

**AUSTIN ENERGY'S
2022 BASE RATE REVIEW**

§ **BEFORE THE CITY OF AUSTIN**
§
§ **IMPARTIAL HEARING EXAMINER**

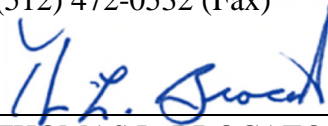
**AUSTIN ENERGY'S RESPONSES TO QUESTIONS RELATED TO
TECHNICAL CONFERENCE #1**

Austin Energy held a Technical Conference on Thursday, May 5, 2022, to allow Participants to ask questions related to the 2022 Austin Energy Base Rate Review. During the discussions at the Technical Conference, Austin Energy committed to answering certain questions in more detail. The purpose of this filing is to follow up regarding those questions and provide the responses to the public to allow for increased ease and access to information for all Participants.

Respectfully submitted,

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**ATTORNEYS FOR THE CITY OF AUSTIN
D/B/A AUSTIN ENERGY**

**Austin Energy's Responses to Questions from the
Independent Consumer Advocate (ICA)**

ICA TC 1-2:

Outside City Rates. Does AE propose to discontinue the 5% outside city rate discount? If yes, how did this affect the cost of service study and bill impact analysis (e.g., WP H-3.1.2)? What is the base rate revenue associated with the current outside city discount by class?

ANSWER:

Austin Energy cannot provide a response to the first question as asked because Austin Energy did not provide a 5% outside city rate discount. However, Austin Energy understands this question to be referring to the distribution of revenues between inside and outside city customers.

Under the rates approved in the June 7, 2012, ordinance, Austin Energy's revenue requirement for customers outside the City of Austin was \$159,970,582. Under the rates in the agreement, Austin Energy's revenue requirement for customers outside the City of Austin is \$153,794,692.

With respect to the second question, this has no impact on the Cost of Service Study. Additionally, an analysis of the impact of the 2012 revenue settlement on bill impact analysis in workpaper WP H-3.1.2 has not been performed.

A revenue analysis that has the base rates for customers outside the City of Austin set equal to the base rates for customers inside the City of Austin was developed for this response. The difference in revenues for the two scenarios (current rates vs. no outside city difference) is compared in the attached. Austin Energy assumes the ICA is seeking this difference.

Attachment ICA TC 1-2: Test Outside City Rates

Test Outside City Rates

<u>Class</u>	<u>Base Revenues</u>	<u>Base Revenues</u>	<u>Difference (\$)</u>	<u>Difference (%)</u>
	<u>with no OCL Rate</u>	<u>Under Current</u>		
	<u>Difference</u>	<u>Rates</u>		
Residential	\$ 300,959,726	\$ 298,139,951	\$ 2,819,775	0.9%
Secondary Voltage < 10 kW	22,062,516	22,062,516	-	0.0%
Secondary Voltage ≥ 10 < 300 kW	146,603,046	146,379,682	223,364	0.2%
Secondary Voltage ≥ 300 kW	97,530,727	97,431,981	98,746	0.1%
Primary Voltage < 3 MW	8,572,137	8,571,888	249	0.0%
Primary Voltage ≥ 3 < 20 MW	24,591,038	24,590,380	657	0.0%
Primary Voltage ≥ 20 MW @ 85% aLF	33,906,126	33,906,126	-	0.0%
Transmission	801,058	801,058	-	0.0%
Transmission Voltage ≥ 20 MW @ 85% aLF	4,236,381	4,236,381	-	0.0%
Total Excluding Lighting	\$ 639,262,755	\$ 636,119,964	\$ 3,142,791	0.5%
City-Owned Private Outdoor Lighting	\$ 2,141,558	\$ 2,141,558	\$ -	0.0%
Customer-Owned Non-Metered Lighting	45,878	45,878	-	0.0%
Customer-Owned Metered Lighting	316,344	316,344	-	0.0%
Grand Total	\$ 641,766,535	\$ 638,623,744	\$ 3,142,791	0.5%

ICA TC 1-7: **Non-Nuclear Decommissioning Reserve.** Please provide studies, analyses, and calculations which support the amount of Non-Nuclear Decommissioning annual payment.

ANSWER: Please refer to Austin Energy's Response to ICA RFI 2-5, Attachment ICA RFI 2-5: Non-Nuclear Decommissioning Cost Study (Public), filed on May 13, 2022.

ICA TC 1-8A: **Fayette and STP Expenses.** Please provide the most recent annual management reports for the Fayette Coal Plant and South Texas Nuclear Project, including budgets and expenses by FERC account.

ANSWER: This information is considered competitively sensitive information, and therefore is confidential and cannot be disclosed.

ICA TC 1-8B: **Fayette and STP Expenses.** Identify labor expenses for both of these power plants as shown in the cost of service model. If the labor expense is not shown in the cost of service model, provide AE's share of site labor expenses for each plant by FERC account.

ANSWER: FPP labor expense is not shown in the Cost of Service model. Austin Energy's portion of FPP Site Labor for the 12 months ended September 30, 2021 can be found in Attachment ICA TC 1-8B.

Please refer to Austin Energy's Response to ICA RFI 1-7 for STP Labor expense as a component of total labor expense by FERC account.

Attachment ICA TC 1-8B: Austin Energy Portion of FPP Site Labor for the 12 Months Ended September 30, 2021

**Austin Energy portion of FPP Site Labor
For the 12 Months Ended September 30, 2021**

FERC	12 Months Ended Total
40800	\$ 442,182.88
50000	\$ 258,381.80
50100	\$ 579,183.08
50200	\$ 186,245.35
50500	\$ 69,463.01
50600	\$ 3,320,430.27
51000	\$ 221,744.76
51100	\$ 41,126.62
51200	\$ 480,614.86
51300	\$ 79,414.56
51400	\$ 578,365.90
92600	\$ 2,845,495.10
93000	\$ 1,393.61
93500	\$ 59.92
Grand Total	\$ 9,104,101.72

ICA TC 1-8C: **Fayette and STP Expenses.** Provide the annual capacity factor for each power plant.

ANSWER: The annual capacity factor for each power plant can be found in the attached document.

