



2017

ANNUAL

REPORT

Growing with Garland





General Manager's Message

As Garland's municipal electric utility, Garland Power & Light takes pride in the service we provide – both the electricity we bring to residents and businesses, and the value we bring to our community.

Our recent successes have sustained last year's reduction in the Recovery Adjustment Factor component of our electric rate. An interim Transmission Cost of Service filing increased GP&L's wholesale transmission revenue by nearly five percent. Careful management of expenses, a diversified power portfolio, and our wholesale energy business also helped keep GP&L's rates competitive and stable for our customers.



During the 85th Texas Legislative Session, GP&L leadership contributed to successful intervention in two pieces of proposed legislation that, if passed, would have negatively impacted public utilities across the state. In the end, flexibility with transmission rate filings was maintained, and pole attachment agreements and fees can be set by municipal utilities separate and apart from right-of-way agreements.

Garland and the other Texas Municipal Power Agency (TMPA) Member Cities were proactive in determining the agency's future. A strategic plan was established to guide near-term operations and transition the agency beyond 2018.

Locally, GP&L continued to partner with the City on economic development opportunities. Our ability to provide reliable and cost-effective electric service was key in attracting a second large data center to Garland.

As testament to the outstanding services we provide our customers, GP&L was once again recognized as a Reliable Public Power Provider by the American Public Power Association, and as a Treeline USA Utility by the Arbor Day Foundation.

In late summer, GP&L was asked to assist two of Florida's public power utilities whose systems were severely damaged by Hurricane Irma. Through a mutual aid agreement, 13 linemen proudly worked long hours to restore power to appreciative customers in New Smyrna Beach and Bartow.

In the coming year, we look forward to TMPA paying off its generation debt and GP&L's portion of the Houston Import transmission project coming online. And, as always, our promise to Garland – to provide reliable electric service and value to the community – remains at the forefront of everything we do.

A handwritten signature in black ink that reads 'Jeff Janke'. The signature is fluid and cursive, with the first letters of 'J' and 'J' being particularly large and stylized.

Jeff Janke
General Manager & CEO



As Garland Power & Light expands its generation portfolio with energy from wind and solar power purchases, the utility sells some of this wholesale energy to smaller public utilities or cooperatives across Texas. Successfully serving these downstream customers has become a growing part of GP&L's business. Aside from Qualified Scheduling Entity (QSE) functions, GP&L manages billing, tracking and verification for the power provided.

To support these activities, as well as GP&L's own transactions with the Electric Reliability Council of Texas (ERCOT), development of a new Market Risk Management software system began. The system will provide a beginning-to-end integration of energy transaction information, allowing users across GP&L to more easily access and analyze the data.

With the implementation of three power purchase agreements this year, the utility acquired its first solar energy, as well as additional wind energy. Power from the Lamesa solar and the Albercas and Salt Fork wind developments was successfully integrated into GP&L's QSE and settlements processes.

Because Lamesa is the first solar resource to be dispatched by GP&L, its inclusion in the QSE was a rigorous process, much different than integrating traditional resources. GP&L also assisted in bringing Lamesa online as a generator in ERCOT.



Prompted by an ERCOT market redesign, GP&L requalified all congestion revenue rights accounts for the utility, as well as its downstream customers. This step helps to ensure that power flows affordably at times of peak demand.

The utility grew participation in the ERCOT emergency response system this year by helping to qualify three more large commercial customers. Participants are provided incentives for agreeing to reduce load when called upon by ERCOT in times of high electric demand.



To support energy conservation efforts in the community, GP&L presented Garland Independent School District with a \$20,000 bill credit for energy-efficient lighting upgrades through the EnergySaver Program. More than 500 residential and small business customers also received bill credits, including 41 customers who installed solar photovoltaic systems.



New and enhanced technologies supported GP&L's performance this year.

In December, the utility launched an updated external website, gpltexas.org, significantly enhancing customers' online experience. The new gpltexas.org offers visitors a mobile-friendly site, improved accessibility and content organization, and updated content and resources. For the first time, customers are able to view GP&L's current power outages on the new Power Outage Map.



