total cost of the service.

The service rates applied to the BU's volumes per service include rent and depreciation.

Service Cost Drivers:

Application maintenance costs can be reduced by:

1. Decommissioning applications that are no longer in heavy use by the BU.
2. Adhering to mutually agreed-upon legacy decommissioning schedules.
3. Reducing the number and frequency of jobs to be run.
4. Reducing the amount of data stored online for a given application.
5. Moving toward one of three common databases (DB2, Oracle, SQL) rather than remaining with a proprietary database.

Service Provider Initiatives:

Initiatives and/or Project implementations may impact production environments for durations outside normal Block Maintenance Times. In those instances, Technology Operations will notify the affected business organizations in advance, and will work with business areas to align required downtime such that business impacts are minimized



CenterPoint Energy Service Company, LLC
Service Level Agreement
The best source of business services for CenterPoint Energy clients.

Year: 2018

Service Provider Information

Company: CenterPoint Energy Service Co LLC
Organization: CNP Technology Operations
Location: Houston
Center: Technology Operations
Service: Technology Support Services

Business Unit Information

Business Unit: Houston Electric

Scope of Service

These service levels apply to support for hardware and software acquired and installed in CenterPoint Energy offices and other contracted locations. These service levels apply only to CenterPoint Energy production systems and not test or development environments. Support of test and development environments will be on a "best effort" basis only and will not be factored into performance calculations. Technology Operations (TO) reserves the right to temporarily redirect test resources for other purposes when deemed necessary.

1. Technical Support Services includes the following bundled Desktop Data Device services

1.1 Business Technology Services

Consulting and testing of new products are performed. The service also manages desktop images and standards. This service is also responsible for pushing Microsoft Patches and Updates to corporate computers, as well as managing and supporting Video Streaming events. This service includes the distribution of applications and management of workstation policies and user profiles for all workstations (office desktops and mobile data workforce computers).

1.2 Business User On-Site Support

This sub-service consists of first and second-level Technology Operations support of office desktop computers and mobile data workforce computers. Office desktop support provided includes hardware, software, printers, operating system, and network. Office desktop support includes visits to the business user's workstation as necessary. Mobile data computer support includes installation and support of mobile data computer hardware and software. Mobile data workforce support includes visits to the mobile data user's vehicle or office as necessary.

1.3 Enterprise Network Services

This sub-service applies to business unit locations that utilize VPN (Virtual Private Network) technology or have dedicated circuits connected to a TO-managed router for connectivity to the corporate network. This service provides centralized support for network equipment (routers, switches, load balancers, diagnostic systems) providing connectivity to the server farms located at CNP Data Centers and designated facilities, as well as network connectivity for remote routers at business user locations. This service also provides Internet access, software maintenance, hardware upgrades, 24x7 operational support, diagnosis, and resolution. If problems arise, Technology Operations will perform root cause analysis to determine whether the problem is the result of loss of building power, cable cuts, equipment failure, carrier outage, or other occurrences. Technology Operations will determine the necessary course of action, dispatch the appropriate resources, and coordinate corrective procedures until the problem is resolved.

1.4 Local Area Network (LAN) Services

This sub-service manages servers that allow business user to access business applications, create files, and print documents. The service provides each business user a secured account that is unique to each business user. Maintenance of the LAN infrastructure including planning, standards, and configuration is handled by LAN Services for multiple locations.

1.5 Technology Service Desk

The Technology Service desk sub-service provides the first point of contact for business users with technical issues and requests. The Technology Service Desk will receive, record, resolve or assign/dispatch, monitor, and track all issues/requests received. Business users may contact the Service Desk through the Self-Service Portal or by telephone.

1.6 LAN Services Specific

This service identifies hardware and software that is managed by Technology Operations and is unique to the business unit. The service provides the use and support of the Microsoft servers directly attributable to specific business units, along with related hardware and software, staff and environmental elements. Included are the hardware systems, data storage, (i.e. tape, disk), automated tape libraries, operating system and related software, as well as operations and technical support functions. This service also includes any specialized software that is required by the business unit.

1.7 Business Technology Basic Services

This sub-service assists in procuring personal computers and peripheral hardware for business users and responsible for the Life Cycle management of business technology equipment; which includes acquisition for large-scale replacements to individual computer requests and Asset Management. On-site warranty repair services are performed in these services; Warranty repairs for remote areas are handled by third-party contractors. This service also provides Mobility Services which includes New Requests, Upgrades, Replacements, Reassignments and management of Cellular Pooling. Business users needing these types of services will contact the Technology Service Desk either by telephone or via the Self-Service portal. Business Technology Basic Services will in turn receive the service request and determine the requirements based on the business user's job requirements while adhering to Computer and Mobile Management Standards. This service also includes purchase and management of Multi-Function Devices and the relocation of computer hardware (Moves) at the request of facilities or the business user's request and the coordination of material recovery and disposal.

Responsibilities

Service Provider:

1. Nonstandard Hardware/Software

The Corporate Technology Review Council (CTRC), comprised of management representation from both Business Units and Technology Operations, have delegated responsibility to develop and enforce CenterPoint Energy Technology Operation standards to the Solutions Review Board (SRB). All Technology Operations work requests involving new or nonstandard technology will require an SRB review as part of the Technology Operations methodology and process. SRB will assess and recommend new or nonstandard technology consistent with the SRB assessment processes and procedures. The business user may appeal SRB decisions to either the CIO or the CTRC. The CTRC recognizes the potential support and financial implications of nonstandard technology. Further information can be found under the Technology Operations SharePoint forum.

1.1 Unsupported Hardware/Software

Technology Operations support for hardware or software which is unsupported by the vendor will be provided on a "best effort" basis and will not be included in SLA performance calculations.

1.2 Application Removal

Technology Operations reserves the right to remove from production, without prior notice, any applications which cause server or network problems or failures.

2. Maintenance

Preventive maintenance and upgrades of an enterprise nature will be conducted during Block Maintenance Time (BMT). Such maintenance will be excluded from availability calculations and will require no advance notification (except for Distribution Dispatching/Outage which will be notified by Computer Operations prior to mainframe BMT). System access will be unavailable for business use during BMT. The Business Unit or Technology Operations management may issue a request to have the application processing schedule and/or online availability schedule altered on a given

date. Such mutually-agreed-upon revisions will not be counted as downtime against the Service Level Agreement. Changes to application processing schedules and/or online availability schedules will be documented according to Technology Operations Change Management System. Technology Operations also will work with the Business Units to coordinate maintenance to minimize downtime on any given date.

BMT for the mainframe environment is 03:00 - 06:00 every other Sunday.

BMT for SAP (Unix hardware and application) is 00:00 - 04:00 Sunday.

BMT for Telecommunications/Network is 01:00 - 05:00 Saturday.

BMT for Wintel servers is 00:00 - 06:00 Friday and Sunday.

BMT for Linux servers is 00:00 - 06:00 Friday and Sunday.

BMT for UNIX servers is 18:00 - 24:00 Saturday.

2.1 Maintenance Outside Block Time

Business unit-driven projects approved by the CTRC, essential infrastructure and environmental upgrades, and preventive maintenance may require outages or reboots outside or beyond scheduled Block Maintenance Time (BMT). Site-specific maintenance may be conducted during regular business hours with business unit approval and coordination. Maintenance conducted outside BMT will be coordinated and scheduled (usually during slow or weekend periods) with the business unit's designated representative, will be subject to postponement in the event of significant storm activity or gas outage, and will be excluded from availability calculations if the business unit agrees to do so.

2.2 Communication of Changes

Changes to the production infrastructure environment will be communicated to business users according to Technology Operations Change Management System. A Corporate Communiqué may be issued for infrastructure changes designated risk level 1 or 2 with widespread potential impact.

2.3 Downtime Statistics

Business units may obtain access to available statistics indicating the number, frequency, timing, duration, etc. of Technology Operations service outages -- planned and unplanned, approved and unapproved, during and outside Block Time.

3. Problem Resolution

The Technology Service Desk will receive, record, resolve or assign/dispatch, monitor, and track all Technology Operations related incidents and service requests. A service ticket will be created for all incidents and requests. Standard Technology Operations hours of operation are Monday - Friday 07:00 - 17:00 (excluding holidays). Afterhours support will be provided only for critical production systems at designated critical sites. The after-hours TSCC hotline has been established for designated representatives at critical sites to address critical applications, functions and production system issues. On-call Technology Operations personnel and a designated business unit representative will be notified upon entry of any critical problem in Technology Operations problem management system. The Technology Service Desk maintains a list (provided by Business Units) of designated critical sites, applications, and business unit representatives. Updates to this list (which is available on request) will be accepted only from each BU's designated CTRC member. In the event of multiple concurrent critical problems under the responsibility of the same Technology Operations work group, Technology Operations will prioritize the problems based on available resources and resolve the problems on a "best effort" basis.

4. Performance Reporting

Technology Operations will track and report service performance monthly. Service performance will be cumulative: each standard will be met or not met on an annual basis.

5. Emergency Conditions

This agreement will be suspended for a mutually-agreed-upon time in cases of gas or power outages, "acts of God," declaration by the company of an "Emergency Condition," or initiation of Technical Recovery procedures -- unless otherwise stated in the agreement.

Business Unit:

1. Nonstandard Hardware/Software

The Performance Standards described below apply only to CenterPoint Energy standard hardware and software that has been approved by the Solutions Review Board (SRB). Additional support costs of nonstandard equipment authorized for implementation will be the responsibility of the Business unit (BU). In addition, nonstandard hardware and software are not covered by the terms of this Service Level Agreement, and nonstandard items will not be factored into any SLA computations. Unsupported nonstandard software runs the risk of being lost in cases in which re-imaging is required.

2. Maintenance

The Business Unit or Technology Operations management may issue a request to have the maintenance schedule altered on a given date. Such mutually-agreed-upon revisions will not be counted as downtime against the Service Level Agreement. If the business unit requests a delay or postponement of Block Maintenance Time, time will be added to BMT equal to the length of the delay. For example, if the start of BMT is delayed from 2 a.m. to 3 a.m., the conclusion of BMT will be 7 a.m. instead of 6 a.m. If BMT is canceled altogether on a given date, Technology Operations may bring down the system prior to the next scheduled BMT at a time to be negotiated with the business unit for whatever time required up to the usual duration of BMT.

3. Server Repair

Repair of business-owned servers will be funded by the business unit, with servers rebuilt or replaced on an individual basis.

4. Problem Resolution

The following Performance Standards are based upon the assumption that user-identified problems are promptly reported to the Technology Service Desk (713) 207-HELP (4357) or 1-888-207-HELP. Problems will be addressed only after the creation of a service ticket.

5. Installations and Large-scale Relocations

Standard hardware unit installations will be conducted by an in-house certified Technology Operations technician. A certified Value-Added Reseller (VAR) may be retained for large-scale installations. In such cases, the cost for the installations will result in additional charges which will be billed directly to the business unit. A standard hardware unit is defined as a PC, printer, scanning device, or laptop with docking station. Relocations of more than five (5) units will be handled by Facilities Management. Relocation of more than ten (10) units will be handled by a relocation company and will result in relocation charges to the business unit. Technology Operations will assist in all relocations.

6. Server Repair

Repair of business-owned servers will be funded by the business unit, with servers rebuilt or replaced on an individual basis.

Performance Standards:

1. General Problem Resolution

Resolution of Incident Management (IM) tickets opened by the Technology Service Desk will be measured according to Internal Priority level.

A Priority 1 event occurs when a designated business critical application is unavailable in total or at a designated critical site, or when a significant "safety event" occurs that requires immediate action. The Technology Service Desk maintains a list of designated critical sites and applications. Updates to this list will be accepted only from the business unit's Business Technology Support Manager.

Technology Operations will respond to Priority 1 events within 30 minutes of notification and work to resolve the issue so that total system availability metrics are met for each specific application. Priority 1 events are provided 24x7 TO support. All downtime resulting from a Priority 1 event is counted against SLA availability. In the event of multiple concurrent Priority 1 incidents under the

responsibility of the same Technology Operations work group, Technology Operations will prioritize the incidents based on available resources and resolve them on a "best effort" basis. A Priority 2 event occurs when a component or function of a system or business critical application is unavailable. (See the Applications SLA for a list of critical applications or request one from the Technology Service Desk) A Priority 2 event also occurs when a designated business critical application is unavailable to BU location(s) that have not been designated as critical. Technology Operations will respond to Priority 2 events within 1 business hour of notification and work to resolve the issue so that total system availability metrics are met for each specific application. Ninety percent (90%) of Priority 2 events will be resolved within one (1) business day of the opening of a problem ticket or arrival of Technology Operations personnel on site (see Travel Time below). One business hour refers to a 60-minute period between 7:00 a.m. and 5:00 p.m. excluding weekends and official company holidays. Priority 2 events are provided Technology Operations support during business hours Monday through Friday (excluding weekends and holidays). Downtime during these periods is counted against SLA availability.

A Priority 3 event occurs when a component issue occurs that impacts an individual's ability to perform work or when a procedural issue has significant potential to impact Technology Operations ability to deliver service to the business user. Technology Operations will respond to Priority 3 events within 1 business day of notification and work to resolve the issue so that total system availability metrics are met for each application. Ninety percent (90%) of Priority 3 events will be resolved within three (3) business days of the opening of a problem ticket or arrival of Technology Operations personnel on site (see Travel Time below). Priority 3 events are provided Technology Operations support during business hours Monday through Friday (excluding weekends and holidays). Downtime during these periods is counted against SLA availability.

A Priority 4 event occurs when a component issue occurs that has minimal impact (the business user can continue to perform the job), or when an incident occurs that requires extended resolution time (e.g. parts on order) for which the business user has an available workaround (e.g. another printer to use). Technology Operations will respond to Priority 4 events within two (2) business days of notification and work to resolve the issue so that total system availability metrics are met for each application. Ninety percent (90%) of Priority 4 events will be resolved within five (5) business days of the opening of a problem ticket or arrival of TO personnel on site (see Travel Time below). One business day refers to a 24-hour period excluding weekends or official company holidays.

1.1 Travel Time

These performance standards apply to locations that have on site Technology Operations personnel. At these locations, response timing begins when a service ticket is opened and routed to the correct department. For all other locations, delivery of services will be delayed by the travel time to the location, if travel is required. While a service ticket will be created promptly and response resources dispatched as agreed upon, response timing begins when the Technology Operations personnel or their proxies arrive on site.