Attachment ICA TC 1-8C: CY21 Capacity Factors

Decker Power Plant		Natural Gas
Unit	Type	Capacity Factor
DECKER_DPG2	Steam	18%
DECKER_DPGT_1	CT	2%
DECKER_DPGT_2	CT	3%
DECKER_DPGT_3	CT	4%
DECKER_DPGT_4	CT	1%

SandHill Energy Center		Natural Gas
Unit	Type	Capacity Factor
SANDHSYD_CC1	Combined Cycle	39%
SANDHSYD_SH1	CT	13%
SANDHSYD_SH2	CT	12%
SANDHSYD_SH3	CT	14%
SANDHSYD_SH4	CT	15%
SANDHSYD_SH6	CT	10%
SANDHSYD_SH7	CT	11%

Robert Mueller Energy Center		Natural Gas
Unit	Type	Capacity Factor
RMEC	CT	86% unsure on nameplat capacity, using 3.75 MWs as opposed to 1.5 MWs

Fayette Power Project		Coal
Unit	Type	Capacity Factor
FPPYD1_FPP_G1_J02	Steam	64%
FPPYD1_FPP_G2_J02	Steam	56%

South Texas Nuclear Project		Nuclear
Unit	Type	Capacity Factor
STP_STP_G1_J04	Steam	89%
STP_STP_G2_J04	Steam	89%

ICA TC 1-9: **Gas Generation Plants.** Provide the gross and net plant costs for gas generation plants included in the cost of service model, separately shown for Combustion Turbines and Steam Gas Generation. Provide the annual capacity factor, separately, for CTs and Steam-fired Gas Generation.

ANSWER: Gross and net plant costs for individual gas generation plants are not available in the Cost of Service Model. The annual capacity factor for CTs and steam-fired gas generation can be found in Attachment ICA TC 1-8C.

ICA TC 1-11C: **Meter Reading.** Please explain how the determination of WWU and AE meter reading expense recognizes that electric meter data can be obtained more efficiently than water meter data.

ANSWER: Meter reading costs are allocated to Austin Water and Wastewater based on the number of manual reads incurred by each utility. Austin Water and Wastewater had 99.44% of reads in FY 19, which was the percentage used for the FY 21 allocation.

ICA TC 1-12B: **Electric meters.** Please provide any AE assessments or documentation of the benefits provided by AE's current digital smart meters. This request pertains to the meters typically sized for the residential and small commercial classes.

ANSWER:

The requested documents are attached.

Attachment ICA TC 1-12B-1: Overview of Austin Energy's Advanced Metering Infrastructure (AMI) Presentation

Attachment ICA TC 1-12B-2: Austin Energy, Our Energy Roadmap (excerpt regarding the role of smart meters)

Attachment ICA TC 1-12B-3: Austin Energy Focus AL Residential Meter Replacement Project, Section G – Justification/Anticipated Benefits (AMI Business Case)

Overview of Austin Energy's Advanced Metering Infrastructure (AMI)

Community Technology and Telecommunications Commission

Dan Smith, P.E.

Vice President – Electric Service Delivery



January 9, 2019

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Overview

- Safety Moment
- Summary of Austin Energy's Power Delivery System
- Overview of AE's Strategic Goals and Grid Modernization Strategy
- Overview of AE's AMI
 - Benefits
 - Scope
 - History
 - Roadmap & Initiatives
 - Highlight of a few Applications



Technology Driving Safety

Remote communication and control of T&D assets



Means reduced truck rolls

Reduced exposure

AE's Power Delivery System



- | | | | |
|---|---|---|---|
| <ul style="list-style-type: none"> • ERCOT Market | <ul style="list-style-type: none"> • 623 miles of Transmission Lines | <ul style="list-style-type: none"> • 2 Community Solar Farms | <ul style="list-style-type: none"> • 480,000 Customers |
| <ul style="list-style-type: none"> • ~ 72,000 MWs generation | <ul style="list-style-type: none"> • 75 Substations | <ul style="list-style-type: none"> • 2 Energy Storage Systems (SHINES Project) | <ul style="list-style-type: none"> • 8,800 Solar Generating Customers |
| <ul style="list-style-type: none"> • 4,834 MWs Austin Energy owned and contracted generation | <ul style="list-style-type: none"> • 4,938 miles Overhead Distribution Lines • 6,652 miles Underground Distribution Lines • 80,000 Distribution Transformers • 180,000 Distribution Poles | <ul style="list-style-type: none"> • 30 MW Local Solar | <ul style="list-style-type: none"> • 380,122 homes • 926,426 people • 596 schools, hospitals • 23 police, fire stations • 56,879 of businesses |



Electric Service Delivery's Vision



Enriching the
lives of our
customers and
communities by
being their
trusted energy
provider,
platform, and
partner



Grid Modernization Strategic Goal



Goal: Innovative **two-way grid** utilizing customer and company infrastructure to deliver **superior reliability** and **customer experience** at the **lowest reasonable cost**.

Measure: Achieve top decile T & D reliability indices (SATLPI, SAIDI, SAIFI, CAIDI) and above average JD Power customer satisfaction index for residential and commercial customers

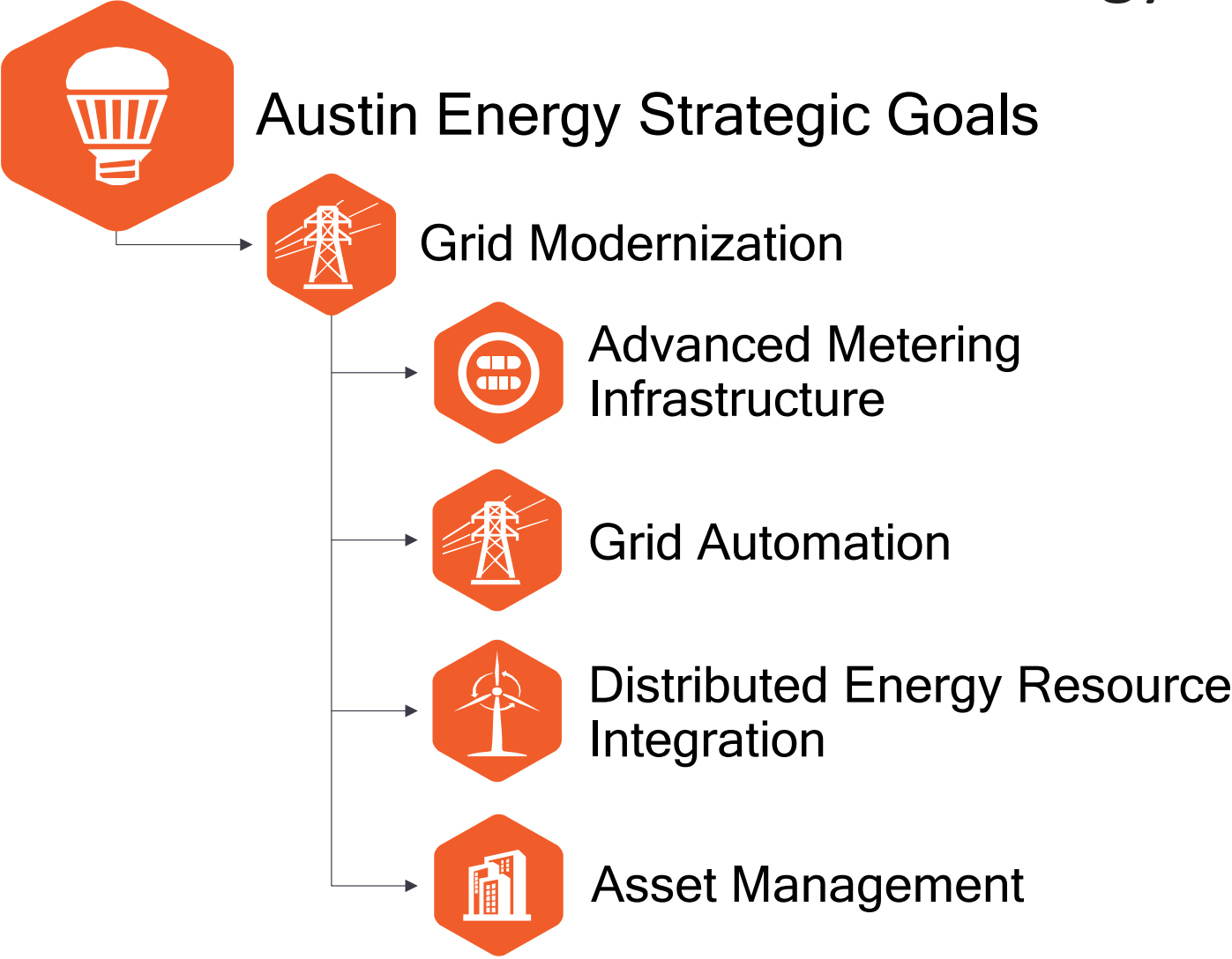
Current State: Top quartile reliability indices; Bottom quartile customer satisfaction index