The software used to create the external outage map also enhanced GP&L's internal distribution maps, improving efficiency in several work groups. This tool makes the utility's robust GIS database more accessible throughout the organization and provides the ability to customize map views with multiple layers of data. Individual assets, such as GP&L's new LED streetlights, are readily visible on the maps.



A project portfolio management software system was implemented as a planning tool for GP&L's substation and transmission capital projects. Configured specifically to the utility's needs, the system keeps schedules for all of the projects, making it easier for project managers to reference information on design, construction, materials and planned outages. The system is also a resource to Finance & Accounting, providing budget status and cash flow forecasts. A new help desk system, separate from the corporate application, was also established to support compliance documentation for these capital projects.

To further enhance the cyber security of GP&L's computer systems, more firewalls were implemented to serve as additional checks on data moving within the network. For protection against human error weaknesses, Technology Services continued to conduct an employee cyber security training program, consisting of online lessons, practice in recognizing security threats, and a monthly newsletter with video resources.

More processes were automated this year, including Distribution employees' daily activity reports. At System Operations, the distribution feeder one-line maps and underground loop drawings were upgraded from print to digital. Electronic note-taking capabilities were also added to the underground loop drawings. The new digital displays are available at both the primary and backup control centers.

Other resources were deployed to aid in work productivity. A business intelligence tool that compiles budget data and visualizes the information through charts and graphs was made available to managers.

A new software module gave distribution engineers the ability to more efficiently run detailed load flow analyses by using monthly meter data pulled directly from the customer information system. The engineers also received high-performance computers to support their use of graphic-intensive software.

An advanced metering system installed at the utility's largest customer locations provides valuable real-time information on power and water usage. These customers can use the data to analyze and enhance their operations, while GP&L can determine power-use status and confirm that customers' transformers and meters are functioning properly.





GP&L supported growth throughout Garland with new electric facilities, and improved service reliability with upgrades to older infrastructure. Outside of the city, the utility remains active in numerous transmission projects to ensure grid reliability and earn incremental revenue.

In advance of new developments in northwest Garland, GP&L Distribution rebuilt the Holford Road feeder, and installed underground facilities along Lookout Drive and Campbell Road. To upgrade aging infrastructure, the Shiloh 2 and Jupiter 2 feeders were rebuilt, and 15 lateral lines down alleys were rebuilt off of the Shiloh 6 feeder.

Improving reliability, GP&L replaced 16.3 miles of underground electric distribution cable. Through this ongoing program, the utility prioritizes projects based on line failures and age.

After an audit of foreign attachments on distribution and transmission poles, GP&L revised procedures for managing the permitting, installation and inspection of pole attachments. Fees were modified based on an FCC formula.

GP&L Transmission activities continued to support growth across North Texas. The 138kV Wylie Switchyard in Lavon began serving load in October, supporting reliable transmission within the ERCOT system.





Northwest of Greenville, the Swindell Switchyard provides a 138kV interconnect with Sharyland Utilities, ensuring reliability and meeting load growth in the area. The switchyard was constructed on an expedited timeline and brought online in April.

Along with construction of the Wylie Switchyard, a four-mile portion of the Olinger to Wylie East transmission line was upgraded. The existing double circuit was separated onto steel monopoles to enhance reliability.

Also improved this year was GP&L's portion of the Apollo to East Richardson 138kV transmission line. The project included work on the Apollo Substation to meet the line's upgraded conductor capacity and coordination with Oncor, owner of the other portion of the line.

Work at the Lookout Switchyard in north Garland included building transmission facilities to feed the Oncor interconnect. GP&L also served as project manager for the construction of the customer-owned substation for RagingWire Data Centers.

A transmission route study for the Jupiter to College 138kV line was completed, giving guidance for location of the line, which is to be upgraded from 69kV.