2. Repair and Maintenance

Repair and maintenance of warranty premise equipment will be completed according to severity level (see General Problem Resolution above). Typically, resolution will occur within three (3) business days of opening an Incident ticket (Level 3) unless circumstances dictate otherwise. One business day refers to a 24-hour period not including weekends or official company holidays.

3. Network Availability

Availability of all, aggregated network circuits and communication devices will be at least 99.9% at BU designated critical sites and 99% at other, non-critical sites. Critical sites are provided 24 x 7 support; 99.9% equates to less than 44 minutes of unplanned downtime per month. Non-critical sites are supported from 7:00 a.m. - 5:00 p.m., Monday - Friday, except official company holidays; 99% equates to less than 1 hour, 54 minutes per month of unplanned downtime during 7-5/M-F. Downtime calculations exclude scheduled maintenance. Downtime is calculated using data gathered from network management tools. Carrier outages or third-party failures will not be counted against SLA calculations.

4. Access Rights

Ninety percent (90%) of mainframe, LAN, e-mail, SAP, and VPN access rights will be granted within one (1) business day of receipt of a properly completed, authorized request. One business day refers to a 24-hour period not including weekends or official company holidays. To ensure accounts are opened by the desired time, complete authorized requests should be submitted at least one (1) business day in advance of the desired time of access.

5. Technology Service Desk First Call Resolution- Seventy-Five percent (75%) of calls will be successfully resolved on first call / contact with Service Desk analyst.

6. Server Availability

Server Availability will be at least 99.9% at BU-designated critical sites and 99% at other, non-critical sites. Critical sites are provided 24 x 7 support; 99.9% equates to less than 44 minutes of unplanned downtime per month. Non-critical sites are supported 7:00 a.m. - 5:00 p.m., Monday - Friday (except official company holidays); 99% equates to less than 1 hour, 54 minutes per month of unplanned downtime during 7-5/M-F. Downtime calculations exclude scheduled maintenance. In situations where redundant hardware, communications, or storage facilities are in place to provide "failover" or alternate host processing/routing capabilities to enhance availability, outage time will only be charged for time, (if any) that the functionality/application is totally unavailable to the business users. Server unavailability due to onsite power outages for any reason will not be charged against the SLA.

7. Sample Availability Calculation (99.9% and 99%)

Note that problem resolution provides 24x7 support for access to critical applications from designated critical locations only. Consequently, the calculation varies by critical versus non-critical sites.

Critical Site = 31 days x 24 hours - 16 hours block time = 728 hours per month. $728 \times 0.999 = 727.27$ target hours of availability. $728 - 727.27 = 0.73$ hours (43.7 minutes) allowable downtime.

Non-Critical Site = 21 days x 9 hours (7 a.m. to 5 p.m.) = 189 hours per month. $189 \times 0.99 = 187.11$ target hours of availability during M-F/7-5 business days. $189 - 187.11 = 1.89$ hours (1 hour, 54 minutes) allowable downtime per month during M-F/7-5 business days.

Pricing Methodology:

1. Desktop Data Device charges will be allocated based on the number of login IDs for a given BU.

1.1 Technology Service Desk charges are allocated based on total Technology Operations O&M spend associated with the Desktop Data Device activity

2. Residuals

Residual amounts are cleared monthly based on planned activities.

3. Rent & Depreciation

Rent and depreciation associated with each service are included in the total cost of the service. The service rates applied to the BU's volumes per service include rent and depreciation.

Service Cost Drivers:

1. Business Technology Services

1.1 Maintain standardized desktop images

1.2 Maintain standardized operating system(s) of Windows 10 (64 bit) and Windows 7 (32 & 64 bit). Migration in progress to new standard Windows 10 OS and Windows 7 OS will be declining.

1.3 Standardize PC - enterprise image and additional applications based on BU requirements and defined business user profiles (no customization)

1.4 Standardize equipment and allow only Technology Operations-approved equipment to be connected to the network

1.5 Managed Workstation Environment - Local administrator access to workstations will be restricted.

1.6 Centralized Software Upgrade & Deployment - Software upgrades and deployment through a central managed push or pull process

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- 1.7 Operations-approved equipment to be connected to the network
 2. Business User On-Site Support
 - 2.1 Ensure support staff have proper training / certifications
 - 2.2 Outsource site support if cost/quality justified
 - 2.3 Hardware repair service vendor if justified
 3. Enterprise Network Service
 - 3.1 Consolidate servers across Business Units resulting in a reduced number of network connections, decreasing network hardware requirements
 - 3.2 A reduction in the number of sites would reduce costs by eliminating network hardware
 - 3.3 Most major sites have been migrated to a minimum of 10 MB MPLS. Some larger sites have bandwidths greater than 10 MB based on # of users and data use requirements. 10 MB MPLS offers the most cost efficient minimum bandwidth requirements to support future technology such as Microsoft Office 365 and cloud technology.

Service Provider Initiatives:

2018 Technology Support Services initiatives include:

Managed Workstation - Completion of restriction of administrative rights on all enterprise workstation. Business Users will only be able to install applications to workstations via Software Center or special access permissions granted from Technology Operations personnel.

Windows 10 Deployment - All non Windows10 devices with warranty expire dates prior to the end of 2019 will be replaced with new Windows 10 devices. Non-windows 10 devices with warranty expire date 2020 or later will be reimaged to Windows10. This work will be done by a 3rd party vendor to be complete by end of 2018.

Office 365 ProPlus - Completion of deployment of Office 365 ProPlus to all enterprise workstations. This initiative began in 2017 and will complete this year.

Office 365 Exchange On-line - All current on-premise email accounts will be migrated to Microsoft's Cloud based Exchange email environment.

New Mobile Workforce Device Deployment - Deploying new Panasonic Toughbook CF-33 devices to all mobile field workforce employees for both Gas and Electric. Deployments will start in 2018 and will end no later than mid-2019.

SACM - Service Asset and Configuration Management

Implement Asset Management for Desktop Hardware and Infrastructure, including Software Management within the Technology Operations organization. Establish processes and configurations through ServiceNow as the centralized repository, for support of the end to end lifecycle methodology. Operational Reliability, Resiliency, and Recoverability is delivered through efficient and effective Asset Management ITIL recommended processes and configurations to provide improved discovery and tracking of assets and software, better analysis for license compliancy and hardware inventory, enforcing controlled processes and achieving cost-savings for the corporation. Strategically focusing on Cyber-Security and Optimization to mitigate critical risks, and transform the delivery of technology services.



CenterPoint Energy Service Company, LLC
Service Level Agreement
The best source of business services for CenterPoint Energy clients.

Year: 2018

Service Provider Information

Company: CenterPoint Energy Service Co LLC
Organization: CNP Technology Operations
Location: Houston
Center: Technology Operations
Service: Telecommunications

Business Unit Information

Business Unit: Houston Electric

Scope of Service

These service levels apply to support for hardware and software acquired and installed by Technology Operations (TO) in CenterPoint Energy offices and other contracted locations. These service levels apply only to CenterPoint Energy production systems and not test or development environments. Support of test and development environments will be on a "best effort" basis only and will not be factored into performance calculations. TO reserves the right to temporarily redirect test resources for other purposes when deemed necessary.

1. Telephone Basic Line

Telephone Basic Line service includes support and maintenance of analog, digital and VoIP line connections to CenterPoint Energy's private telephone switch network. Telephone basic line service includes the following: daily production, service management, cost management, problem resolution (24x7 for Severity 1 problems), chargeback billing, preventive maintenance, vendor management, capacity planning, releases/upgrades, long distance access, 911 emergency access, voice messaging where available, technical research, and audio conference bridge service.

2. Telecom Move/Add/Change

This service includes labor for telephone, fax, modem, and ISDN trunk programming, installation, removal, or any change other than a repair. Programming phone features is also included in this service.

Responsibilities

Service Provider:

1. Nonstandard Hardware/Software

The Corporate Technology Review Council (CTRC), comprised of management representation from both Business Units and TO, have delegated responsibility to develop and enforce CenterPoint Energy Technology Operations standards to the Technology Assessment Council (TAC). All TO work requests involving new or nonstandard technology will require a TAC review as part of the TO methodology and process. TAC will assess and recommend new or nonstandard technology consistent with the TAC assessment processes and procedures. The client may appeal TAC decisions to either the CIO or the CTRC. The CTRC recognize the potential support and financial implications of nonstandard technology. Further information can be found under the TO SharePoint forum.

1.1 Unsupported Hardware/Software TO support for hardware or software which is unsupported by the vendor will be provided on a "best effort" basis and will not be included in SLA performance calculations.

2. Maintenance

Preventive maintenance and upgrades of an enterprise nature will be conducted during Block Maintenance Time (BMT). Such maintenance will be excluded from availability calculations and will require no advance notification (except for Distribution Dispatching/Outage which will be notified

by Computer Operations prior to mainframe BMT). System access will be unavailable for client use during BMT. The Client or TO management may issue a request to have the application processing schedule and/or online availability schedule altered on a given date. Such mutually-agreed-upon revisions will not be counted as downtime against the Service Level Agreement. Changes to application processing schedules and/or online availability schedules will be documented according to Technology Operation's Change Management System. TO also will work with the Business Units to coordinate maintenance to minimize downtime on any given date.

BMT for the mainframe environment is 03:00 - 06:00 every other Sunday.

BMT for SAP (Unix hardware and application) is 00:00 - 04:00 Sunday.

BMT for Telecommunications/Network is 01:00 - 05:00 Saturday.

BMT for Wintel servers is 00:00 - 06:00 Friday and Sunday.

BMT for Linux servers is 00:00 - 06:00 Friday and Sunday.

BMT for UNIX servers is 18:00 - 24:00 Saturday.

2.1 Maintenance Outside Block Time

Business-unit-driven projects approved by the CTRC, essential infrastructure and environmental upgrades, and preventive maintenance may require outages or reboots outside or beyond scheduled Block Maintenance Time (BMT). Site-specific maintenance may be conducted during regular business hours with business unit approval and coordination. Maintenance conducted outside BMT will be coordinated and scheduled (usually during slow or weekend periods) with the client's designated representative, will be subject to postponement in the event of significant storm activity or gas outage, and will be excluded from availability calculations if the client agrees to do so.

2.2 Communication of Changes

Changes to the production infrastructure environment will be communicated to clients according to TO's Change Management System. A Corporate Communiqué may be issued for any change in the infrastructure designated a risk level 1 or 2 change with widespread potential impact.

2.3 Downtime Statistics

Clients may obtain access to available statistics indicating the number, frequency, timing, duration, etc. of TO service outages -- planned and unplanned, approved and unapproved, during and outside Block Time.

3. Problem Resolution

The Client Support Center (CSC) help desk will receive, record, resolve or assign/dispatch, monitor, and track all Technology Operations related trouble calls and service requests. A service ticket will be created for all problems and requests. Standard Client Support Center hours of operation are Monday - Friday 07:00 - 17:00. Afterhours support will be provided only for critical production systems at designated critical sites. A 24x7 hotline has been established for designated representatives at critical sites to address critical production system issues. On-call TO personnel and a designated client representative will be paged automatically upon entry of any critical problem in TO's problem management system. The CSC maintains a list (provided by BUs) of designated critical sites, applications, and client representatives. Updates to this list (which is available on request) will be accepted only from each BU's designated Business Unit Information Technologist (BUIT) representative.

In the event of multiple concurrent critical problems under the responsibility of the same TO work group, TO will prioritize the problems based on available resources and resolve the problems on a "best effort" basis.

4. Performance Reporting

Technology Operations will track and report service performance on a monthly basis. Service performance will be cumulative: each standard will be met or not met on an annual basis.

Emergency Conditions This agreement will be suspended for a mutually-agreed-upon time period in cases of gas or power outages, "acts of God," declaration by the company of an "Emergency Condition," or initiation of Technical Recovery procedures -- unless otherwise stated in the agreement.

Business Unit:

1. Telephones, Conference Phones, and Fax Machines

If a unit fails and cannot be repaired, or a department needs a new unit, the preference is to locate an item that can be moved from an existing area and redeployed. TO will work with the client to help identify equipment for redeployment. If none can be identified, the BU must authorize and pay for the purchase of a new unit.

2. Audio Conferencing

BUs are responsible for all long distance charges associated with audio conferencing. The company has limited facilities allocated on a first-requested, first-served basis. Some audio conferencing requests may have to be served by an outside vendor with the resulting cost paid by the BU.

3. Maintenance

The Client or TO management may issue a request to have the maintenance schedule altered on a given date. Such mutually-agreed-upon revisions will not be counted as downtime against the Service Level Agreement. If the client requests a delay or postponement of Block Maintenance Time (BMT), time will be added to BMT equal to the length of the delay. For example, if the start of BMT for is delayed from 00:00 a.m. to 01:00 a.m., the conclusion of BMT will be 05:00 a.m. instead of 04:00 a.m. If BMT is canceled altogether on a given date, TO may bring down the system prior to the next scheduled BMT at a time to be negotiated with the client for whatever time required up to the usual duration of BMT.

4. Problem Resolution

The following Performance Standards are based upon the assumption that user-identified problems are promptly reported to the Client Support Center at (713) 207-HELP (4357) or 1-888-207-HELP. Problems will be addressed only after the creation of a service ticket.

Performance Standards:

1. General Problem Resolution

Resolution of Incident Management (IM) tickets opened by the TO Client Support Center will be measured according to Internal Priority level.

A Priority 1 event occurs when a designated business critical application is unavailable in total or at a designated critical site, or when a significant "safety event" occurs that requires immediate action. The TO Client Support Center maintains a list of designated critical sites and applications. Updates to this list will be accepted only from the Business Unit Technical Directors.

Corporate TO will respond to Priority 1 events within 30 minutes of notification and work to resolve the issue so that total system availability metrics are met for each particular application.

Priority 1 events are provided 24x7 TO support. All downtime resulting from a Priority 1 event is counted against SLA availability. In the event of multiple concurrent Priority 1 incidents under the responsibility of the same TO work group, TO will prioritize the incidents based on available resources and resolve them on a "best effort" basis.

A Priority 2 event occurs when a component or function of a system or business critical application is unavailable. (See the Applications SLA for a list of critical applications or request one from the TO Client Support Center.) A Priority 2 event also occurs when a designated business critical application is unavailable to BU location(s) that have not been designated as critical.

Corporate TO will respond to Priority 2 events within 1 business hour of notification and work to resolve the issue so that total system availability metrics are met for each particular application.

Ninety percent (90%) of Priority 2 events will be resolved within one (1) business day of the opening of a problem ticket or arrival of TO personnel on site (see Travel Time below). One business hour refers to a 60-minute period between 7:00 a.m. and 5:00 p.m. excluding weekends and official company holidays. Priority 2 events are provided TO support during business hours Monday through Friday (excluding weekends and holidays). Downtime during these periods is counted against SLA availability.