Opportunities/Challenges: Resources (personnel/knowledge/funding), Analytics, Solution Selection





Grid Modernization Strategy





The Benefits of AMI

- **Customer Collaboration**
 - Enhanced Outage Communication
 - Increased Availability of Energy Usage Information
 - Alternative Rate Offerings
- **Financial Health and Business Excellence**
 - Enhanced revenue detection and protection
 - Remote monitoring and alarming
 - Over the air programming and remote service operations results in less field activities
 - Increased revenue modeling
 - Streamlining Complex Metering Operations
 - Operational efficiencies and cost savings
- **Grid Modernization**
 - Expanded system monitoring for Conservation Voltage Reduction, Fault Location Isolation & Service Restoration, micro grid, and other grid optimization applications
- **Environment**
 - Reduced Truck Rolls decreasing carbon footprint
- **Employee Engagement**
 - Increased personnel and public safety through alarming and monitoring and reduced truck rolls





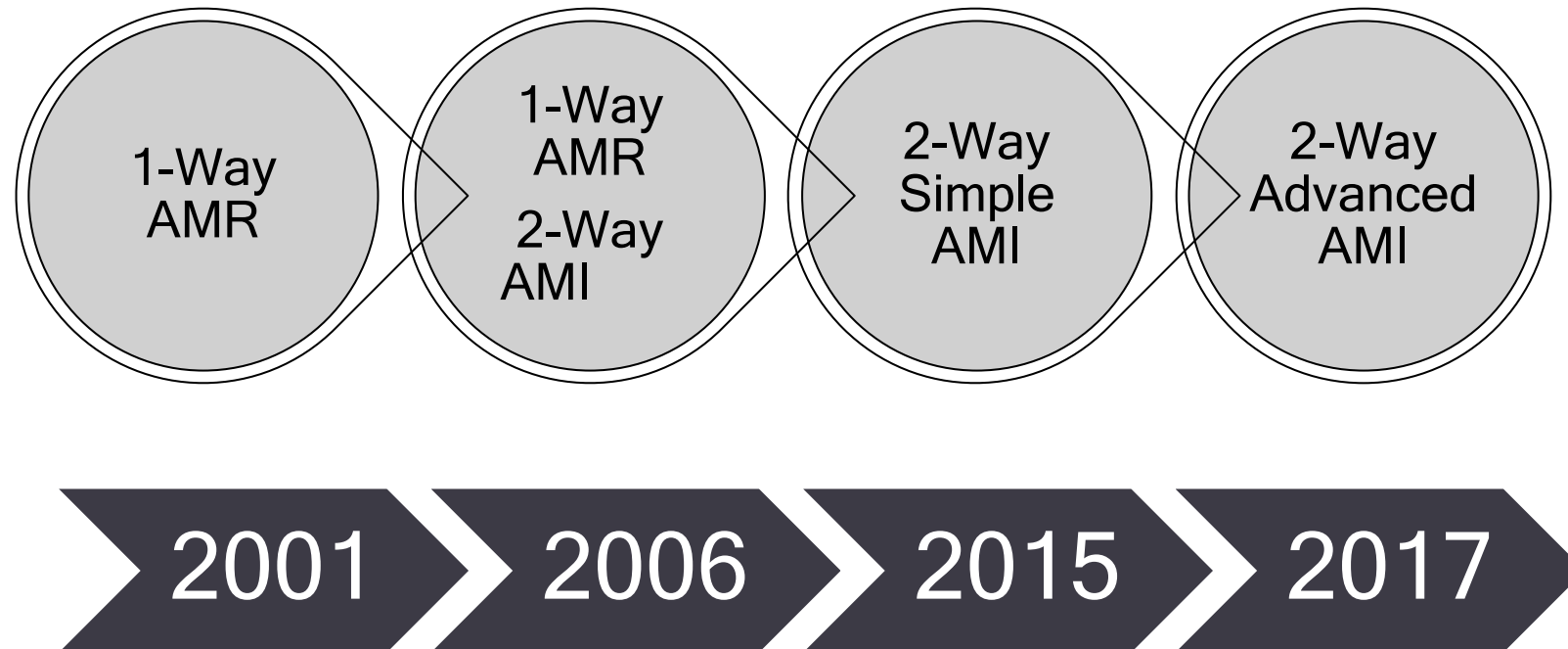
Scope of AMI at AE

- RF network spanning 437 square miles of service territory
- Managed Service provided by Landis + Gyr
- Over 490,000 Electric Meters in the AE Service Territory ...and growing ...
 - ~65k C&I meters
 - ~425k Residential Meters
 - 215k 'Simple' Two-Way Meters
 - 210k Two-Way Meters with IDR, Service Disconnect capability
- AMI at AE is the meter, the network, the systems that facilitate access