In July, GP&L submitted to the Public Utility Commission of Texas a certificate of convenience and necessity (CCN) for the construction of the Dent Road to Shelby transmission line. During GP&L's first in-house CCN process, the utility met with landowners and other intervenors, and submitted a recommended route. The exact route for the line will be finalized in the coming year.

Farther from Garland, construction continues on GP&L's portion of the Houston Import Project, a 345kV transmission line that will increase power flow into southeast Texas and support reliability of the ERCOT system. The utility worked closely with its construction partner on the build-out, and coordinated outage clearances as related facilities were constructed and energized. The project is scheduled to come online in 2018.



In West Texas, GP&L conducted thorough inspection and maintenance of the utility's 75 miles of transmission line in the Competitive Renewable Energy Zone. Maintenance activities included the replacement of some davit arms and installation of vibration dampers.

GP&L's responsibility to operate and maintain Texas Municipal Power Agency (TMPA) transmission facilities necessitated several projects this year, including the installation of a 600MVA auto transformer at the Gibbons Creek Substation, the relocation of two 345kV lines to accommodate the Houston Import Project, and vegetation management efforts.

Production projects enhanced the reliability of two of GP&L's generating units. At the Olinger Power Plant, employees replaced the obsolete Unit #4 gas turbine control system. The new controls are easier to maintain with readily available parts, and access to the system's turbine control logic is more user-friendly.

At the Lewisville Hydroelectric Plant, the 60-inch isolation valve, which allows water into the north water supply conduit, was replaced. The job required coordination among GP&L, the City of Dallas and the U.S. Army Corps of Engineers.





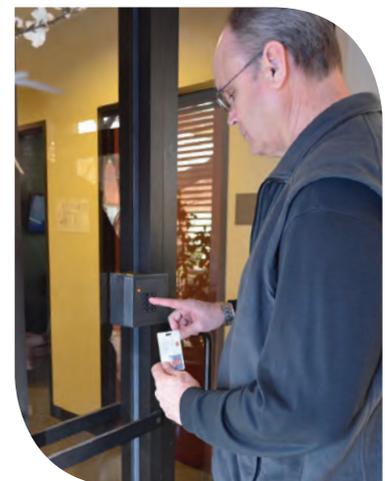
Led by the Regulatory & Compliance Division, employees across the utility participated in projects to ensure GP&L keeps pace with the industry's extensive and expanding regulatory requirements.

GP&L's Production, QSE and Business Operations groups successfully completed a North American Electric Reliability Corporation (NERC) audit covering Generator Owner and Generator Operator functions. Significant work went into preparing for and completing the review, which was narrow in scope but more in-depth and detailed than previous audits.

Internal compliance exercises continued this year with a mock audit of the TMPA Transmission Owner and Transmission Operator functions. By conducting simulated examinations, GP&L stays prepared for external audits and improves the utility's efficiency during formal reviews.

During the official TMPA audit, which focused predominantly on cyber and physical security, employees responded to nearly 200 data requests from examiners. The audit was a significant effort across multiple work groups, involving detailed data for 12 transmission standards.

To increase physical security at GP&L facilities, the utility continues to comply with Critical Infrastructure Protection standards required at all power plants, substations and control rooms, while preparing for the next version of the standards.





Employees in several work groups completed required training on Black Start procedures. GP&L also updated the Black Start plan to reflect an analysis of critical load facilities in the service area. Using this information, Customer Service revised its database to note facilities with a crucial need for power.



At both the Olinger and Spencer power plants, Production completed Relative Accuracy Test Audits to ensure emissions met Texas Commission on Environmental Quality air permits.

As a leader in the electric industry, GP&L continues to participate in developing and updating regulatory standards by having employees serve on ERCOT and NERC committees. While representing the interests of GP&L and non-opt-in entities, this service also prepares the utility for the addition of new regulatory policies, including upcoming requirements that will affect substations, control rooms, data management and procurement of materials.



Mutual Aid in Florida

In September, a team of 13 GP&L linemen traveled to Florida to assist in power restoration following Hurricane Irma. The Category 4 storm caused widespread destruction and knocked out power for more than six million electric customers in the state. Through a mutual aid agreement with the American Public Power Association, GP&L and other public utilities across the country were called to help restore power.