A Priority 3 event occurs when a component issue occurs that impacts an individual's ability to perform work or when a procedural issue has significant potential to impact TO's ability to deliver

service to the client. Corporate TO will respond to Priority 3 events within 1 business day of notification and work to resolve the issue so that total system availability metrics are met for each particular application. Ninety percent (90%) of Priority 3 events will be resolved within three (3) business days of the opening of a problem ticket or arrival of TO personnel on site (see Travel Time below). Priority 3 events are provided TO support during business hours Monday through Friday (excluding weekends and holidays). Downtime during these periods is counted against SLA availability.

A Priority 4 event occurs when a component issue occurs that has minimal impact (the client can continue to perform the job), or when an incident occurs that requires extended resolution time (e.g. parts on order) for which the client has an available workaround (e.g. another printer to use). Corporate TO will respond to Priority 4 events within two (2) business days of notification and work to resolve the issue so that total system availability metrics are met for each particular application. Ninety percent (90%) of Priority 4 events will be resolved within five (5) business days of the opening of a problem ticket or arrival of TO personnel on site (see Travel Time below). One business day refers to a 24-hour period excluding weekends or official company holidays.

1.1 Travel Time

These performance standards apply to locations that have Technology Operations personnel on site or Business Unit technical representatives acting on behalf of TO. At these locations, response timing begins when a service ticket is opened by the Service Desk and routed to the correct department. For all other locations, delivery of services will be delayed by the travel time to the location, if travel is required. While a service ticket will be created promptly and response resources dispatched as agreed upon, response timing begins when the TO personnel or proxy arrives on site.

1.2 Response Time Suspension/Adjustment

Response timing will be suspended/adjusted under the following conditions:

- The client or contact is not available when a technician arrives for repair or to verify a repair was made
- An outside vendor is required to make repairs for fax machines or ISDN equipment connected from the wall jack to the desktop
- An outside vendor such as AT&T or SBC is required to make repairs to a telephone or ISDN line
- The Service Desk opens an old problem ticket for additional repairs not on a previous ticket (unless the original problem reoccurs)

2. Dial Tone Availability

Dial Tone Availability is defined as a state in which the switch is operating to receive a dial tone from an outside vendor or the internal CNP network. Dial tone availability of TO-provided basic telephone lines will be 99.9% at BU designated critical sites and 99% at other, non-critical sites. Critical sites are provided 24 x 7 support; 99.9% equates to less than 44 minutes of unplanned downtime per month. Non-critical sites are supported from 7:00 a.m. to 5:00 p.m., Monday - Friday, except official company holidays; 99% equates to less than 1 hour, 54 minutes per month of unplanned downtime during 7-5/M-F. Downtime calculations exclude scheduled maintenance. Availability is measured through telephone network reports and individual switch reports.

3. Telephone Basic Line Problem Resolution/Repairs

Telephone Basic Line issues will be diagnosed remotely if possible and dispatched when necessary with ninety-five percent (95%) of analog or digital line problems to be resolved within three (3) business days of being received by the CenterPoint TO Service Desk via telephone call or through the TO Web (Service Desk) intranet site. (One business day consists of twenty-four hours excluding weekends and official company holidays.) SLA reports are performed monthly through TO's problem management system.

4. Telecom Moves/Adds/Changes

Ninety-five percent (95%) of MAC service requests will be completed within five (5) business days (i.e. 120 hours excluding weekends and official company holidays) of being received by the CenterPoint TO Service Desk through the TO Web (Service Desk) intranet site.

Moves/Adds/Changes will be conducted during regular business hours (7:00 a.m. - 5:00 p.m.).

To ensure that service is provided at the required date, authorized requests should be submitted at least five (5) business days in advance of the desired date of service. In cases when infrastructure availability limits service delivery, a mutually-agreed-upon service date will be negotiated with the client's representative based on the time required to obtain the necessary additional equipment. In all cases, every effort will be made to provide service on a timely basis.

Response timing will be suspended/adjusted under the following conditions:

- The client or contact is not available when the technician arrives for a move or to verify a move was made
- Facilities Management changes information on the move list submitted to Technology Operations
- Information provided on the service ticket is inaccurate
- Telephone or electrical lines are not in place prior to a move
- The client requests that a move not be performed or asks the technician to return later.

SLA reports are performed monthly through TO's problem management system. The number of tickets completed on time (5 days) each month is divided into the total number of tickets and multiplied by 100 to determine the percentage successfully completed.

5. IVR Availability Interactive

Voice Response availability will be 99.9%, which equates to less than 44 minutes of unplanned downtime per month. Downtime calculations exclude scheduled maintenance. Availability is measured by dividing IVR uptime by the total amount of available time for the month and multiplying by 100.

6. OAS Callback System Processing

The Outage Analysis Callback System will process a minimum of 5,800 calls per hour.

8. Sample Availability Calculation (99.9% and 99%)

Problem resolution provides 24 x 7 support for access to critical applications from designed critical locations only. Consequently the calculation varies by critical versus non-critical sites.

Critical Site: 31 days x 24 hours - 16 hours block time = 728 hours per month. $728 \times 0.999 = 727.27$ target hours of availability. $728 - 727.27 = 0.73$ hours (43.7 minutes) allowable downtime.

Non Critical Site: 21 days x 9 hours (7 a.m. to 5 p.m.) = 188 hours per month. $188 \times 0.99 = 186.12$ target hours of availability during M-F/7-5 business days. $188 - 186.12 = 1.88$ hours (1 hour, 53 minutes) allowable downtime per month during M-F/7-5 business days.

Pricing Methodology:

1. Telephone Basic Line

Each telephone instrument, fax machine, or modem requires a dedicated port on the telephone network. Each connection counts as one unit. The volume of this service is determined by a percentage based upon the number of clients per billing unit divided by the total number of clients in the Houston PBX supported area. This percentage is then used to allocate a portion of the total Telecom expenditures for all lines to the billing unit.

2. Telecom Moves/Adds/Changes

Telecom Moves/Adds/Changes are billed monthly at an hourly rate for labor including consultation and technician time for services rendered as recorded on service request tickets

3. Residuals

Residual amounts are cleared monthly based on planned activities.

4. Rent & Depreciation

Rent and depreciation associated with each service are included in the total cost of the service. The service rates applied to the BU's volumes per service include rent and depreciation.

Service Cost Drivers:

1. Telephone Basic Line

1.1 Size of the network

-
- 1.2 Congestion resolution and re-routing call flows based on traffic patterns
 - 1.3 Maintaining interfaces to clients' special voice processing applications such as Predictive Dialing system, fax servers, and Automatic Call Distributions (ACD). This includes special routing implementation for various applications.
 - 1.4 Performing database backups, traffic reports, and applying software patch fixes to multiple voice processing platforms.
 - 1.5 Telephone network battery replacement and maintenance.
 - 2. Telecom Moves/Adds/Changes
 - 2.1 Minimize convenience moves
 - 2.2 Coordinate employee moves so that an employee is moved into a cubicle or office with an appropriate handset to avoid phone change outs.
 - 2.3 Plan moves well and minimizes last minute changes.

Service Provider Initiatives:



CenterPoint Energy Service Company, LLC
Service Level Agreement
The best source of business services for CenterPoint Energy clients.

Year: 2018

Service Provider Information

Company: CenterPoint Energy Service Co LLC
Organization: CNP Technology Operations
Location: Houston
Center: Technology Operations
Service: TO Cyber Security

Business Unit Information

Business Unit: Houston Electric

Scope of Service

Corporate Technology Security provides services necessary to plan and implement cyber security measures for the protection of personnel, assets, and ensure compliance with requirements of the Department of Homeland Security and other regulatory entities. These services include providing:

- * Standards for the installation and maintenance of electronic security systems in all business units, with special attention to critical infrastructure facilities.
- * 24/7 on call
- * Confidential cyber security investigations.
- * Provide DHS/SOX Security Clearances.
- * Security assessments.
- * Security monitoring and assessments of cyber systems in all business units, even those not installed or maintained by TO, to ensure compliance with CNP computer use polices. (Includes security inspection of servers, appliances, routers, modems, firewalls, etc.)
- * Secure Socket Layer encryption certificates/keys for servers, WEB applications and ERCOT access.

Responsibilities

Service Provider:

Provide required services in a timely and cost-effective manner using CNP security staff and/or external contractors.

Business Unit:

Contact TO Security to request or change security services.

Performance Standards:

KEY METRIC

TO security will operate the security controls with no significant deficiencies within industry average cost. TO security will provide bi-annual statistics of industry average security cost.

Pricing Methodology:

SERVICE BILLINGS

The Client Billing Plan reflects cost transfer pricing for the following:

- * The Cyber Security service is billed based on the total TO O&M spend allocated to each business unit.
- are cleared monthly by planned activities.

Service Cost Drivers:

Increase in national security threat levels.

Service Provider Initiatives:

Process Improvement

BUSINESS SERVICES 2018 BUDGET GUIDELINES

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- I. Budget Goals/Objectives
- II. Budget Requirements
- III. Common Budgeted Items
- IV. Capitalization of Software & Tangible Assets
- V. SAP Reports
- VI. References

ATTACHMENTS

- Attachment 1 – Budget Calendar
- Attachment 2 – Cost Element mapping for One Pay
- Attachment 3 – Cost Elements with Descriptions

BUSINESS SERVICES CONTACTS

<u>Name</u>	<u>Number</u>	<u>Area of Support</u>
Michelle Townsend	(713) 207-3113	Manager Business Services Planning & Perf Mgmt.
Darren Storey	(713) 207-4931	Manager Business Services
Sally Glaser	(713) 207-8784	Legal, Records Mgmt, Audit Services, Regulatory, Govt Affairs
Tom Roeller Yolanda Adams Atul Bhakta	(612) 321-5188 (713) 207-4390 (713) 207-7094	Technology Operations
Emily Fitts	(713) 207-8955	Human Resources, Finance, Public Affairs
Linda Diaz	(713) 207-3087	Executive Office
Steve Wallender	(713) 207-5174	Business and Operations Support
Nicole Clifford Brown	(713) 207-6458	System Support, Consolidated Business Services

WHAT'S NEW

- **Budget Guidance**

- All Functions should target a 2018 Controllable O&M Plan that has a growth rate no greater than 1.5% of a normalized June 2017 forecast. 2019-2022 O&M growth limited to 1.5% per year
- Labor costs should include a 3% competitive pay adjustment and a 2% labor offset reflecting turnover and the corresponding O&M impacts
- Technology Operations' Plan should strive to:
 - Achieve a \$75M run rate for **total** capital
 - Include benefits from Technology Operations projects in Business Units and Functions
- Strategic Plans (if applicable) to be reviewed at the same time as Financial Plans

- **Critical Dates:**

Functions input of 2018 O&M and Capital Plan in SAP plan version A00. (\$, activity quantities, headcount, SKFs)	6/30-7/21
Service Company 2018 activity rates calculated and allocations run	7/24-25
Functions Review/Adjust 2018 Plans	7/26-8/4
Service Company 2018 allocations run	8/7
Service Company Copy 2018 O&M Function Plans & Escalate for 2018-2021	8/8-9
Functions Review/Adjust 2018-2022 O&M and Finalize Capital Plans	8/10-11
BU/Functions Five Year Salary & Headcount Info to Benefits Accounting	8/14
Service Company 2018-2022 activity rates calculated and allocations run to BUs	8/14-15
2018-2022 Function Plans Available to Business Units	8/16
Functions Review Plans, meet with BU leadership and Adjust Plans As Needed	8/17-9/7
Benefit Accounting Provides Updated Benefits & Payroll Burden Rates	8/31
Service Company 2018-2022 rates and allocations run to BUs with updated payroll burden	9/8-11
Functions Financial & Strategic (if Applicable) Plans Due to Financial Planning	9/15
EC Review of Functions Financial Plans and Strategy Updates (includes TO, Regulatory and Customer Ops)	9/28-29
EC Review of Business Unit Strategic and Financial	10/11-13
Adjustments to 2018-2022 O&M and Capital Plan in SAP based on guidance provided by EC	10/10-16
Service Company and Business allocations run as needed	10/16-18
Final BU & Functions Strategic & Financial Plans Due Including Approved Tax Templates	10/24
Final EC Review BU Strategic & Financial Plans	10/30

- **Budget Input:**

2018-2021 Plan (A00) has been cleared. You can still access your last year's 2018-2021 data if you run your reports using plan version **P01**. If you have multiple cost centers, internal orders and/or wbs's that you are responsible for, please contact your Business Services budget coordinator to discuss your initial 2018 plan input options.

Your 2018 O&M plan data in A00 will be used to populate the 2019-2022 data in SAP. **We will work with our respective functional areas to identify specific cost objects to be copied. Only LABOR cost elements will be escalated. Non-labor cost elements will have to be adjusted manually for all out years. Please Note: Capital plans will not be copied or escalated. They must be manually planned.**

- **Employee Recognition & Awards:**

Cost centers should not plan for non-cash awards as Business Services will be coordinating the planning of such costs using a designated cost center at the functional level in the ENERGIZED BY YOU program. Cash awards however should continue to be planned at the individual cost center.

- **Enable MLP**

2018–2022 plans should reflect any anticipated Function cost run rates related to continued support to Enable Midstream, based on approved agreements.

- **Contributions & Memberships**

Details of approved Contributions and Memberships will be communicated by Community Relations.

- For questions regarding the Contributions and Memberships Budget Process, contact the Community Relations group
 - Diane Englet at 713.207.7166
 - Rasheda Carter at 713.207.7220
 - Bertie Turcios at 713.207.8874
- For access to the SharePoint site, contact Bertie Turcios at 713.207.8874
- For technical support, contact IT Help Desk at 713.207.4357

I. BUDGET GOAL/OBJECTIVE:

- **Financial Target**
Business Services should provide the level of service required by the business units at a competitive price. Please see the specific budget guidance provided by the EC in the What's New Section.
- **Service Company Reporting Requirements**
Continue individual time tracking and planning of all Service Company employees.

II. BUDGET REQUIREMENTS:

- All areas will be using SAP (**version A00**) to plan their 2018-2022 Budget.
- Budget input and updates in SAP will be the responsibility of the cost center/WBS/service managers and/or budget coordinators.
- Budget input will be by cost element on a monthly basis. Do not distribute a one-time payment over 12 months. Please see the guidelines established in the **Prepayments Policy** to determine expense recognition for payments in excess of \$200,000 per year or \$50,000 per quarter.
 - **NOTE:** Please consult the **Prepayment Policy** – Policy references are located in Section IV of this document.