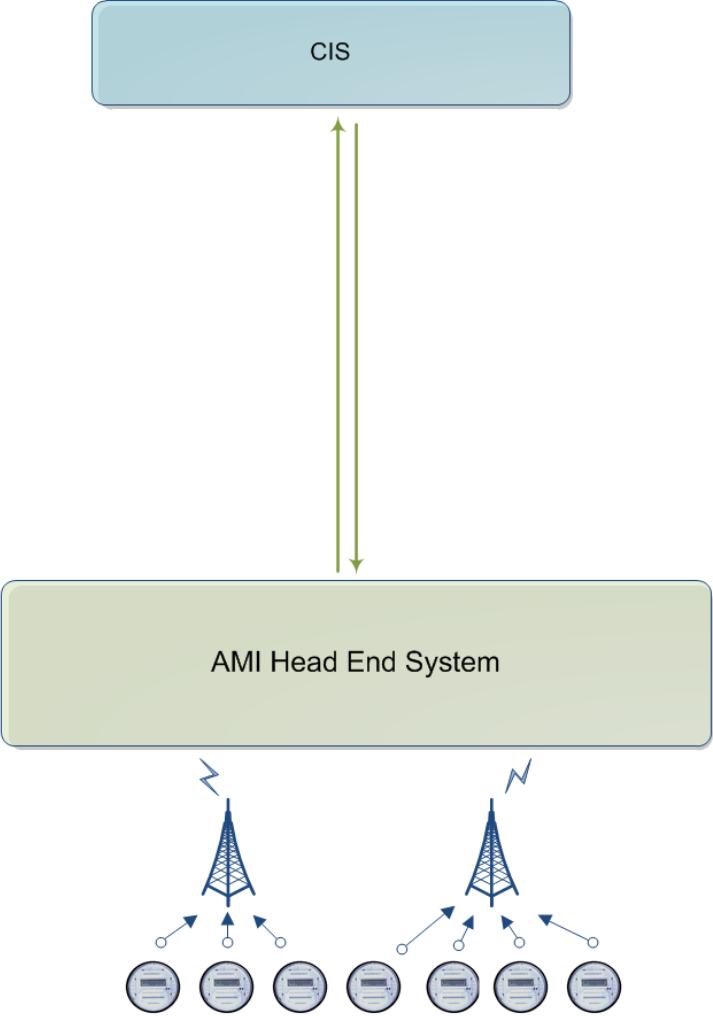




History of AMI at Austin Energy



AMI in 2013







AMI Data Flood

2013



Daily Reads = 1/day
Alarms/Events/Flags = 4

2018



Daily Reads = 1/day
Interval Reads = 96/Day
Alarms/Events/Flags = 137/600





Commercial & Residential Meter Upgrades

Commercial Meter Replacement Project

- 48,000 GE and Elster meters to be exchanged
- Planned completion FY 2019
- 30% complete
- Installation contractor

Residential Meter Replacement Project

- 245,000 residential meters to be exchanged
- Planned completion FY 2022
- 10% complete
- Revenue Measurement and Control





Leverage/Optimize Advanced Metering Infrastructure

Head End System Upgrade

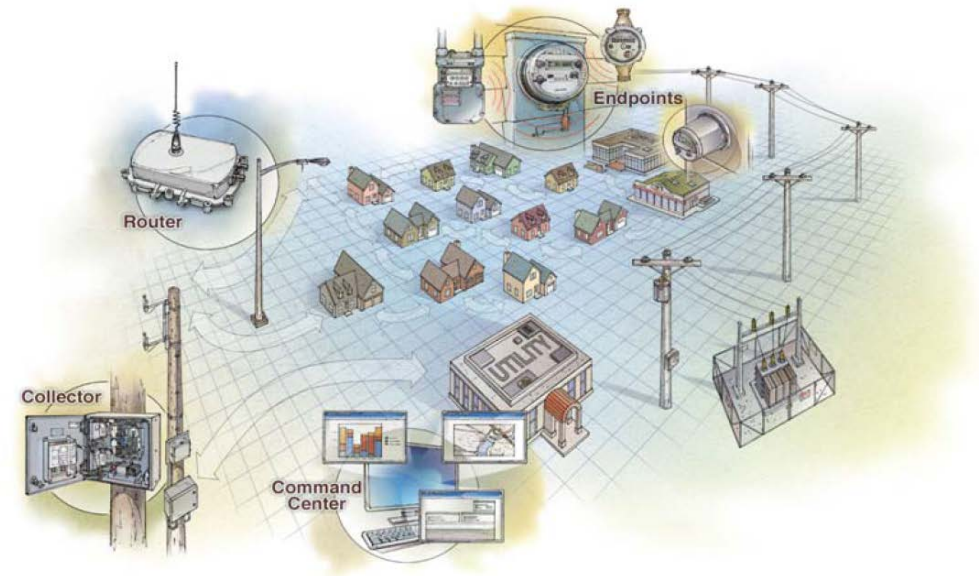
Remote Connect/Disconnect

ADMS Integrations

- Instantaneous voltage underway
- Automated outage/restoration events to MDMS>ADMS
- On Demand voltage requests from ADMS

Other Initiatives

- Thermostat and Home Energy Management System (HEMS) ZigBee integration proof of concept
- Proposed pilot of IP based metering communication protocol





Meter Data Management System Upgrade

Phase II Upgrade

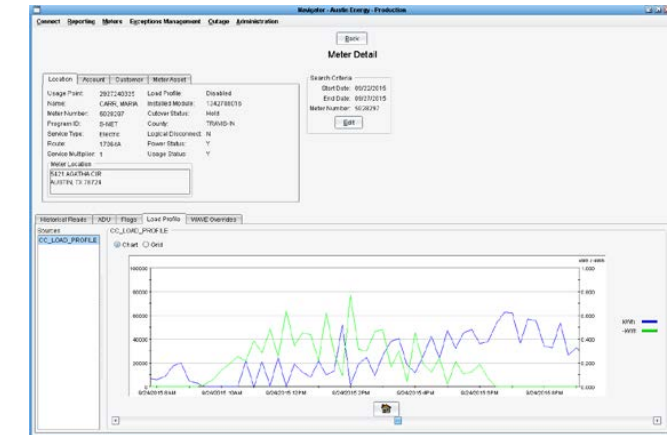
- Upgrade to Version 4.0
- Planned completion Q1 FY 2020

ADMS Integrations

- Automated outage/restoration events to ADMS
- On Demand Voltage requests from ADMS
- Monthly and Annual load profile data for all AMI reporting meters to support load flow estimates in ADMS