While in Florida, GP&L's linemen displayed exceptional skill, expertise and dedication while working long hours in extreme weather with limited accommodations. As an additional challenge, swampy conditions made many poles inaccessible by truck, meaning excellent climbing skills were paramount.

GP&L crews worked under the direction of local public utilities, changing out transformers, poles and switches, and hauling poles. Along with manpower, GP&L brought six bucket trucks, two line trucks for pole setting, two pickups and four equipment trailers.



For the initial assignment, crews worked for five days with the Utilities Commission, City of New Smyrna Beach. The linemen were then reassigned to the City of Bartow, where they worked for another four days before returning to Garland. In both cities, electric customers were grateful for GP&L's help, offering not only words of appreciation, but also food, water and dry socks to the linemen.

During and after the restoration efforts, GP&L received numerous notes of gratitude, both from Florida residents and social media users in Garland.

From Florida:

We live in Polk County, Florida. We saw your trucks and wanted to say Thank You for helping our state from the effects of Hurricane Irma.

To the linemen of GP&L who came to help UCNSB, I thank you for your support and hard work to restore power to New Smyrna Beach, Florida. We [Utilities Commission, City of New Smyrna Beach] couldn't have done it without you.

From this Floridian... Thank you! You all giving your time away from your families means a great deal to those of us trying to get back to normal after the devastating effects of Irma!

Thank you for coming! I am very proud of you. Garland, Texas, is my hometown.

Thank you so much to the NSB Utilities Commission employees and Garland, Texas, linemen. I know our line to Dolphin Cove on North Causeway gave you lots of challenges, but we all appreciate your hanging in with the repair late into the night tonight. You are appreciated.

Thank you from this Garland hometown girl transplanted to Florida!



From Garland:

I cannot give enough kudos to GP&L. They take care of our own city so well and now off to help others!

Love our GP&L guys. Always first and most certainly the best there ever will be! Praying for all of you to come home safe and sound when your jobs are complete!

You guys are AWESOME! Garland is fortunate to have you. You make us so proud!

Thank you, we really appreciate all you are doing.

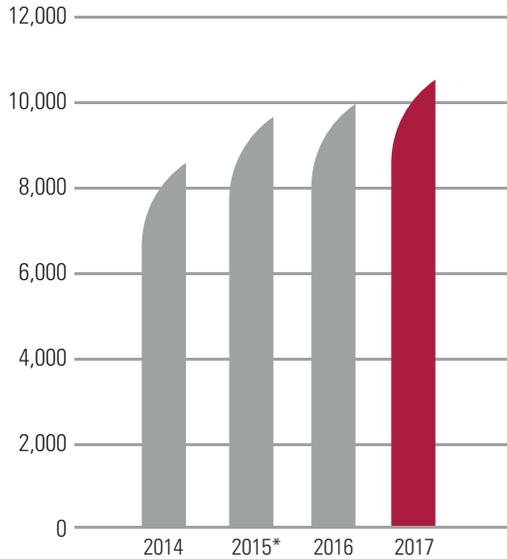
Our boys making us proud working hard like they do every day!



Performance Indicators

Fiscal Year Ended September 30

Work Orders

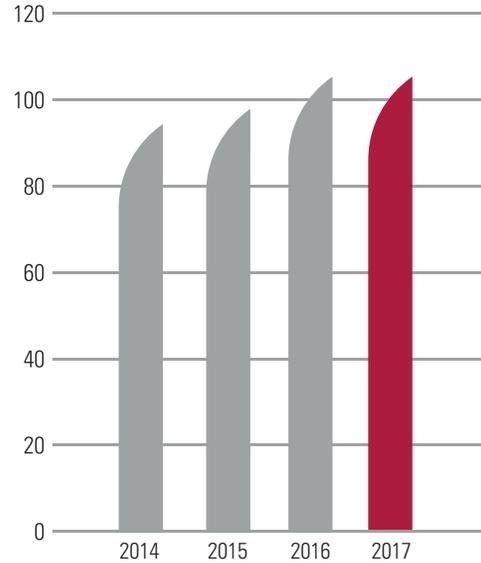


Description: Total number of annual requests for distribution and transmission services.