➤ **Five-year Plan**

2018 O&M plan data in A00 will be used to populate the 2019-2022 data in SAP. **We will work with our respective functional areas to identify specific cost objects to be copied and escalated. Selected cost elements will only be copied and will not be escalated. These cost elements and any changes to the escalations must be made manually.** Escalation rates used for out-year planning and non-escalated cost elements are included as attachment 4.

Please Note: Capital plans will not be copied or escalated. They must be manually planned.

- Headcounts will be loaded in SAP using statistical key figures (SKFs). HEXMPT for exempt, HNEXMT for non-exempt, and HUNION for union, and HCONTR for contractors. Printed instructions are included in the Training Presentation on SharePoint.

III. Common Budgeted Items:

Labor

- Labor reports will be pulled by HR and sent to the appropriate management.
- Using the HR Labor report, the monthly amounts will be entered into SAP per cost center, per cost element (CE 517995 – Non-Exempt; CE 517999 – Exempt). Planning a portion of the labor cost in the non-productive cost elements (CE 515050 non-exempt and CE 515052 non-productive non-exempt) is not required.
- The HR Labor report does not show any approved personnel requisitions (i.e. open positions). Find an existing position similar to the open position. Then add the existing position salary & STI dollars to the cost center total.
- Areas that routinely experience turnover in positions need to plan salaries at a reduced rate to incorporate the effects of the turnover.
- 2018 -2022 headcount and salary information should be approved by Functional area leadership and in SAP by **August 14th** as this information will be sent to Payroll & Benefits Accounting for burden rate calculations.

Productive Labor Hours

Total productive hours are used to calculate the bill hour rates for cost centers billing hourly time. Total productive labor hours calculated below will be used in absence of historical data for planned billable hours.

Non-Productive Labor Hours per year based on the following assumptions:

Avg. Vacation/Holiday per FTE	220 hrs/yr.
Avg. Paid Absences per FTE	40 hrs/yr.
<u>Admin Activities/Staff Mtg per FTE</u>	<u>100 hrs/yr.</u>
TOTAL:	360 hrs/yr.

Available hours per year =	2080
<u>Less non-productive hours =</u>	<u>360</u>
Total productive labor hours =	1720

CPA

CPA adjustments at 3% are to be planned effective April 1st. Plan Union CPA adjustments per contract.

Attrition

A 2% labor offset reflecting turnover at the Function level will be entered by Business Services using CE 515000.

STI

Using the HR Labor report, the monthly amounts will be entered into SAP per cost center, per cost element (CE 515040 – Bonus/Incentive Exempt, CE 515042 – Bonus/Incentive Non-Exempt, 515044 Bonus/Incentive Union). The HR Labor report is pulling the employee's current STI level in SAP. STI must be planned as it is accrued each month, **not** as a one-time payment in March.

Burden

Burden will be calculated by Benefits Accounting. These costs will be populated in SAP within the appropriate cost centers by a system-generated program.

Severance

Severance costs are to be budgeted at the Cost Center level. Please discuss with your management and HR representative any severance plans prior to budgeting. (CE 515070 – Severance)

Overtime Meals

Overtime Meals and Call out Meals are to be considered as Other Compensation (CE 517992 – Non Exempt; CE 517996 – Exempt)

Employee Recognition & Awards administered thru ENERGIZED BY YOU

Non-cash awards to **employees** will now be planned for within a designated cost center at the functional level by Business Services.

Cash Awards (PIP awards) – will continue to be planned for within the individual cost centers.

Employee Service Awards

Service Awards costs for 2018 will be planned and populated by Human Resources into a designated functional area cost center (i.e., Finance, TO, etc.) Special recognition awards/"Energized by You" cash awards will be budgeted at the cost center level (see Cash Awards or Awards & Recognition for more information)

Contractors

Contract Employee is defined as “full-time equivalent employee(s) who are hired to augment staffing.” not to include consultants or others providing professional services. This headcount must tie to what was entered in the HCONTR headcount SKF (545120 Contr&Svcs Exp-Temporary Manpower Services)

Consultants

Includes expenses for professional consultants who provide expert technical advice or services to management; a specific project deliverable is defined. (CE 543010 – Professional Svcs)

TO Technical Consultants (i.e. SAP, Microsoft, Accenture, etc.) is to be charged to Contracts & Services IT Services (CE 545510)

Cloud Computing

Contact the Technology Operations Finance support team for guidance when planning these costs.

Memberships

- Club Memberships and Expenses – i.e. Houston Club, Chambers of Commerce (CE 550080)
 - Member Dues in Organizations – i.e. Women’s Energy Network, Texas Diversity Council (CE 550086)
 - Industry Related Memberships – i.e. AGA, Interstate Natural Gas Association (CE 550087)
- Note:** Individual employee memberships and professional dues – i.e. Houston Bar Association (CE 522040)

(see Attachments 2 & 3 for additional contribution guidelines)

Dues & Licenses

Employee dues and licenses held in the employee name for professional organizations (CE 522040 – Dues/Licenses)

Books/Subscriptions

(CE 522120 – Books/Subscriptions) – Examples include hard copy or on-line subscriptions to WSJ, Reference books, Forbes, etc.

Registration

Employee registration for conferences/seminars (CE 522030 – Registration)

Training

Used for training classes including off-site seminars (CE 522020 – Training)

Entertainment (Client and Customers only)

Purchase of tickets to sporting events, rodeo, gift certificates, or other events to be used by outside client/customers (CE 522062 – Entertainment)

Education Reimbursement

CNP provides a maximum of \$5,250 per employee per year. See the Human Resources website for educational reimbursement guidelines (CE 522070 – Education)

Mileage Reimbursement

CNP reimburses \$0.535 per mile (CE 522080 – Parking/In Town Travel)

Parking/Toll Road Expenses

(CE 522080 – Parking/In Town Travel)

Travel

Travel is to include only Airfare, Gas, Hotel, Taxi, Rental Car - no meals are to be planned in this cost element (CE 522010 – Employee Travel, 522050 – Spousal/Non-employee Travel). Usage of the

corporate jet will be charged to CE 522012 employee (522051 Spousal/Non-employee). Travel for consultants must be charged to CE 543010 (Contracts & Services – Professional Services – Deductible).

Business Meals

Use CE 522060 – Business Meals for overnight business, meals with vendors, customers, employee business meal, meals when working late. Not used for OT meals as defined by the General Expense & Reimbursement policy.

Relocation/Recruiting Fees

Relocation/Recruiting Fees are to be budgeted at the Cost Center level. Relocation expenses are to be planned in accordance with the CenterPoint Energy Relocation Program. For cost estimates of planned relocations please contact Kimberly Bell at ext. 7-3168 to discuss. (CE 522100 – Relocation/Moving)

Donations/Contributions

Donations-cash – (CE 566010) United Way, March of Dimes, etc.; Sponsorships/Contributions – (CE 566030) – sponsorship or contributions of community activities such as golf events, festivals, athletic teams, school related functions. Contributions are to be included in your operating budget. Community Relations will provide details of what amounts have been approved for planning.

Wireless Devices

Wireless Devices (Pagers, Cell Phones and Smart Phones) will be directly charged to the cost centers (under CE 543090 Wireless Devices) and need to be budgeted accordingly.

Long Distance

Long Distance will be directly charged to the cost centers (under CE 545520) and need to be budgeted accordingly.

Transportation Charges and Central Shops

Transportation & Central Shops will determine the 2018 plan for each cost center and through a planned settlement, these costs will be populated in SAP within the appropriate cost centers. Contact Transportation (Pat Gipson) to determine any 2018 services that will be required.

- ***NOTE:** Please consult the CNP General Expense & Reimbursement Policy on the OnePay portal for additional information and descriptions.

Do Not Plan in the following Cost Elements

These cost elements will have limited use and will be reviewed monthly by accounting.

- 522130 – Miscellaneous Employee Expenses
- 546010 – Other Services

See Attachment 2 for cost element mapping in the One Pay system.

IV. CAPITALIZATION/AMORTIZATION POLICY

Capitalization of Tangible Assets:

Tangible Assets with a unit cost of \$500 or more and a useful life greater than one year are to be capitalized. During the initial outfitting of a computer system, equipment costing less than \$500, which is purchased with and is associated to the system, is capitalized. All other computer hardware costing less than \$500 must be charged to the appropriate operations or maintenance cost object.

Technology Operations (TO) will budget for the acquisition of desktops and laptops for **Company 2 employees**. Replacement equipment will be configured according to established CNP standards.

Cost Center managers must budget for the following:

- a. Miscellaneous hardware not acquired as part of the PC Refresh (keyboards, mice, speakers, web cam, headset, memory, etc.)
- b. Printers and Multifunction units
- c. Non-standard devices including large screen monitors
- d. Replacement or additional monitors
- e. Equipment for new employees

If you are budgeting for computer hardware that meets the capitalization criteria and will not be planned for by TO, contact your Finance Team representative to establish a capital internal order or WBS to budget the dollars. These dollars must not be budgeted as O&M in your cost center.

Capitalization of Computer Software:

Purchased Software

The cost is at least \$10,000 and the useful life is greater than 1 year. If the software is included in the price of the hardware and not separately stated it is to be capitalized with the hardware. This is usually the case with operating systems.

Enhancements to Existing Software

The total cost to develop is at least \$100,000 and the useful life is greater than one year. Increases functionality and extends the useful life of the software.

Internally Developed Software

The total cost to develop is at least \$100,000 and the useful life is greater than one year. Increases functionality and extends the useful life of the software.

Amortization of Software Maintenance:

To recognize costs in the appropriate accounting period, software maintenance exceeding \$200,000 per year or \$50,000 per quarter is to be amortized over the periods in which it covers.

Prepayment Policy:

Please see policy located within Business Services planning portal on SharePoint.

V. SAP REPORTS

The following reports are recommended for planning purposes:

NAME	DESCRIPTION
COST CENTERS	
Z115/ CCF5 (IT)	Cost Center Report (Actuals/Plan/Forecast)
Z11A	Plan (Budget) by month (periods 1 - 12) - Cost Center
Z11B	Actuals by month (periods 1 - 12) - Cost Center
Z112	Cost Elements by Cost Center (Actuals/Plan/Forecast)
Z118	5 year plan cost center report
Z119	5 year actual cost center report
ZR01	Compare 2 Plans (i.e. 2016 vs 2017 of one version or between A00 vs P01)
ILLV	Activity Types: Plan Receivers
KSBL	Cost Center: Planning Report
PROJECTS	
ZP07	Projects distribution with cost elements (List all WBS by range)
ZP01	Plan Projects by month (periods 1 - 12) - WBS
ZP06	Actuals (periods 1 - 12) – WBS
ZPP8	Project Partner Report
ZP09	Project Labor Report
ZP10	5 Year plan WBS report
ZPIC	Compare 2 Plans (i.e. 08 vs 09)
CN41	Display WBS with associated orders (structure)
SERVICES	
ZTJ2	Services with Volumes & Plan by SBU
Orders	
Z300	Actuals/Plan/Forecast
Z32A	Plan by month
Z302	5 Year plan internal order report
Z32B	Actuals by month
Other/Transactions	
KP06	Planning/Forecasting - Cost Centers
KPF6	Planning/Forecasting – Internal Orders
CJR2	Planning/Forecasting – WBS Projects (billable hours/volumes)
KP46	Planning Headcounts
1KMA	Headcount report by cost center/month

Procedure for Creation of Cost Objects (excluding objects needed for planning cycle)

Cost Centers: Complete Powerform CNP 456 and submit to your Business Services representative.

Internal Orders: (expense, capital, and/or deferred): Complete Powerform CNP 459 and submit to your Business Services representative.

WBSs: Please select the [NEW WBS Request](#) link to request a new WBS.

VI. References

To use links on this site, hold “Control” key while clicking on the link

SharePoint

Communication and documentation for the 2018-2022 planning process will be stored in the SharePoint repository. *The SharePoint site can be found on the CNP Today Intranet, Quick Links, SharePoint Team Sites, Finance (left nav), Project Sites, 5 Year Planning Portal (top nav), Business Services (left nav).*

Please check the [Business Services Portal](#) regularly for updates by selecting the following link.

THERE ARE NO WORKPAPERS
TO
THE DIRECT TESTIMONY
OF
MICHELLE M. TOWNSEND

**APPLICATION OF CENTERPOINT
ENERGY HOUSTON ELECTRIC, LLC
FOR AUTHORITY TO CHANGE RATES**

§
§
§

**PUBLIC UTILITY COMMISSION
OF TEXAS**

DIRECT TESTIMONY

OF

JOHN E. SLANINA

ON BEHALF OF

CENTERPOINT ENERGY HOUSTON ELECTRIC, LLC

April 2019

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IV. CENTERPOINT ENERGY PROPERTIES	13

1 **EXECUTIVE SUMMARY OF JOHN E. SLANINA**

2 Business & Operations Support is a centrally managed support organization that
3 provides both operations and corporate support services and management oversight to
4 CenterPoint Energy Houston Electric, LLC (“CenterPoint Houston” or the “Company”).

5 My testimony:

- 6 • describes the structure of Business & Operations Support and the key role
7 it plays in helping CenterPoint Houston meets its objectives;
- 8 • describes how Business & Operations Support costs are controlled and
9 monitored through the use of Service Level Agreements and the budgeting
10 process;
- 11 • supports the reasonableness and necessity of the Business & Operations
12 Support costs incurred by CenterPoint Houston; and
- 13 • explains the structure of CenterPoint Energy Properties, Inc. and the
14 reasonableness and necessity of rent charged for office space that
15 CenterPoint Houston subleases from CenterPoint Energy Service
16 Company, LLC.

17 My testimony will demonstrate that the Business & Operations Support costs
18 incurred are (1) reasonable and necessary; (2) fully and fairly charged to CenterPoint
19 Houston; and (3) not costs that are expressly disallowed for rate-making purposes. Thus,
20 CenterPoint Houston’s Business & Operations Support service costs and the rent
21 associated with CenterPoint Houston’s leased facility space should be fully reflected in the
22 cost of service approved by the Public Utility Commission of Texas.

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DIRECT TESTIMONY OF JOHN E. SLANINA

I. INTRODUCTION

Q. PLEASE STATE YOUR NAME AND POSITION.

A. My name is John E. Slanina. I am currently the Vice President of Strategic Sourcing & Logistics for CenterPoint Energy Service Company, LLC (“Service Company”). During the test year, I served as Vice President of Business & Operations Support, also for Service Company.