Totalized and Fractional Metering

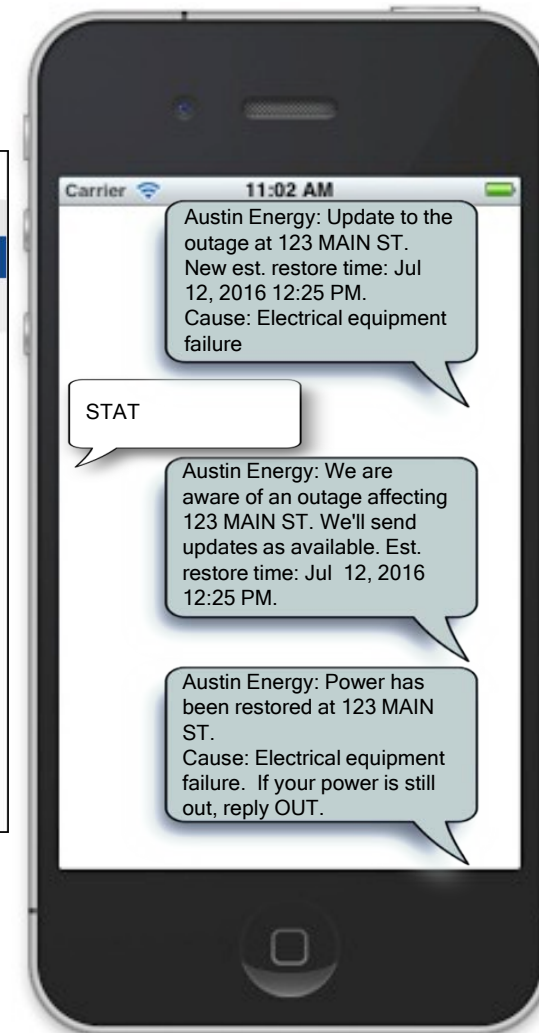
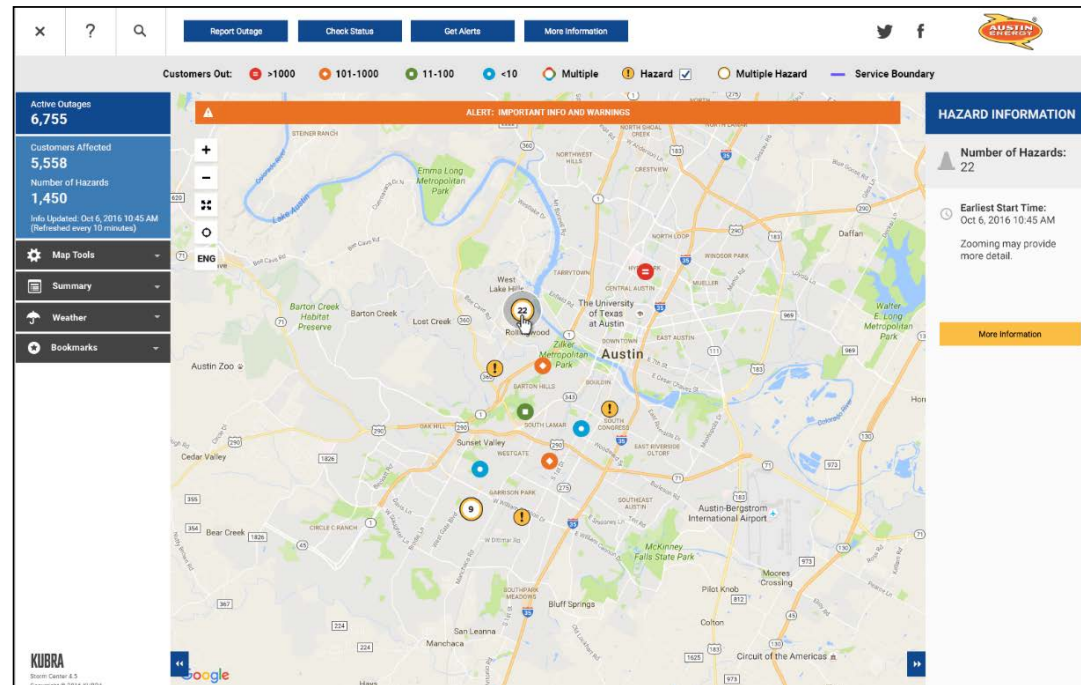
- Using MDMS Virtual Metering Engine



The screenshot shows the 'Meter Detail' window for a specific meter. It includes a 'Historical Reads' section with a table of reads. The table has columns for 'Entry Date', 'Meter ID', 'Module ID', 'Source', 'Read Time', 'kWh Read', 'Daily kWh Usage', 'Read Status', 'Daily Peak Demand', and 'Daily Peak Demand T'. The table contains multiple rows of data, with the most recent read on 08/20/2015 at 00:00.

Entry Date	Meter ID	Module ID	Source	Read Time	kWh Read	Daily kWh Usage	Read Status	Daily Peak Demand	Daily Peak Demand T
08/20/2015 00:00	5028297	1342700016	CC_METER_READS	08/20/2015 00:00	22194.149	23.02	O		
08/20/2015 00:00	5028297	1342700016	CC_METER_READS	08/20/2015 00:00	22171.129	32.441	O		
08/20/2015 00:00	5028297	1342700016	CC_METER_READS	08/20/2015 00:00	22138.688	18.240	O		
08/20/2015 00:00	5028297	1342700016	CC_METER_READS	08/20/2015 00:00	22118.44	31.325	O		
08/20/2015 00:00	5028297	1342700016	CC_METER_READS	08/20/2015 00:00	22088.115	23.595	O		
08/20/2015 00:00	5028297	1342700016	CC_METER_READS	08/20/2015 00:00	22064.72	22.812	O		
08/20/2015 00:00	5028297	1342700016	CC_METER_READS	08/20/2015 00:00	22041.808	20.812	O		
08/20/2015 00:00	5028297	1342700016	CC_METER_READS	08/20/2015 00:00	22020.295	27.804	O		
08/20/2015 00:00	5028297	1342700016	CC_METER_READS	08/20/2015 00:00	21993.092	28.73	O		
08/20/2015 00:00	5028297	1342700016	CC_METER_READS	08/20/2015 00:00	21964.362	36.688	O		
08/20/2015 00:00	5028297	1342700016	CC_METER_READS	08/20/2015 00:00	21937.874	23.58	O		
08/20/2015 00:00	5028297	1342700016	CC_METER_READS	08/20/2015 00:00	21904.094	26.349	O		