Interpretation: Service requests are the macro level indicator of the productivity in the Transmission & Distribution Division. Incidents such as major storms can impact the totals.

*2015 increase reflects process change to use work orders to track meter tests.

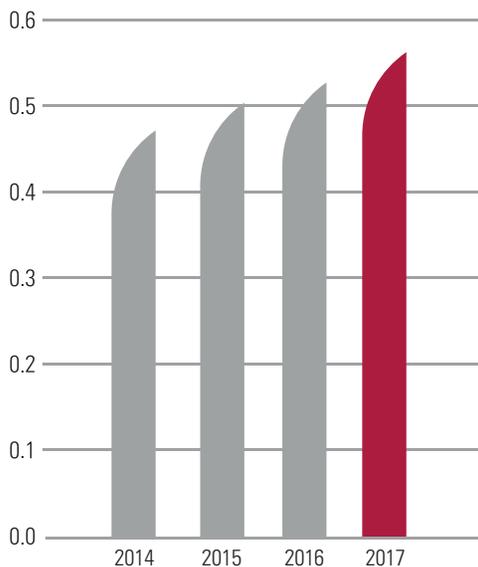
Operating Expenses per Megawatt Hour



Description: Total GP&L operating expenses for utility operation, excluding wholesale customer energy purchases, divided by the total kilowatt hours of retail sales x 1,000.

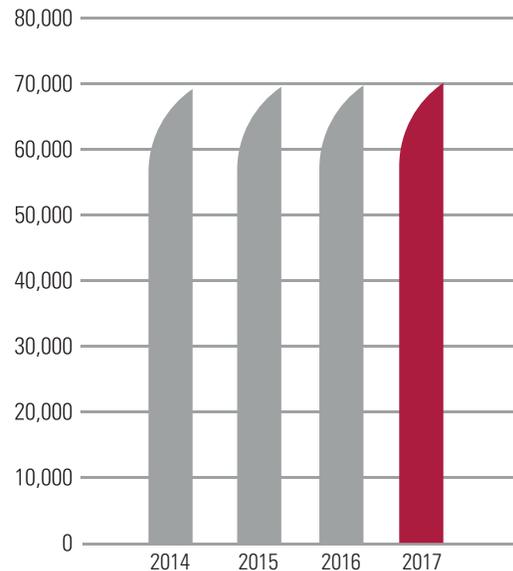
Interpretation: As this statistic is highly influenced by power and TMPA costs, comparisons between utilities must be made carefully.

Debt-to-Asset Ratio



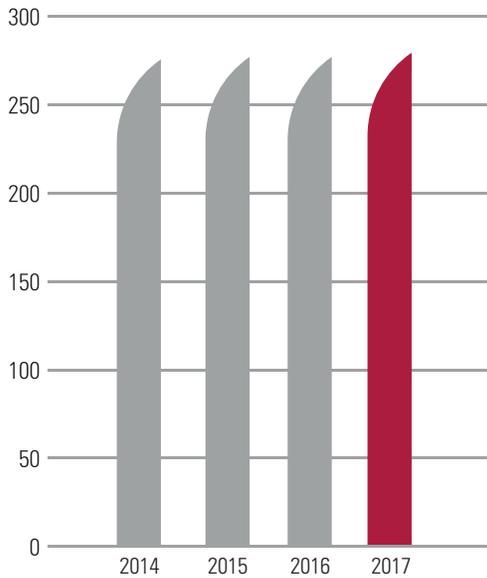
Description: The debt-to-asset ratio is a comparison of an organization's long-term debt to total assets. This ratio reflects to what degree an organization finances its assets with long-term debt.