Q. PLEASE SUMMARIZE YOUR BACKGROUND AND CURRENT RESPONSIBILITIES.

A. I received a bachelor’s degree in Business Administration from Letourneau University and a master’s degree in Business Administration from the University of Houston. I began my career at CenterPoint Energy, Inc. (“CNP”) and its predecessors and subsidiaries in 1981 as a distribution line mechanic. Over the years, I held many positions across electric operations, including head line mechanic, senior service consultant, service area manager, and service area director.

In 2008, I was named Vice President of Distribution Operations for CenterPoint Houston, which included Distribution & Service Area Operations. Since then I have served as Vice President of Business Transformation, Vice President of Operations Support & Technology and, in 2014, I was named Vice President of Business & Operations Support with responsibilities for Facilities Management, Corporate Travel and Office Support Services (“Facilities Management”), Purchasing and Logistics (“P&L”), and Corporate Security (“Security”). Each of these areas of responsibility is a corporate support service as

1 defined in 16 Texas Administrative Code § 25.272(c)(4) (TAC), which is more
2 fully addressed by Company witness Michelle M. Townsend. I also have
3 management and oversight responsibilities for Surveying and Right of Way
4 (“SROW”), Fleet, Shop Services and Radio Communications (“Fleet”),
5 Geographic Information Services (“GIS”), which are part of CenterPoint Houston.
6 Those services support both electric and gas utility operations as support services
7 which are also addressed in 16 TAC § 25.272(c)(4).

8 **Q. WHAT IS THE PURPOSE OF YOUR TESTIMONY?**

9 A. I describe the structure of the Business & Operations Support organization and
10 discuss its role in providing corporate and operations support services to the various
11 CNP business units, which are considered its clients. I also describe the services
12 provided by Business & Operations Support to CenterPoint Houston’s transmission
13 and distribution operations as part of utility operations. I further address why all
14 services provided to CenterPoint Houston are reasonable and necessary to utility
15 operations, and I discuss the process followed to monitor and control incurred costs
16 for clients using the services, including CenterPoint Houston.

17 In addition, I provide an overview of the services that Business &
18 Operations Support provides to CenterPoint Energy Properties, Inc. (“CenterPoint
19 Energy Properties”) and discuss the space leased by CenterPoint Houston and its
20 associated rent.

1 **Q. WHICH SCHEDULES IN THE RATE FILING PACKAGE DO YOU**
2 **CO-SPONSOR?**

3 A. I do not directly sponsor any schedules; however, my testimony supports the
4 reasonableness and necessity of services and costs included in schedules sponsored
5 by Ms. Townsend insofar as they are related to Business & Operations Support.

6 **Q. HOW DOES YOUR TESTIMONY RELATE TO THE TESTIMONY OF**
7 **OTHER WITNESSES IN THIS RATE FILING PACKAGE?**

8 A. My testimony addresses certain affiliate services described in the Direct Testimony
9 of Ms. Townsend. Ms. Townsend addresses the overall Service Company structure
10 and cost assignment methodology, the Service Level Agreements (“SLA”) process
11 used by Service Company, which includes specific SLAs for our services, and the
12 process used by CenterPoint Houston to share operations services with gas utility
13 affiliates. Finally, I address how the budget process and financial system controls
14 described by Ms. Townsend for Service Company are supported by Business &
15 Operations Support when conducting our business operations.

16 **Q. WHAT BUSINESS & OPERATIONS SUPPORT SERVICES WERE**
17 **PROVIDED TO CENTERPOINT HOUSTON DURING THE HISTORICAL**
18 **TEST YEAR?**

19 A. Business & Operations Support provides a variety of reasonable and necessary
20 services that are commonly required by large corporations to or for the benefit of
21 CNP and its affiliates. As a centrally managed support organization, Business &
22 Operations Support provides Facilities Management, P&L, and Security services
23 throughout CNP. Business & Operations Support incurs costs to provide those

1 services to multiple business units or for individuals providing overall management
2 oversight and direction, which are centralized and billed as affiliate charges from
3 Service Company. Business & Operations Support also manages electric utility
4 personnel and expenses for SROW, Fleet, and GIS, each of which supports electric
5 utility operations while also providing shared expertise and services to gas utility
6 operations. Finally, Business & Operations Support employees dedicated to a
7 specific business unit are employed by and directly incurred within that business
8 unit.

9 Where appropriate, Business & Operations Support requires that third
10 parties invoice the business units directly for work performed rather than passing
11 business unit specific costs through Service Company. While the third-party work
12 is part of the overall services and associated activities managed by Business &
13 Operations Support for its clients, those third-party managed costs are directly
14 included in the books and records of the proper business unit, such as CenterPoint
15 Houston.

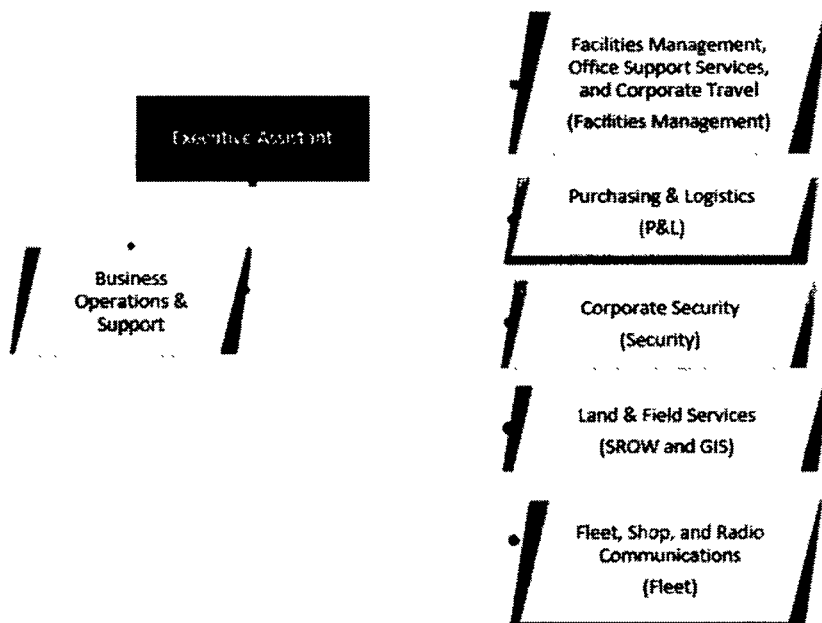
16 **II. BUSINESS & OPERATIONS SUPPORT**
17 **ORGANIZATION AND RESPONSIBILITIES**

18 **Q. PLEASE DESCRIBE THE BUSINESS & OPERATIONS SUPPORT**
19 **ORGANIZATION STRUCTURE.**

20 A. Business & Operations Support is part of Service Company and provides support
21 services to Service Company affiliates as well as within Service Company. The
22 Directors of Security, Facilities Management, P&L, Land & Field Services (SROW
23 and GIS), and Fleet reported directly to me during the test year. The functional

1 departments within the Business & Operations Support organization that support
 2 CenterPoint Houston and other affiliate operations are reflected below:

3 **Figure 1. Business & Operations Support Organization**



4 **Q. WHAT ARE THE RESPONSIBILITIES OF THE BUSINESS &**
 5 **OPERATIONS SUPPORT ORGANIZATION?**

6 **A.** Business & Operations Support is a centralized support organization that provides
 7 corporate support services and management oversight for business unit specific
 8 functions as well as operations support to gas and electric utility operations.
 9 Business & Operations Support has responsibility for the functions shown above.

10 **Facilities Management** provides services related to routine building and
 11 facility operations as well as project management services for building design
 12 modifications and construction management.

1 **Office Support Services** provides services necessary to support daily office
2 operations which include mail services, copy center services, and forms design and
3 management.

4 **Corporate Travel** provides travel-related and offsite-meeting services
5 necessary to support ongoing company operations.

6 **P&L** provides purchasing, material logistics, and investment recovery
7 services as well as management oversight to support business unit specific
8 purchasing and logistics operations.

9 **Security** operates the Security Operations Center and provides the
10 investigative services, guard services, and electronic security systems necessary to
11 protect CNP personnel and assets.

12 **SROW** provides professional surveying, acquisition and maintenance of
13 rights-of-way and responds to land-related inquiries from CenterPoint Houston, its
14 affiliates, outside businesses, governmental agencies, and the public.

15 **GIS** provides GIS systems, related geospatial technology services, and
16 software applications for desktops, servers, or mobile devices.

17 **Fleet** manages the acquisition, disposition and maintenance of all vehicles,
18 power-operated equipment, and radio communications.

19 **Q. ARE THERE BENEFITS TO HAVING A CENTRALIZED BUSINESS**
20 **SUPPORT ORGANIZATION?**

21 A. Yes. Ms. Townsend describes the overall benefits of the Service Company
22 structure. The Business & Operations Support organization was designed to
23 incorporate this central management philosophy into its various services. By

1 employing central management of its support functions, Business & Operations
2 Support can leverage expertise by providing common and shared business
3 philosophies, practices, infrastructures and systems across CNP. This central
4 management philosophy facilitates use of shared resources, achieves economies of
5 scale through workload leveling and consolidated purchasing, provides workforce
6 flexibility, and reduces the need for redundant supervisory and management costs
7 throughout the corporation while giving the business units access to specialized
8 skills and resources in an efficient and cost-effective manner. Business &
9 Operations Support is not a profit center. Rather, services are provided at its cost,
10 to meet the needs of its clients.

11 **Q. PLEASE DESCRIBE HOW FACILITIES MANAGEMENT, P&L, FLEET,
12 AND SECURITY ARE ORGANIZED.**

13 A. Facilities Management, P&L, and Fleet each have some personnel and services
14 located within CenterPoint Houston to specifically support electric utility
15 operations. Each of these groups also provides some personnel and services from
16 outside CenterPoint Houston as shared corporate support services to CenterPoint
17 Houston and other CNP business units. Security provides corporate support
18 services from Service Company with oversight of the Security Operations Center
19 that is part of electric utility operations. Fleet provides about 80% of its services
20 from within CenterPoint Houston to specifically support electric utility operations.
21 The Facilities Management group maintains a small special services repair presence
22 within CenterPoint Houston to support utility operations with over 70% of the

1 group providing corporate support within the Service Company. P&L has 60% of
2 its personnel and services dedicated to CenterPoint Houston.

3 **Q. BUSINESS & OPERATIONS SUPPORT ALSO INCLUDES TWO GROUPS**
4 **THAT ARE PART OF CENTERPOINT HOUSTON. PLEASE EXPLAIN**
5 **THIS STRUCTURE.**

6 A. SROW and GIS were located entirely within CenterPoint Houston with a large
7 percentage of services performed for CenterPoint Houston. These groups also
8 support CNP's gas utility operations. The cost of supporting the gas utility affiliates
9 are directly assigned to those affiliates as described by Ms. Townsend. This
10 structure supports the minimal historical needs of the affiliates and the specialized
11 roles and responsibilities provided. However, due to the growing demand for the
12 services offered to other affiliates, the alignment of GIS under CenterPoint Houston
13 was re-evaluated.

14 As a direct result of this re-evaluation, GIS was realigned under Gas
15 Operations executive management effective March 1, 2018. The realignment
16 resulted from management's determination that reporting to Gas Operations
17 executive management better positioned GIS to integrate within the organization
18 that utilized the majority of its services. Approximately 60% of the services
19 performed by GIS were being done for Gas Operations, whereas only 40% of the
20 services were performed for CenterPoint Houston. Since SROW continues to
21 provide over 75% of its services for CenterPoint Houston with only about 25% to
22 gas utility operations, no change was made to its reporting structure.

III. CONTROL OF COSTS

1

2 **Q. WHAT TYPES OF COSTS DOES BUSINESS & OPERATIONS SUPPORT**
3 **TYPICALLY INCUR?**

4 A. Business & Operations Support primarily incurs labor-related expenses to support
5 routine corporate operations. Periodically, certain capital costs are incurred for
6 items such as improvements or modifications to corporate facilities, purchase of
7 new fleet vehicles, and for equipment used to provide its services. These capital
8 costs, which are primarily third-party costs, are either paid directly by the respective
9 business unit as they are incurred or incurred by Business & Operations Support to
10 be recovered through its service processes.

11 **Q. ARE THE CAPITAL INVESTMENTS NECESSARY?**

12 A. Yes. Capital operations and support investments include projects such as periodic
13 upgrades to the Security Operations Center, new facility construction, roof
14 replacements, and facility upgrades, new vehicle purchases, general office services
15 equipment, and the tools and equipment to support utility operations. Each of these
16 investments is necessary to efficiently and effectively operate CenterPoint Houston.

17 **Q. WHAT PROCESSES DOES BUSINESS & OPERATIONS SUPPORT**
18 **FOLLOW TO MONITOR ACTUAL COSTS INCURRED?**

19 A. Business & Operations Support uses both the CNP budget process and financial
20 system controls, as described in Ms. Townsend's Direct Testimony, to determine
21 its annual expenditures and to monitor results during the course of the year. In
22 concert with its clients, Business & Operations Support carefully plans operations
23 and maintenance activities and investments during the annual budget process and
24 monitors them throughout the year. Executives of CNP, including myself, meet

1 each month to review actual performance against the approved plans for the year
2 and provide direction if business changes are identified as a result of the
3 performance reviews. Business & Operations Support monitors and reconciles its
4 costs throughout the year and periodically, based on findings, reviews the financial
5 system in order to ensure that the costs incurred by Business & Operations Support
6 on behalf of its clients are reasonable and appropriately charged to the client taking
7 services.

8 **Q. DOES BUSINESS & OPERATIONS SUPPORT INCUR COSTS THAT**
9 **ORIGINATE WITHIN CENTERPOINT HOUSTON?**

10 A. Yes, certain costs incurred for a specific business unit such as CenterPoint Houston
11 are not further distributed within the business unit. Within CenterPoint Houston,
12 examples include costs identified to the Security Operations Center, direct client
13 support costs provided by office services, and Facilities Management that support
14 CenterPoint Houston's common facilities.