Customer Outage Communication





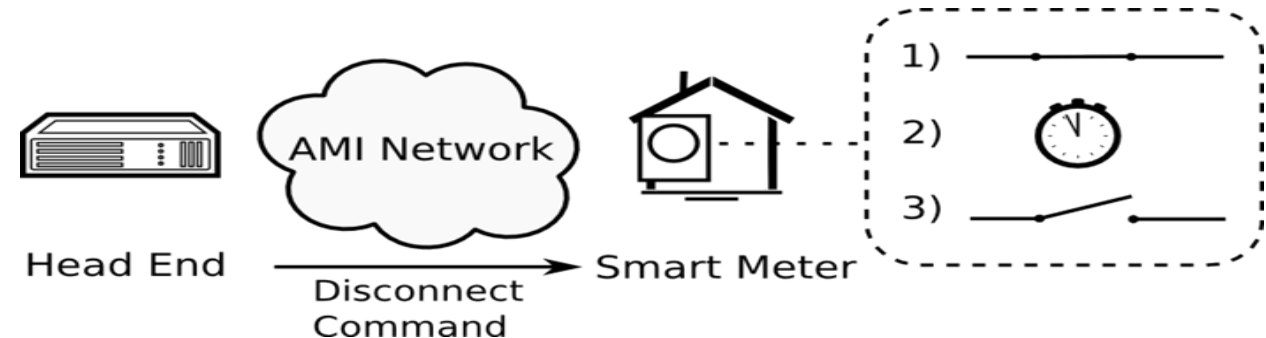
Automated Remote Service Switching

Remotely Connecting and Disconnecting Customer Service

Meter can *Open* or *Close* with a command sent OTA

Customer Requested Disconnect
or
Disconnect for non-payment

Enables Prepay program



Manual process today

Reduces

~50 Truck Rolls/Day



Automated process tomorrow

Reduces

~300-500 Truck Rolls/Day

Zigbee Pairing

Pairing our AMI Meters with Home Energy Devices

Meter is provisioned to accept a connection request from a specific device

Device will “read” the register of the meter

Customers have the ability to better understand their energy consumption



Shared Solar

One Meter, Many Customers

Allows landlords to offer solar credit to tenants

PV consumption from one meter is broken out into specified fractions within MDMS

Tenants receive credit from consumptive values on 'virtual meter' in CC&B





**Customer Driven.
Community Focused.SM**



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All of Austin Energy's electric meters transfer meter readings automatically.



COMMUNICATING WITH SMART METERS

All electric meters in Austin Energy's system are automated and position the utility to be on the forefront of developing a smart grid that enhances customer service and reduces operational costs. Austin Energy was one of the first electric utilities in the country to deploy an Advanced Metering Infrastructure that communicates meter reads at frequent intervals to track energy use.

With new software systems currently being put in place, the meters can send out a signal when they have lost power and when power is restored. Austin Energy also can "ping" the meters to double-check if electricity is back on. The data available to Austin Energy from its meters and communication software increases the speed of restoration and the volume of information available for the utility to communicate to customers about outages.

When more information is available about their energy use, customers can monitor their consumption and the amount of electricity used. This will help customers lower their electric bills and Austin Energy reduce the amount of electricity produced.

Now, that's smart.



Austin Energy Focus AL Residential Meter Replacement Project

A. General Information

Project Request Name:	Focus AL Residential Meter Replacement Project
Business Unit Requesting:	ESD, CCS, CAM, CES
Prepared By:	Salvador Lima, William Kelly, Pam Cleveland
Date Prepared:	02/22/2016
Cost Estimate (Capital):	\$28,175,000.00
Ongoing Cost (O&M):	
Life Cycle ROI (5yr):	
Strategic Value	High
Proposed Project Start Date:	August 2016
Estimated In-Production Date:	September 2020
Estimated Completion Date:	September 2020

B. Project Description

Austin Energy (AE) has ~245,000 Landis+Gyr (L+G) Focus AL residential meters in its service territory. These meters, initially procured and installed from 2006 to 2009, were used as a cost effective solution to propagate and complete Automated Meter Reading throughout the AE service territory and help transition AE into Advanced Metering Infrastructure (AMI). As AE's Advanced Metering Infrastructure (AMI) needs have matured, the Focus AL has been identified as a legacy hardware product that no longer meets the utility's or the city's goals for advanced metering. Compounded by the fact that the Focus AL product has been beset by functional display problems – a display that does not impact the integrity of the metrology but can cause problems validating the meter read information easily via the LCD display. A random sampling of 1.5% of the AL Meter population performed by Revenue Measurement & Control (RMC) reported that nearly 52% of the meters visited had either a faded or blank display. Austin Energy has worked with the manufacturer, Landis+Gyr, on an agreement to provide financial relief to AE for this product, but the desired, suitable replacement, the Landis +Gyr Focus AXR-SD meter, is a technological upgrade and will require additional funding to fulfill.

C. Business Opportunity/Need/Problem/Issue

The primary concern is the lack of integrity that the Focus AL meter potentially provides in Meter to Cash assurance. The LCD burn out/brown out issue causes a lack of validation of the following requirements:

(L+G)

- Meters will not have full functionality and features that come standard on Focus AL meter. (e.g. net metering capabilities)
- 4) Replace existing Focus AL meters with new meters with greater functionality and better align with Austin Energy Key Strategic Initiatives.
- Field replacement services will be the same as Options 2 and 3.
 - Meters will be at a significantly discounted price point than meters in Option 3.
 - Remote meter firmware changes or meter re-programing would be available which would reduce operating cost and some defect fixes or enhancements would not require a field visit
 - Retirement fee would be waived, (approximately \$4.2M), only if Focus AXR-SD meter platforms are installed

E. Proposed Solution

Option 4:

Initiate a five (5) year replacement strategy to include funding of \$28,175,000.00 over five (5) years to purchase Landis+Gyr Focus AXR-SD meters at a significantly discounted price from the manufacturer. Assign an AE project manager, and perform field replacement activities utilizing in-house resources from Revenue Measurement and Control (RMC). Start deployment activities by replacing approximately 60,000 meters per year for 5 years starting August 2016. Measure the initial success of the phase 1 by tracking AMI system performance, revenue generation, and operational cost reductions.

F. Alignment with Austin Energy's Strategic Goals/Objectives

System Reliability – Focus AXR-SD meters provide interval data and enhanced outage and restoration flags, as well as additional diagnostic information and tamper detection.

Exceptional Customer Satisfaction – Remote Disconnection and Reconnection allows for less wait time between payment and reconnection.

Economic Development – Ability to collect interval data from all 400k + residential and light commercial meters in the service territory allows for enhanced research and analysis on grid load and provides ability to model rates for customers based upon factual, real consumptive data collected and not on figurative, modeled data.

G. Justification/Anticipated Benefits

Enhance Customer Service: This will be achieved by enhancing our outage reporting and service disconnection/reconnection times, increased identification or meter defect identification and eventual resolution and the potential to reduce estimated bills.

Reduce Electricity Theft: The meters currently used at AE have significantly limited capability to report Alarms or Events. By replacing these meters with a meter that will have alarms and



events capability, energy theft can be greatly reduced hence reducing lost revenue. This includes both, recovery of revenue and prevention of future potential revenue loss. Utility theft will be more readily detected using the replacement meters and Command Center, allowing for a more rapid identification and action to stop it. Utilities that have gone through a similar system change on the commercial metering platform have seen first year annual savings of over \$640K due to the reduction in theft.