Electric System Number of Retail Customers



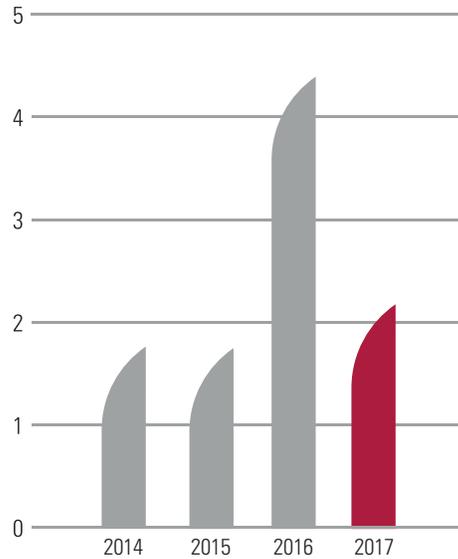
Description: Total annual customers.

Retail Customers per Employee



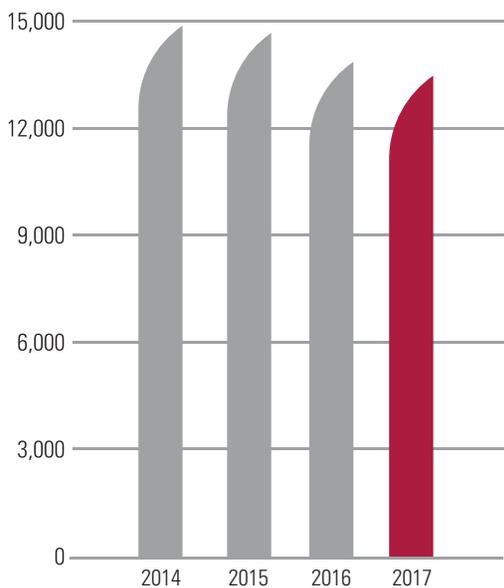
Description: Number of retail customers divided by the number of electric utility employees.

OSHA Incidence Rate



Description: This is the standard indicator utilized by the industry to report lost time accidents. It is produced by multiplying the number of lost time accidents by 200,000, then dividing that number by the total hours worked by the employees.

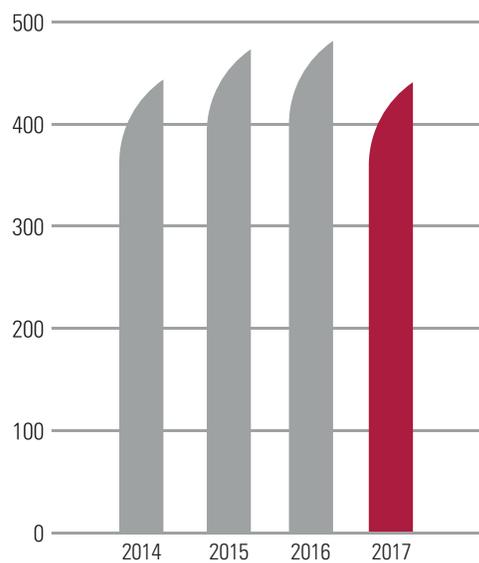
KWH Sales per Residential Customer



Description: Sales of electricity in kilowatt hours for the residential class customers divided by total number of residential customers.

Interpretation: Changes in sales can be due to seasonal temperatures and customers' electricity utilization preferences.

Electric System Peak (Megawatts)



Description: Peak demand as reported to the U.S. Department of Energy.