15 **Q. DOES BUSINESS & OPERATIONS SUPPORT ROUTINELY UTILIZE**
16 **THIRD-PARTY SERVICES TO SUPPORT CENTERPOINT HOUSTON?**

17 A. Yes, third-party services are routinely used by Business & Operations Support. For
18 example, third-party costs are routinely incurred by Facilities Management for
19 renovation, remodeling and furniture projects as well as many building operations
20 services, including janitorial services; building and building systems repairs and
21 maintenance; office relocations and moves; and general operating support. Office
22 Support Services contracts with third parties to provide mail services (courier and
23 US mail delivery); copy center services; and central supply room office supplies

1 and materials. SROW utilizes third-party services to support large scale projects
2 and influx in workloads to better meet the request and deadlines of CenterPoint
3 Houston and other affiliates. Fleet also contracts with third-party vendors for
4 services such as tire replacements and road service for flat repair, windshield
5 replacements, vehicle collision estimates and repairs, vehicle washing and light
6 fleet preventative maintenance activities. Security relies heavily on third parties to
7 provide physical and technology services, including guard service and electronic
8 security systems. These third-party costs are paid directly by CenterPoint Houston
9 where applicable. There are some third-party costs that support centralized services
10 and those costs are incurred within its incurred cost structure and handled like
11 routine affiliate costs. The Business & Operations Support role is limited to
12 oversight and certain administrative activities.

13 **Q. HOW DOES BUSINESS & OPERATIONS SUPPORT TYPICALLY**
14 **EVALUATE OPTIONS TO USE THIRD-PARTY SERVICES?**

15 A. Business & Operations Support evaluates options to use third parties by assessing
16 potential increases in quality of service offered; estimating cost savings; evaluating
17 service expediency (to determine what level of service meets the client timeframe
18 needs); assessing required expertise (to decide if we have or want to keep a
19 comparable level of expertise inside the corporation); and verifying numbers of
20 service providers (to see if there are a few or many providers in the market).
21 Third-party contracts are then competitively bid by Business & Operations Support
22 before final selections are made. Third parties are currently used to provide service
23 (such as copy center or corporate travel) and to support activities within a service

1 (such as freight management, janitorial services, mail couriers, and security
2 guards).

3 **IV. CENTERPOINT ENERGY PROPERTIES**

4 **Q. WHAT IS CENTERPOINT ENERGY PROPERTIES AND WHAT
5 FACILITIES DOES IT OWN?**

6 A. CenterPoint Energy Properties, a subsidiary of CNP, owns several facilities
7 including the multi-tenant facilities in the Houston area consisting of CenterPoint
8 Energy Tower (“CNP-T”), the corporate headquarters building, and the Energy
9 Control & Data Center (“EC/DC”). The Facilities Management group within
10 Business & Operations Support provides direct oversight and support to
11 CenterPoint Energy Properties for building operations.

12 **Q. DOES CENTERPOINT HOUSTON OCCUPY SPACE IN THE
13 CORPORATE HEADQUARTERS BUILDING AND EC/DC?**

14 A. Yes. CenterPoint Houston occupies space in both the corporate headquarters
15 building and the EC/DC facility owned by CenterPoint Energy Properties and
16 leased to Service Company. The EC/DC facility houses the CenterPoint Houston
17 energy control center as well as certain corporate support personnel and activities,
18 including the information technology data center, office support services, and
19 facilities management. CenterPoint Houston subleases space from Service
20 Company in separate master lease/sublease arrangements for the corporate
21 headquarters building and EC/DC.

22 **Q. PLEASE DESCRIBE THE LEASE ARRANGEMENTS.**

23 A. A master lease agreement is in place between CenterPoint Energy Properties and
24 Service Company for all CNP occupied office space in CNP-T, including parking

1 space in an underground garage. A separate master lease agreement is in place
2 between CenterPoint Energy Properties and Service Company for all CNP occupied
3 office space at EC/DC. Space is sublet from Service Company to CenterPoint
4 Houston to meet its administrative and operational needs at both CNP-T and
5 EC/DC. Additionally, other CNP business units lease office space at CNP-T using
6 sublease arrangements. The master leases and the subleases are co-terminus,
7 expiring on December 31, 2022.

8 The terms of the lease are the same for each business unit. Each business
9 unit, including CenterPoint Houston, is charged for its net rentable area, which is a
10 combination of the actual square footage of occupancy plus a share of the common
11 space adjusted annually to reflect any changes. The base rent rate component is
12 fixed per the master lease and does not change annually. A standard operations rate
13 component (“additional rent”) is adjusted annually in accordance with normal
14 commercial office building practice and includes items such as property
15 management, building maintenance, janitorial/cleaning, grounds keeping, utilities,
16 taxes, insurance, security, support costs, etc. All CNP business units are charged
17 the same gross rent rates for occupied space (base rent plus additional rent)
18 exclusive of parking requirements at CNP-T, which are normally separate charges.

19 **Q. DO NON-AFFILIATE TENANTS OCCUPY FACILITIES OWNED BY**
20 **CENTERPOINT ENERGY PROPERTIES?**

21 A. Yes. There are currently three non-affiliated third-party tenants leasing space in
22 the CNP-T net rentable area. These leases range from 10 to 15 years in term, with
23 rents at the prevailing market rates at the time the leases were signed. CNP-T

1 operating costs are shared consistent with Building Owners and Managers
2 Association standards and are adjusted as is standard in the commercial office
3 building market.

4 **Q. HOW IS OCCUPANCY DETERMINED FOR EACH CNP SUBLEASE**
5 **(BUSINESS UNIT)?**

6 A. The CNP-T and EC/DC master leases provide for total leased office space. This
7 total lease space may change during the lease period such that only occupied square
8 footage is included in the master lease. All unoccupied square footage remains at
9 CenterPoint Energy Properties until such time as it is leased and occupied.
10 Facilities Management reviews subleases to determine the actual space occupied
11 by each sub-lessee and any necessary adjustments are identified. Facilities
12 Management meets with the respective business units occupying each building to
13 discuss changes to current square feet (“SF”) occupied. Facilities Management
14 then communicates the specific square feet needs to CenterPoint Energy Properties
15 and billings are adjusted accordingly. The 2018 occupancy needs for CenterPoint
16 Houston were 134,462 SF at CNP-T in a total 1,079,525 SF building net rentable
17 area and 109,934 SF at EC/DC in a total 215,343 SF building net rentable area.

18 **Q. HOW IS BASE RENT DETERMINED FOR EACH CNP BUSINESS UNIT?**

19 A. Base rent for each CNP business unit subleasing space from Service Company is
20 the same as the base rent charged to Service Company in its master lease with
21 CenterPoint Energy Properties. The base rent amount is fixed during the lease term,
22 currently ten years, and was developed in 2002 to include recovery of its
23 depreciation expense and a reasonable return on investment. This formula has not

1 changed since it was reviewed and approved by the Public Utility Commission of
2 Texas (“Commission”) in the Company’s last rate case, Docket No. 38339.

3 **Q. HOW IS ADDITIONAL RENT (SHARED OPERATING COST)**
4 **DETERMINED FOR EACH CNP BUSINESS UNIT?**

5 A. Each year, Facilities Management prepares an operating budget as part of the
6 service provided to CenterPoint Energy Properties. Operating costs include the
7 items described as “additional rent” above. When the budget is finalized, Facilities
8 Management develops annual operating rates based on total building net rentable
9 area square footage and, in the case of EC/DC, space type (high technology and
10 low technology). The operating rates are billed to Service Company and passed to
11 the business units through annual rent adjustments. Since these are strictly
12 cost-based operating costs, Facilities Management prepares an annual true-up from
13 budget to actual and rates are adjusted if appropriate. The operating rates at EC/DC
14 are split between low technology and high technology due to the higher operating
15 costs required to support “high tech” space. The sub-lessees pay exactly what is
16 charged to Service Company for additional rent.

17 **Q. IS FURNITURE PROVIDED TO EACH CNP BUSINESS UNIT?**

18 A. Yes. Prior to 2007, the building standard furniture used by business unit occupants
19 in CNP-T and EC/DC was provided as part of a service from Service Company.
20 Subsequently, all building standard furniture assets were transferred to CenterPoint
21 Energy Properties at book value in order to maintain all assets associated with the
22 multi-tenant buildings in one entity. Rent rates are developed annually to include
23 recovery of depreciation expense and a reasonable return on investment over the

1 net rentable area where CenterPoint Energy Properties has supplied furniture.
2 Business Unit specific furniture and areas with no furniture were excluded from the
3 net rentable area calculation.

4 **Q. ARE THESE RENT COSTS REASONABLE AND NECESSARY?**

5 A. Yes. The rent costs are necessary to house employees and equipment vital to the
6 success of CenterPoint Houston operations. The total rents charged are reasonable
7 as described above with CenterPoint Houston only responsible for its assigned
8 share of occupied space as described within this testimony.

9 **Q. DOES THIS CONCLUDE YOUR TESTIMONY?**

10 A. Yes. I have (1) described my organization; (2) shown that my organization
11 maintains the processes and tools necessary to support our efforts to provide quality
12 service at a reasonable cost; (3) demonstrated that the services provided to
13 CenterPoint Houston are both reasonable and necessary to successful utility
14 operations; (4) discussed the role that CenterPoint Houston has in our service
15 process; and (5) described how CenterPoint Energy Properties manages the
16 multi-tenant building, including rents paid by CenterPoint Houston. I have,
17 therefore, shown that the cost for Business & Operations Support and property rents
18 paid by CenterPoint Houston should be fully reflected in the cost of service
19 approved by the Commission for CenterPoint Houston.


STATE OF Texas §
 §
COUNTY OF Harris §

AFFIDAVIT OF JOHN E. SLANINA

BEFORE ME, the undersigned authority, on this day personally appeared John E. Slanina who having been placed under oath by me did depose as follows:


1. “My name is John E. Slanina. I am of sound mind and capable of making this affidavit. The facts stated herein are true and correct based upon my personal knowledge.
2. I have prepared the foregoing Direct Testimony and the information contained in this document is true and correct to the best of my knowledge.”

Further affiant sayeth not.



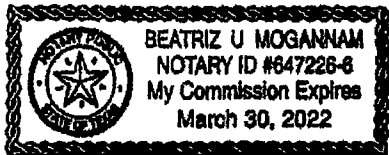
John E. Slanina

SUBSCRIBED AND SWORN TO BEFORE ME on this 20 day of March, 2019.



Notary Public in and for the State of Texas

My commission expires: March 30, 2022



THERE ARE NO WORKPAPERS
TO
THE DIRECT TESTIMONY
OF
JOHN E. SLANINA

**APPLICATION OF CENTERPOINT
ENERGY HOUSTON ELECTRIC, LLC
FOR AUTHORITY TO CHANGE RATES**

§
§
§

**PUBLIC UTILITY COMMISSION
OF TEXAS**

**DIRECT TESTIMONY
OF
SHACHELLA D. JAMES
ON BEHALF OF
CENTERPOINT ENERGY HOUSTON ELECTRIC, LLC**

April 2019

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1 **EXECUTIVE SUMMARY OF SHACHELLA D. JAMES**

2 Technology Operations (“TO” or “T.O.”) provides critical services to CenterPoint
3 Energy Houston Electric, LLC (“CenterPoint Houston” or the “Company”) that enable
4 CenterPoint Houston to meet internal employee needs and external needs of customers and
5 regulators. TO provides traditional information and operational technology services which
6 are necessary to the efficient and effective operation of business by CenterPoint Houston.
7 TO sends end-use electric usage data to ERCOT daily, which is forwarded to the
8 appropriate retail electric provider to bill TO’s customers, as required by the Public Utility
9 Commission of Texas. In addition, TO supports CenterPoint Houston’s Advanced
10 Distribution Management system which provides information regarding types and location
11 of outages, enabling repairs to be effectively scheduled and dispatched to the field through
12 the mobile data system. TO provides critical services on a 24/7 basis that enable
13 CenterPoint Houston to operate at optimal performance.

14 My testimony:

- 15 • describes the organization and responsibilities of TO;
- 16 • explains the necessary and important functions that TO plays in helping
17 CenterPoint Houston meet TO’s objectives;
- 18 • describes how TO costs are controlled and monitored through the use of
19 Service Level Agreements and the budgeting process;
- 20 • addresses why the costs of TO assigned to CenterPoint Houston are
21 reasonable; and
- 22 • supports the reasonableness of the \$119 million of TO affiliate costs
23 assigned to CenterPoint Houston.

24 My testimony will demonstrate that the affiliate costs for TO are reasonable and
25 necessary and are not priced higher to CenterPoint Houston than the prices charged for the
26 same services to other affiliates. Thus, CenterPoint Houston’s TO affiliate costs should be
27 recovered in full through rates.

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DIRECT TESTIMONY OF SHACHELLA D. JAMES

I. INTRODUCTION

Q. PLEASE STATE YOUR NAME, PLACE OF EMPLOYMENT AND POSITION.

A. My name is Shachella D. James and I am employed by CenterPoint Energy Service Company, LLC (“Service Company”) as Vice President – Technology Operations.

Q. PLEASE GIVE YOUR EDUCATIONAL BACKGROUND, PROFESSIONAL QUALIFICATIONS AND EXPERIENCE.

A. I am a certified technology professional, having earned my B.B.A. in Business Analysis – Management Information Systems from Texas A&M University and my MBA from the University of Texas at Austin. I have worked in the IT field for 24 years. My experience spans progressive leadership roles in technology consulting services with Ernst & Young, data warehousing with Motorola and in telecommunications at LOGIX Communications, where I managed the application development and support functions of the IT organization for 10 years. In 2009, I stepped into the role to manage the CenterPoint Energy, Inc. (“CNP”) SAP Enterprise Resource Planning ecosystem and key utility industry electric market integrations, with a focus on the core capabilities of customer channels, human resources, materials management and finance. In 2016, I assumed responsibility to direct employee and user engagement via business partnerships, desktop support, procurement/asset management, and mobility strategy for an approximately 100-person organization serving 7,500 employees. I managed the project planning, vendor management and execution of application recovery for CNP’s multi-data center environment, resulting in accelerated disaster recovery times for 68 critical

1 applications. In October 2017, I began my current assignment as Vice President –
2 Technology Operations where I provide leadership to a 400-person technology
3 organization that enables and supports the corporate technology enterprise,
4 including end user support, business applications, portfolio value and delivery, and
5 data center operations. I drive organizational development plans leading the
6 organization to achieve greater efficiencies, security, continuity and resilience via
7 technology and resources.