Support Greater Customer Choice and Control: Installing new meters will also provide the utility the ability to combine meter programs into a standard program allowing more choices for new billing rates and structures that encourage conservation during peak periods.

Retirement Fees Waived: If the Focus AL meters are gradually replaced through the existing maintenance program or through a project utilizing a different meter manufacturer, a communication module retirement fee and a termination convenience fee will be charged by the network provider, Landis+Gyr. If the meters are replaced with Focus AXR-SD meters as part of a project, the retirement and termination convenience fees would be waived. This equates to approximately \$4.2 million dollars in savings over the 5 years the project is expected to take.

H. Organizational Impact

Meter Replacement Services:

In-house resources from Revenue Measurement and Control will be utilized in the following fashion over a 5 year period to exchange all Landis+Gyr Focus AL meters:

1. Resource allocation
 - 5 FTE dedicated to the project (Meter Maintenance)
 - 5 FTE Current Diversion (2 hours of overtime per employee daily M-F)
2. Replacement forecast (day, week & month)
 - Day – 250
 - Week – 1250
 - Month – 5000

Meter Monitoring & Maintenance Program:

Post installation of the more advanced Focus AXR-SD meter, the term 'meter maintenance' will need to take on a new form at Austin Energy. The meter population will be entirely electronic with an additional communications device on board, and accurate field validation of meter accuracy, program, software, firmware and functionality will be required. The challenges associated with supporting the newly deployed advanced meter population will likewise require a new look at existing resources skill sets. The introduction of the new smart meter platform will require an overhaul of the existing meter maintenance methodology and redesign of the in-service test plan.

The new model will require the assessment of existing processes and resources, reallocation and organization, shifting of responsibilities, possible supplemental resources, and extensive training. The challenge will be handling the magnitude of the changes in process.



ICA TC 1-14B: **3-1-1 Expense.** Provide the proportions of 311 calls pertaining to particular types of issues (e.g., downed power lines, outages, etc.).

ANSWER: The requested information is not available. The table below shows all 311 calls by all City of Austin Departments.

FY2021 Data						
Department	Disposition Duration (Min)	Disposition Duration (%)	True Budget (\$)	Allocated Budget (%)	Allocated Duration (Min)	Allocated Budget (\$)
Austin Police Department	1,542,882.42	31.78%	\$ 3,010,119.98	37.52%	1,821,552.39	\$ 3,553,797.23
Austin Resource Recovery	564,666.57	11.63%	\$ 1,101,648.51	13.73%	666,654.65	\$ 1,300,624.38
Austin Public Health	426,459.58	8.78%	\$ 832,010.59	10.37%	503,485.21	\$ 982,285.41
Animal Services Office	346,691.72	7.14%	\$ 676,385.74	8.43%	409,309.95	\$ 798,552.14
Austin Energy	298,064.53	6.14%	\$ 581,515.48	7.25%	351,899.90	\$ 686,546.75
Development Services Dept	215,901.33	4.45%	\$ 421,217.40	5.25%	254,896.67	\$ 497,296.20
Austin Code Department	158,971.98	3.27%	\$ 310,149.85	3.87%	187,684.94	\$ 366,168.02
Austin Transportation	149,366.27	3.08%	\$ 291,409.36	3.63%	176,344.27	\$ 344,042.70
Public Works	113,761.62	2.34%	\$ 221,945.70	2.77%	134,308.84	\$ 262,032.75
Austin Water	110,593.00	2.28%	\$ 215,763.82	2.69%	130,567.92	\$ 254,734.32
Austin Parks and Recreation	78,915.35	1.63%	\$ 153,961.62	1.92%	93,168.76	\$ 181,769.62
Municipal Court	12,584.23	0.26%	\$ 24,551.48	0.31%	14,857.15	\$ 28,985.89
Fire Department	11,636.00	0.24%	\$ 22,701.51	0.28%	13,737.65	\$ 26,801.77
CPIO	8,133.67	0.17%	\$ 15,868.55	0.20%	9,602.74	\$ 18,734.68
Watershed Protection	8,093.77	0.17%	\$ 15,790.71	0.20%	9,555.63	\$ 18,642.77
Human Resources	7,888.00	0.16%	\$ 15,389.27	0.19%	9,312.70	\$ 18,168.82
Neighborhood Housing/Comm Dev	7,374.10	0.15%	\$ 14,386.66	0.18%	8,705.98	\$ 16,985.13
Law Department	6,771.43	0.14%	\$ 13,210.88	0.16%	7,994.47	\$ 15,596.98
HSEM	6,723.15	0.14%	\$ 13,116.68	0.16%	7,937.46	\$ 15,485.76
Mayor & City Council	5,533.97	0.11%	\$ 10,796.61	0.13%	6,533.49	\$ 12,746.66
Planning and Zoning	4,609.00	0.09%	\$ 8,992.03	0.11%	5,441.46	\$ 10,616.14
TARA	3,168.70	0.07%	\$ 6,182.04	0.08%	3,741.02	\$ 7,298.62
CTM	2,902.57	0.06%	\$ 5,662.83	0.07%	3,426.82	\$ 6,685.63
Office of City Clerk	2,723.80	0.06%	\$ 5,314.06	0.07%	3,215.76	\$ 6,273.86
Economic Development Dept	2,441.73	0.05%	\$ 4,763.75	0.06%	2,882.75	\$ 5,624.16
City Manager	2,075.10	0.04%	\$ 4,048.46	0.05%	2,449.90	\$ 4,779.68
Austin Public Library	1,886.12	0.04%	\$ 3,679.76	0.05%	2,226.78	\$ 4,344.39
Neighborhood Home Program	1,653.98	0.03%	\$ 3,226.87	0.04%	1,952.72	\$ 3,809.70
Fair Housing Office	1,399.25	0.03%	\$ 2,729.90	0.03%	1,651.98	\$ 3,222.96
Building Services	1,216.22	0.03%	\$ 2,372.80	0.03%	1,435.89	\$ 2,801.37
Purchasing Office	1,021.55	0.02%	\$ 1,993.02	0.02%	1,206.06	\$ 2,352.99
Aviation	799.52	0.02%	\$ 1,559.83	0.02%	943.92	\$ 1,841.57
Office of Real Estate Services	719.43	0.01%	\$ 1,403.59	0.02%	849.37	\$ 1,657.11
Small Minority Bus Resource	592.27	0.01%	\$ 1,155.50	0.01%	699.24	\$ 1,364.20
City Boards and Commissions	543.95	0.01%	\$ 1,061.23	0.01%	642.20	\$ 1,252.91
Community Engagement	472.52	0.01%	\$ 921.87	0.01%	557.86	\$ 1,088.37
Intergovernmental Relations	450.87	0.01%	\$ 879.63	0.01%	532.30	\$ 1,038.50
Office of the Police Monitor	413.32	0.01%	\$ 806.37	0.01%	487.97	\$ 952.01
Fleet Services	365.38	0.01%	\$ 712.85	0.01%	431.38	\$ 841.61
Downtown Austin CommunityCourt	327.02	0.01%	\$ 638.00	0.01%	386.08	\$ 753.23
Budget Office	235.78	0.00%	\$ 460.01	0.01%	278.37	\$ 543.09
Austin Convention Center	223.45	0.00%	\$ 435.94	0.01%	263.81	\$ 514.68
Municipal Civil Service Office	206.72	0.00%	\$ 403.30	0.01%	244.05	\$ 476.14
Capital Contracting Office	189.30	0.00%	\$ 369.32	0.00%	223.49	\$ 436.02
Treasury Office	188.22	0.00%	\$ 367.21	0.00%	222.21	\$ 433.53
Controller's Office	162.23	0.00%	\$ 316.51	0.00%	191.54	\$ 373.68
Corridor Program Office	72.92	0.00%	\$ 142.26	0.00%	86.09	\$ 167.95
Office of Sustainability	69.77	0.00%	\$ 136.11	0.00%	82.37	\$ 160.70
Innovation Office	47.78	0.00%	\$ 93.22	0.00%	56.41	\$ 110.06
Office of City Auditor	46.37	0.00%	\$ 90.46	0.00%	54.74	\$ 106.80
Integrity Office	34.37	0.00%	\$ 67.05	0.00%	40.57	\$ 79.16
Labor Relations	32.82	0.00%	\$ 64.02	0.00%	38.74	\$ 75.59
Equity Office	22.15	0.00%	\$ 43.21	0.00%	26.15	\$ 51.02
Office of Performance Mgmt	6.67	0.00%	\$ 13.01	0.00%	7.87	\$ 15.36
Total Client/Department	4,112,333.50	84.70%	\$ 8,023,046.42	100.00%	4,855,088.67	\$ 9,472,140.75
Total	4,855,088.67	100.00%	\$ 9,472,140.75			
		Total Budget	\$ 12,629,521.00			
		25% Value as Backup (Direct AE Charge)	\$ 3,157,380.25			
		Departmental Allocation	\$ 9,472,140.75			