8 **Q. WHAT IS THE PURPOSE OF YOUR TESTIMONY?**

9 A. I describe TO and TO's role as provider of information and technology systems. I
10 also describe the services provided by TO to CenterPoint Energy Houston Electric,
11 LLC ("CenterPoint Houston" or the "Company") as well as the basis and
12 methodology for charging CenterPoint Houston for these services. In addition, my
13 testimony demonstrates that these charges are reasonable and necessary. Finally,
14 my testimony includes the intelligent grid ("IG") project cost-benefit analysis as
15 required by the Public Utility Commission of Texas' ("Commission") Order on
16 Rehearing in Docket No. 38339 in Exhibit SDJ-1.¹

17 **Q. WHAT AMOUNTS IN THE COMPANY'S PROPOSED COST OF**
18 **SERVICE DOES YOUR TESTIMONY SUPPORT?**

19 A. I support TO's cost for supporting CenterPoint Houston in 2018 of approximately
20 \$119 million in unadjusted test year expense, as discussed later in my testimony. I

¹ The cost-benefit analysis required by the Commission's Order on Rehearing in Docket No. 38339 was previously filed as part of the *Application of CenterPoint Energy Houston Electric, LLC For Approval of a Distribution Cost Recovery Factor Pursuant to 16 Tex. Admin. Code §25.243*, Docket No. 48226.

1 also support approximately \$1 billion in capital additions for the period
2 2010 – 2018 related to TO.

3 **Q. HOW DOES YOUR TESTIMONY RELATE TO THE TESTIMONY OF**
4 **OTHER COMPANY WITNESSES IN THIS PROCEEDING?**

5 A. The parts of my testimony that relate to planning, budgeting and the assignment of
6 affiliate costs to CenterPoint Houston support and supplement the testimony of
7 Company witness Michelle M. Townsend, who testifies about the overall role and
8 benefits of having a service company, of which I am a part, including the budgeting
9 and allocation methodologies for Service Company affiliate costs charged to
10 CenterPoint Houston.

11 **Q. DO YOU SUPPORT ANY SCHEDULES IN THE RATE FILING**
12 **PACKAGE?**

13 A. I do not directly sponsor any schedule, however, my testimony supports the
14 reasonableness and necessity of various costs included in Schedules V-K-7 and
15 V-K-12, sponsored by Ms. Townsend, as they relate to TO costs.

16 **II. TECHNOLOGY OPERATIONS ORGANIZATION AND FUNCTION**

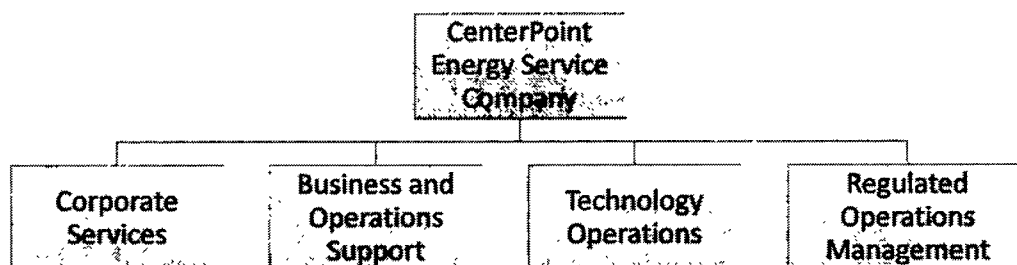
17 **Q. PLEASE DESCRIBE TECHNOLOGY OPERATIONS.**

18 A. TO, formerly titled Information Technology (“IT”), resides in the Service Company
19 and is responsible for providing CenterPoint Houston and other CNP business units
20 with information and operations technology infrastructure, applications,
21 cybersecurity, and services to support their business objectives. TO includes
22 enterprise mainframe computers, voice and data networks, and distributed
23 computing operations (personal computers, servers and local area networks) as well
24 as data and cybersecurity, and help desk client support services. TO also provides

1 all services and technology necessary to ensure recoverability and restoration of
 2 mission critical business functionality through comprehensive disaster recovery
 3 capabilities. Additionally, TO acquires, develops, and/or enhances software
 4 applications to support business objectives. By having centralized management of
 5 TO's functions and services, TO can optimize the allocation of TO's resources and
 6 contain overall costs of services to TO's clients.

7 As Vice President of TO, I report directly to Gary Hayes, Senior Vice
 8 President and Chief Information Officer of CNP. As shown in the figure below,
 9 TO resides within the Service Company. For further discussion on the Service
 10 Company, please refer to the testimony of Ms. Townsend.

11 **Figure 1. Service Company**



12 **Q. WHY HAS CENTERPOINT HOUSTON CHANGED THE NAME OF**
 13 **THEIR TECHNOLOGY SERVICES DELIVERY ORGANIZATION FROM**
 14 **IT TO T.O.?**

15 **A.** With the 2009 initiation of CNP's Advanced Metering project and the subsequent
 16 deployment of Smart Grid devices in the years that followed, the degree of
 17 digitization and integration of operational and information systems increased.
 18 Dependencies and operational requirements of technologies deployed in support of

1 business operations resulted in the development of common services in support of
2 both operational and informational systems. For these reasons, a restructuring and
3 renaming of the IT organization was instituted to gain technology delivery
4 efficiencies and synergies. The newly formed TO organization is representative of
5 the combined services delivered.

6 **Q. WHAT SERVICES DOES T.O. PROVIDE TO CENTERPOINT**
7 **HOUSTON?**

8 A. TO provides traditional information technology services and supports elements of
9 the operations technology as well. These services are necessary to the efficient and
10 effective operation of business by CenterPoint Houston. Provided services include
11 mainframe and distributed computing services such as batch job processing, data
12 storage, e-mail administration, internet access, server administration, computer
13 hardware and software procurement and maintenance, data security administration,
14 systems monitoring and management, analytics, enterprise architecture, and
15 disaster recovery of the business application environment. As required by the
16 Commission, end use electric usage data is processed by TO and sent daily to
17 ERCOT to forward to the appropriate retail electric provider to bill TO's customers.
18 ERCOT uses the same usage information to settle the wholesale electric market.
19 Detailed move-in and move-out information is transmitted by ERCOT to TO and
20 then service orders are scheduled and dispatched to the field through the
21 CenterPoint Houston mobile data and work management systems.

22 In addition, TO also provides support for CenterPoint Houston's
23 Distribution Management system which provides information regarding types and

1 location of outages, enabling repairs to be effectively scheduled and dispatched to
2 the field through the mobile data system. This system is used to address isolated
3 outages such as those caused by traffic accidents or construction damage as well as
4 widespread outages caused by weather which may occur by thunderstorms or as
5 occurred following Hurricanes Ike and Harvey.

6 TO operates a central area to monitor and manage CNP's extensive local-
7 area networks, computer applications and associated hardware and cybersecurity
8 activity. TO also partners with CenterPoint Houston in the development of
9 software applications to meet TO's defined requirements, providing automated
10 solutions to complex business needs such as those mentioned above. TO provides
11 database administration services, architectural planning, and programming tool
12 support. TO's client support services area provides the employees of CenterPoint
13 Houston with the end-user desktop PC environment and problem resolution
14 necessary to conduct daily business. In short, TO works with CenterPoint Houston
15 to provide reliable and efficient services and to ensure that CenterPoint Houston
16 has the automated tools needed to effectively serve each of TO's customer and retail
17 users of electricity.

18 **III. DESCRIPTION OF TO SERVICES**

19 **Q. PLEASE DESCRIBE T.O. SERVICES PROVIDED TO CENTERPOINT**
20 **HOUSTON.**

21 A. Categories of service provided by TO to CenterPoint Houston and other affiliates
22 are: Technology and Infrastructure, Application Development and Delivery,
23 Operations and Support, and Data and Cyber Security. Within the TO organization,

1 we refer to these broad services in terms of nine more specific types of services
2 described below.

3 **Desktop Data Device Services.** This service provides life-cycle
4 management of desktop and related network devices, such as desktop computers,
5 laptops, printers, network servers, standard desktop/network software, e-mail,
6 internet and remote access, and disaster recovery and business resumption planning
7 and support. These tools are necessary resources for the performance of daily
8 responsibilities by CenterPoint Houston employees. Through this desktop and
9 network environment, employees gain access to their business applications which
10 include systems such as Mobile Data, Work Management, Customer Information,
11 Employee Storm Roster, and SAP. In addition, employees are able to create files,
12 print documents, and utilize internal and external e-mail messaging capabilities.

13 **Mainframe CPU Utilization.** This service involves the use and support of
14 the mainframe-computing platform, along with related hardware, software, staff
15 and environmental elements. This service includes support for the mainframe
16 processors, operating system and related software, support for operations and
17 technical functions, and disaster recovery and business resumption planning.
18 Mainframe applications utilized by CenterPoint Houston include the Customer
19 Information System and required supporting functionality. These applications are
20 essential to the effective restoration of service. TO ensures these applications are
21 available at a rate of 99% or greater as required by the business and as outlined in
22 the Service Level Agreements (“SLA”) with CenterPoint Houston.

1 **Data Management.** This service involves the use and support of the
2 storage platforms, along with related hardware, software, staff and environmental
3 elements. These services include support for various storage mediums (e.g., tape,
4 disk), operating systems and related software, and support for operations and
5 technical functions. TO stores more than 6000 terabytes of data in a central storage
6 disk environment. TO also maintains off-site data archive storage, which is used
7 to support business continuity efforts as well as contingency plans for disaster
8 recovery. Additionally, these services include all technology and services to
9 replicate mission critical data between the Company's primary and secondary data
10 centers.

11 **Distributed Systems.** This service involves the use and support of
12 hardware (e.g., UNIX, gateways and specialized servers) platforms supporting
13 business specific or enterprise distributed systems, along with related software,
14 staff and environmental elements. This service includes support of the hardware
15 systems, data storage, operating system and related software and operations and
16 technical support functions. This service also supports CenterPoint Houston's
17 Transaction Management Hub, which sends data to the Electric Reliability Council
18 of Texas ("ERCOT").

19 **Enterprise Applications Development and Support.** This service
20 provides the ongoing maintenance of application software, training, and system
21 enhancements for integrated applications (SAP) that run numerous critical business
22 systems, including financial reporting, payroll, accounts payable, accounts

1 receivable, human resources, materials management, purchasing and logistics,
2 budgeting, and work management.

3 **Applications Development and Support.** This service involves working
4 with CenterPoint Houston to implement automated solutions to satisfy particular
5 business needs and internal requirements. The cost of this service is directly
6 charged and includes partnering with CenterPoint Houston to develop strategic
7 business plans, feasibility, requirements, and analysis and design documents.
8 Additional services include software development and acquisition, integration
9 testing, implementation, support of production applications, technical consultations
10 and facilitation, using a variety of software languages and data base tools, across
11 mainframe and distributed environments as well as the Intranet/Internet.

12 **Telephony Service.** TO provides CenterPoint Houston with individual
13 telephone line connections and equipment on CNP's telephone network. TO,
14 working with CNP's Purchasing & Logistics area, secures communications service
15 for CenterPoint Houston, including Voice Over Internet Protocol domestic and
16 international calling.

17 **Telecommunications Move/Add/Change.** This service includes labor and
18 equipment associated with moving, adding or changing telecommunications
19 equipment for CenterPoint Houston personnel.

20 **Data and Cyber Security Management.** This service includes
21 management oversight and support as well as Cyber/SAP/Network security. TO
22 involves identifying and implementing the appropriate tools and procedures to
23 ensure Sarbanes-Oxley compliance. This service also encompasses costs

1 associated with support provided to TO by other Service Company areas such as
 2 Human Resources, Finance, Business Support Services and Legal.

3 **IV. TEST YEAR COSTS OF TO SERVICES**

4 **Q. WHAT WERE THE UNADJUSTED TEST YEAR EXPENSES FOR T.O.?**

5 A. Unadjusted test year TO costs for CenterPoint Houston were approximately \$119
 6 million.

7 **Q. WHAT TYPES OF COSTS MAKE UP THE APPROXIMATELY \$119**
 8 **MILLION IN OPERATIONS AND MAINTENANCE (“O&M”)**
 9 **EXPENSES?**

10 A. As mentioned above, TO provides four main types of services to CenterPoint
 11 Houston: Technology and Infrastructure, Application Development and Delivery,
 12 Operations and Support, and Data and Cyber Security. Figure 2 below highlights
 13 the test year O&M costs attributable to these categories.

14 **Figure 2. O&M Cost - TO Services Provided to**
 15 **CenterPoint Houston, Unadjusted**

Service Category	Amount (\$ 000s)
Technology and Infrastructure	\$52,125
Application Development and Delivery	\$45,114
Operations and Support	\$17,784
Data and Cyber Security	\$3,895
Total	\$118,917

16 **Q. WHAT TYPES OF COSTS COMPRISE THE TECHNOLOGY AND**
 17 **INFRASTRUCTURE SERVICE CATEGORY?**

18 A. All hardware, software, and network components that collectively provide for the
 19 delivery of CenterPoint Houston business systems require annual maintenance
 20 payments to the provider for the ongoing support of the associated technology.

1 Maintenance and support ensures the highest degree of continuous operation and
2 minimizes operational restoration should issues occur.

3 **Q. WHAT TYPES OF COSTS COMPRISE THE APPLICATION**
4 **DEVELOPMENT AND DELIVERY SERVICE CATEGORY?**

5 A. CNP's Technology Operations organization develops and maintains over 500
6 business applications in support of the overall operations of the company.
7 Approximately 70 applications are deemed "mission critical." The Application and
8 Delivery Service category includes the labor and associated resources to develop,
9 enhance, deploy, maintain, improve, and otherwise sustain the continuous
10 operations of the company's application portfolio. Mission critical applications for
11 CenterPoint Houston include: Advanced Metering System ("AMS"), Transaction
12 Management HUB, and SAP, for example.

13 **Q. WHAT TYPES OF COSTS COMPRISE THE OPERATIONS AND**
14 **SUPPORT SERVICE CATEGORY?**

15 A. All CenterPoint Houston business applications are implemented and maintained to
16 ensure the highest degree of continuous operations. The Operations and Support
17 category includes all resources including technology and subject matter expertise
18 to monitor and manage the associated applications. Data management, backup and
19 recovery, problem resolution, and technology refreshes and upgrades are included
20 in this category.

1 **Q. WHAT TYPES OF COSTS COMPRISE THE DATA AND**
2 **CYBERSECURITY SERVICE CATEGORY?**

3 A. The Data and Cybersecurity service category includes all resources including
4 technology and subject matter expertise to prevent, isolate, and/or resolve potential
5 vulnerabilities and exposures of confidential and private data to non-authorized
6 individuals or parties.

7 **Q. WHAT DRIVES T.O.'S O&M EXPENSE?**

8 A. TO's O&M expense is primarily driven by deployed technologies through annual
9 vendor maintenance and support cost increases. Additionally, organic growth of
10 data associated with a general increase in the number of transactions executed
11 across the total systems and application environment requires additional hardware
12 and software license acquisitions which results in additional supporting O&M
13 increases.