ICA TC 1-15: **Economic Development Program.** Provide details regarding the purpose of the Economic Development program, identify AE's contributions to the program, and specify the class allocation method applied to those contributions.

ANSWER: Please refer to the City of Austin's Economic Development Department website for the purpose of the program, which can be found at the following link: <https://www.austintexas.gov/department/economic-development>.

Austin Energy's contribution to Economic Development is \$9,353,024. Economic Development Program costs are allocated among classes in proportion to Key Account program costs.

ICA TC 1-16:

Call Center. Please identify the amount of AE's Call Center cost and the schedules which contain the cost. Does AE maintain record as to number of calls and call duration from each customer class? If yes, provide a summary of the information. To the extent available, provide a break down of AE Call Center calls, which shows the subjects of the calls (i.e., outages, high bills, energy efficiency billing dispute, etc.) and the call duration.

ANSWER:

The Austin Energy Call Center costs are shown in the table below:

FERC Account	\$
903	14,943,120.60
908	244.85
920	41,594.37
921	3,667.21
930	381,634.91
Grand Total	15,370,261.94

The schedules which contain the cost are D-1, D-2, and E-4.

Austin Energy does not track calls by customer class. However, breakdowns are available for residential and commercial categories in the below table. Below please find a breakdown of Austin Energy Call Center calls, which shows the dispositions (subject) of the calls and the proportion of total calls.

Commercial Customer Top Dispositions - Utility Contact Center			
February – April	Total		%
Start/stop/transfer	3043		31%
Balance/Acct Number Inquiry/Payment	2597		27%
Bill/Usage Inquiry	2037		21%
General Questions	1962		20%
Outage	142		1%
Residential Customer Top Dispositions - Utility Contact Center			
February – April	Total		%
Start/stop/transfer	30874		32%
Balance/Acct Number Inquiry/Payment	33003		34%
Bill/Usage Inquiry	12700		13%
General Questions	17716		19%
Outage	1423		1%
While Outage calls is not statistically significant in terms of volume to make it to report, it was specifically called out in the question.			

The duration of all Austin Energy Call Center calls is available in Austin Energy's response to ICA TC 1-14B, above.

**Austin Energy's Responses to Questions from
Texas Industrial Energy Consumers (TIEC)**

TIEC TC 1-1: Please confirm that Primary Subs, P & C includes all plant investment and expenses related to distribution substations, poles, towers, fixtures, overhead/underground conductors and devices, and conduit.

ANSWER: The "Primary Subs, P&C" classified sub-function includes all plant investment and expenses related to distribution substations. However, it includes only plant investment and expenses for poles, towers, fixtures, overhead and underground conductor and devices, and conduit for the portions of the system that operate at primary voltage levels. Investment and expenses for poles, towers, fixtures, overhead and underground conductor and devices, and conduit which operate at secondary voltage are included in the "Secondary – P&C" classified sub-function.

TIEC TC 1-2: Do any of the customers in the Primary Voltage Over 3 MW and Over 20 MW Over 85% ALF classes take delivery service directly from Austin Energy-owned distribution substations?

- a. If so, what portion of the 12NCP loads of these classes is represented by customers taking delivery service directly from Austin-Energy owned substations?
- b. What is Austin Energy's rationale for allocating the costs of primary distribution poles, towers, fixtures, overhead/underground conductors and devices, and conduit to customers that take service directly from a distribution substation?

ANSWER:

Yes.

- a. The analysis that would be required to identify the relevant customers and the responsive load data has not been performed.
- b. For the purpose of allocating the costs of Austin Energy's distribution system among classes of customers, Austin Energy has historically divided the system on the basis of general voltage levels of service and has not performed subdivisions of the system within a given voltage level, such as dividing the primary system into primary substation service and primary feeder service.

TIEC TC 1-3: Does the rate filing package contain information about the dates and times of the distribution substation system peak demands?

a. If not, is this data available and in what form?

ANSWER:

No.

a. Yes. Below please find a list with the requested information, which was pulled from Austin Energy's load-data system:

- 10/11/20-17:59:59
- 11/09/20-16:59:59
- 12/17/20-07:59:59
- 01/12/21-07:59:59
- 02/14/21-19:59:59
- 03/27/21-18:59:59
- 04/09/21-17:59:59
- 05/03/21-17:59:59
- 06/14/21-17:59:59
- 07/26/21-17:59:59
- 08/31/21-17:59:59
- 09/01/21-17:59:59