14 Major capital investments since Docket No. 38339 include implementation
15 of mandated regulatory changes, major technology upgrades or conversions
16 required to maintain support or ensure data and cybersecurity maintenance is
17 maintained at the most recent levels, development and deployment of customer
18 accessibility and functionality improvements, increasing overall business
19 functionality resiliency through higher degrees of redundancy, including the
20 construction and activation of a backup Energy Control and Data Center, and the
21 merging of Information technology and Operations technology to optimize TO's
22 ability to deliver services. These initiatives are the primary drivers of TO's O&M
23 expense.

1 **Q. WHAT TYPES OF T.O. CAPITAL PROJECTS MAKE UP THE**
 2 **APPROXIMATELY \$1 BILLION IN T.O. CAPITAL ADDITIONS SINCE**
 3 **DOCKET NO. 38339?**

4 A. Figure 3 below highlights the major TO capital additions for CenterPoint Houston
 5 since Docket No. 38339.

6 **Figure 3. TO Capital Additions 2010 - 2018**

Service Category	Amount (\$ 000s)
Baseline TO Support	\$268,927
Advanced Metering System	\$441,226
Intelligent Grid	\$103,820
Telecom & General Equipment	\$215,343
Total	\$1,029,315

7 **Q. HOW HAS TECHNOLOGY SUPPORTED THE WAY THE COMPANY**
 8 **DOES BUSINESS SINCE DOCKET NO. 38339?**

9 A. TO investments are strategically engineered to support the increased safety,
 10 satisfaction, and security of our customers, employees, regulators, and the general
 11 public. The organization's Operate, Serve, and Grow strategy is founded on digital
 12 transformation through deployment of innovative technologies that improve
 13 operations, reduce organizational risks, and provide customer and employee
 14 benefits. Through major technology advancements, including deployment of smart
 15 meters, intelligent grid technology, mobile customer and employee digital services,
 16 data analytics, and more sophisticated cybersecurity capabilities, the Company has
 17 matured from a 20th century utility to a 21st century digital business.

1 **Q. HOW HAVE THE COMPANY’S TECHNOLOGY INVESTMENTS**
2 **SERVED TO IMPROVE THE COMPANY’S ABILITY TO SERVE ITS**
3 **CONSTITUENCY?**

4 A. The best example of how the Company has capitalized on its technology
5 investments is in the organization’s response to the catastrophic weather event,
6 Hurricane Harvey. Technology implemented since Docket No. 38339 was
7 instrumental in restoring services to our customers.

8 **The Smart Grid**, including distribution automation devices such as
9 intelligent grid switches, allowed us to quickly isolate problems on our grid and
10 restore service to customers through those devices. Presently, there are
11 approximately 1,552 overhead circuits with automated devices representing about
12 20% of the distribution deployment. The Company operated more than 250 of these
13 devices during Hurricane Harvey, impacting more than 140,000 customers.
14 Through smart grid automation, CenterPoint Houston avoided almost 41 million
15 outage minutes (approximately 683,000 hours) for our customers and saved 16.71
16 System Average Interruption Duration Index (“SAIDI”) minutes.

17 **AMS meters** increased efficiency during the storm. The Company
18 executed 45,000 orders remotely at 97% performance and billed 700,000 accounts
19 with actual readings at 98.9% performance. The Company also used AMS meters
20 to remotely turn service off and on for safety reasons.

21 **Real-time analytics** tools allow CenterPoint Houston to assess, monitor
22 and resolve cases more effectively and efficiently. During Hurricane Harvey, real-
23 time analytics aided in developing better situational awareness and allowed us to

1 correlate weather and flooding information with outages, providing operations with
2 critical decision-making tools.

3 **Drones** helped to assess damage and evaluate work conditions. More than
4 500 locations were tracked using 15 drones, which enabled real-time situational
5 awareness, accelerating restoration assessments. Our drones allowed us to
6 efficiently direct crews to accessible locations, and their built-in infrared
7 capabilities helped identify equipment that needed further inspection.

8 **Mobile data** tools with each crew kept outage management efficient.

9 **Power Alert Service (“PAS”)** kept customers informed. AMS meters
10 provide outage information that enables our predictive analytics engine to supply
11 data to PAS and Interactive Voice Response (“IVR”) systems, ultimately allowing
12 for better, more detailed customer updates.

13 **Advancement in call center technology and mobility technologies**
14 provided for:

- 15 • **485,455** calls to the call center;
- 16 • **147,612** calls answered by agents with IVR handling the remainder;
- 17 • **352,629** outage notifications delivered through PAS service; and
- 18 • **22,257** new PAS enrollments.

19 **A Secondary Energy Control and Data Center** was necessary to reduce
20 or eliminate the risk of losing our ability to deliver customer services in the event
21 of a major data center outage. Regulatory recovery time requirements were not
22 achievable through traditional disaster recovery means and the addition of a
23 secondary data center will ensure all mission critical applications and systems are

1 recoverable and operational when a major event like Hurricane Harvey occurs. In
2 addition, all mission critical systems have a higher resiliency and recoverability
3 capacity as a result.

4 **Q. WERE THERE OTHER MAJOR T.O. CAPITAL PROJECTS SINCE**
5 **DOCKET NO. 38339?**

6 A. Yes. Since the Company's last rate case, we have begun transitioning data from
7 our prior customer information system to SAP. This transition is necessary to
8 support the exponential growth in customer data generated by our AMS deployment
9 and relied upon by customers and the market.

10 **Q. HOW HAVE THE COMPANY'S TECHNOLOGY-RELATED EXPENSES**
11 **CHANGED IN LIGHT OF THE NEW INVESTMENT SINCE DOCKET**
12 **NO. 38339?**

13 A. Technology-related costs have increased based on the increasing business reliance
14 on digital capabilities and services. Capital technology investment results in
15 longer-term O&M increases. Since Docket No. 38339, technology investments
16 have focused on increasing customer satisfaction, ensuring long-term and
17 sustainable business resiliency, maturing data and cybersecurity capabilities,
18 maintaining or improving efficiency and effectiveness of operations, and
19 continually improving both the functionality and dependability of our mission
20 critical business systems.

1 **Q. ARE THE T.O. CAPITAL INVESTMENTS SINCE DOCKET NO. 38339**
2 **AND THE T.O. TEST-YEAR O&M EXPENSES REASONABLE AND**
3 **NECESSARY?**

4 A. Yes. The 2010 – 2018 TO capital investments and the test-year operating expenses
5 are reasonable and necessary, because the utility requires technology services just
6 as much (and perhaps even more) than any other business operation requires these
7 support functions. The total cost of services is reasonable as it is based on the actual
8 cost of providing each service, with CenterPoint Houston only responsible for its
9 assigned share as described in the next section of my testimony.

10 **V. COST ASSIGNMENT**

11 **Q. HOW ARE THE RATES FOR T.O. SERVICES DETERMINED?**

12 A. The rates for TO services are determined annually during the budgeting process.
13 Each business unit, working with TO personnel, signs an SLA identifying the
14 quantity of each provided service projected to be used in the upcoming year. The
15 business units and TO work together to estimate the amount of services needed for
16 the coming year, which include reviewing the historical volume trend data for a
17 given service for the business unit and discussing factors that may cause the trend
18 to shift down or up.

19 Finance, working with TO, then uses this estimate of the total projected
20 quantity of a given service required during the year, along with the total forecasted
21 cost for that type of service to calculate the unit rate to be applied throughout the
22 year for each given service. This is then reviewed and agreed to by CenterPoint
23 Houston during the annual budget process. In all cases, the unit rate charged for
24 each type of service will be the same for all of TO's clients with the cost for a given

1 service being equal to the volume of a given service used times the unit rate for that
2 given service. Should the cost of providing a type of service or the quantity of
3 service taken materially deviate from budgeted levels during the year, adjustments
4 are made to compensate for the deviations.

5 **Q. ARE THERE ANY SERVICES PROVIDED BY T.O. THAT ARE NOT**
6 **COVERED BY SLA'S?**

7 A. No. All services provided by TO are covered within the SLAs.

8 **Q. DO THE SLA'S INCLUDE EFFECTIVENESS MEASUREMENTS?**

9 A. Yes. The SLAs contain metrics such as server uptime and problem resolution time
10 that reflect the effectiveness of TO service delivery in accordance with defined
11 business requirements.

12 **Q. FOR EACH OF THE T.O. SERVICES, PLEASE DESCRIBE HOW COSTS**
13 **ARE ASSIGNED TO EACH CLIENT.**

14 A. All clients are billed for a service based upon a single, common rate for each given
15 service and the volume or level of service utilized. Using the direct assignment
16 methodology previously discussed, TO charges TO's clients in the following
17 manner for each of the nine specific types of services described earlier in my
18 testimony.

1

Figure 4. Cost Assignment of TO Services

Service	Direct Assignment Calculation
Desktop Data Device	This service is directly assigned to clients based upon the number of login IDs for a given client area. The number of login IDs is identified within CNP's Active Directory structure for Local Area Network Access.
Mainframe CPU Utilization	This service is directly assigned to clients based on the number of CPU seconds used. Snapshots of CPU usage are taken on a daily basis to capture mainframe usage by department billing point, totaled on a monthly basis, and billed to the appropriate business unit.
Data Management	This service is directly assigned to clients based upon the number of megabytes managed by each client. A snapshot of disk allocations is captured monthly and is matched to the cost centers in SAP to determine the owner of the storage.
Distributed Systems	Personnel, hardware and software charges for this service are specific to individual business units based on the client's specific use of the applications, platforms, and software, and are directly assigned to those business units.
Enterprise Applications Development and Support	The costs of this service are directly assigned based upon the business unit's headcount (67% weighting) and operating expenses (33% weighting).
Applications Development and Support	The costs of this service are directly assigned to each client utilizing the service. The charges are based upon billable hours of actual work effort required to support ongoing baseline operations activity and new projects solicited by clients to provide business solutions.
Telephony Service	Each telephone instrument, fax machine, or modem requires a dedicated port on the Private Branch Exchange ("PBX") switch. The total cost for this service is divided by the total number of end users supported by the PBX to determine the rate and multiplied by the number of end users to determine the directly assigned cost. While TO works with Purchasing & Logistics to structure CNP's long distance contract, the costs are invoiced directly to the CenterPoint Houston cost centers based on the minutes of actual long-distance usage reflected in the vendor invoice for those individuals in CenterPoint Houston.
Telecommunications Move/Add/Change	Charges are directly assigned and based upon billable hours.
Data and Cyber Security Management	This service is allocated to all business units based on total TO O&M spend.

1 **Q. DOES CENTERPOINT HOUSTON PAY HIGHER RATES FOR SERVICE**
2 **THAN OTHER BUSINESS UNITS OR AFFILIATES?**

3 A. No. All business units are billed at cost based upon a single, common rate for each
4 TO service, calculated as described in Figure 4.

5 **Q. ARE THERE CONTROLS IN PLACE IN CASE THE COST OF A T.O.**
6 **SERVICE IS MORE THAN BUDGETED?**

7 A. Yes. Should TO's expenses for a given service, or the volume for a given service,
8 be higher or lower than budgeted, a monthly true-up process occurs wherein the
9 cost for services is adjusted and the subsequent cost increase or decrease is
10 charged/credited to each business unit.

11 **Q. ARE COSTS PROPERLY ASSIGNED TO THE VARIOUS AFFILIATES?**

12 A. Yes. As previously discussed, the level of service provided to each client and the
13 rates charged for those services are developed during the budget and SLA execution
14 process. This process helps ensure that TO provides only services that each client
15 deems necessary. The SLA process also serves to develop one rate for each given
16 service, which is then applied for each client's volumes for that given service using
17 the direct cost assignment methodologies previously discussed. TO expenses are
18 captured in our SAP financial module by cost element within a cost center or work
19 breakdown structure ("WBS"). The WBS captures those internal hours and
20 third-party costs (e.g., contractors, hardware, software) that tie to the specific effort
21 defined and represented by the WBS for a given business unit. SAP reports are
22 then used monthly to review all TO hours worked and tracked by individual
23 according to the given service work and project effort done. These hours, along

1 with the expenses attributable to a given service or WBS, are summarized into a
2 cost assignment report provided to each business unit as a validation check of
3 charges. Variances between budgeted and actual charges are identified and
4 explained or corrected.

5 **Q. HOW DOES T.O. MONITOR AND CONTROL EXPENSES TO ENSURE**
6 **THAT INCURRED COSTS ARE REASONABLE AND NECESSARY AND**
7 **THAT COSTS ARE PROPERLY ASSIGNED TO AFFILIATES?**

8 A. TO uses CNP's budget process, as explained in the direct testimony of
9 Ms. Townsend, to determine expected annual expenditures. As expenditures occur,
10 CNP processes require management approval for all dollars spent to ensure the
11 charges applied are consistent with the requests of the client and cost level
12 expectations. Use of SLAs is also important because they establish a process
13 wherein a client such as CenterPoint Houston only receives TO services it has
14 requested. During each year, as costs are incurred, TO identifies any variances
15 from the annual budget and reviews those for reasonableness. TO must also justify
16 the variances to Company management on a monthly basis.

17 CenterPoint Houston also manages TO costs. CenterPoint Houston, like all
18 of CNP's business units, is accountable for the dollars TO spends. Costs are
19 monitored and reconciled monthly to ensure that costs incurred by TO on behalf of
20 TO's clients are appropriately borne by the client receiving services. As a result,
21 the CenterPoint business units monitor their TO costs just as they would other types
22 of costs, internal or external, to ensure that they are appropriate and reasonable.

1

VI. CONCLUSION

2 **Q. DOES THIS CONCLUDE YOUR TESTIMONY?**

3 **A. Yes.**

STATE OF TEXAS §
 §
COUNTY OF HARRIS §

AFFIDAVIT OF SHACHELLA D. JAMES

BEFORE ME, the undersigned authority, on this day personally appeared Shachella D. James who having been placed under oath by me did depose as follows:

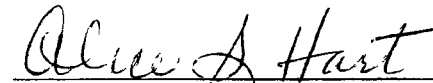
1. “My name is Shachella D. James. I am of sound mind and capable of making this affidavit. The facts stated herein are true and correct based upon my personal knowledge.
2. I have prepared the foregoing Direct Testimony and the information contained in this document is true and correct to the best of my knowledge.”

Further affiant sayeth not.



Shachella D James

SUBSCRIBED AND SWORN TO BEFORE ME on this 18 day of March, 2019.



Notary Public in and for the State of Texas

My commission expires: 07/17/2019