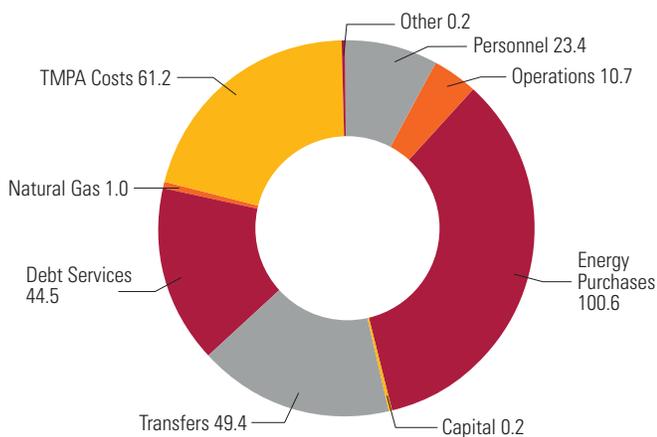
Balance Sheet

Fiscal Year Ended September 30, 2017. With comparative totals for Fiscal Year Ended September 30, 2016. (Unaudited)

Assets	2017	2016
Current Assets:		
Cash and investments	\$ 43,333,387	\$ 53,199,258
Inventories	4,310,542	4,269,106
Receivables and other	<u>47,251,402</u>	<u>41,070,082</u>
 Total Current Assets	 <u>94,895,331</u>	 <u>98,538,446</u>
Restricted Assets:		
Cash and investments	186,355,904	190,760,015
Accrued interest receivable	<u>220,661</u>	<u>245,782</u>
 Total Restricted Assets	 <u>186,576,565</u>	 <u>191,005,797</u>
 Property, Plant and Equipment – Net of accumulated depreciation	 <u>510,469,293</u>	 <u>412,675,476</u>
 Other Assets	 <u>100,680,574</u>	 <u>139,442,598</u>
 Total Assets	 <u>\$ 892,621,763</u>	 <u>\$ 841,662,317</u>

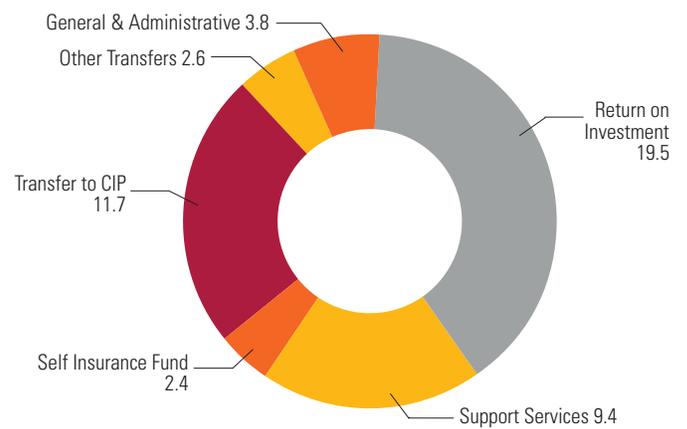
Fiscal Year 2017 Actual Expenditures

in millions of dollars



Fiscal Year 2017 Transfers

in millions of dollars



Liabilities

	2017	2016
Current Liabilities:		
From current assets		
Payables	\$ <u>47,208,803</u>	\$ <u>41,613,891</u>
Long-term Liabilities:		
From restricted assets		
Accounts payable	9,703,236	3,325,148
Retainage payable	336,662	145,959
Escrow payable	<u>253,131</u>	<u>—</u>
Total payables from restricted assets	10,293,029	3,471,107
Bonds payable and other	<u>482,136,684</u>	<u>422,846,262</u>
Total Long-term Liabilities	<u>492,429,713</u>	<u>426,317,369</u>
Total Liabilities	\$ <u>539,638,516</u>	\$ <u>467,931,260</u>

Equity

Retained Earnings:		
Invested in capital assets, net of debt	165,591,695	153,918,287
Restricted	179,449,020	178,325,654
Unrestricted	<u>7,942,532</u>	<u>41,487,116</u>
Total Retained Earnings	<u>352,983,247</u>	<u>373,731,057</u>
Total Liabilities, Contributed Capital and Retained Earnings	\$ <u>892,621,763</u>	\$ <u>841,662,317</u>

Statement of Revenues, Expenses and Changes in Retained Earnings

Year Ended September 30, 2017. With comparative totals for year ended September 30, 2016. (Unaudited)

Operating revenues:	2017	2016
Charges for service	\$ 279,846,202	\$ 278,334,789
Other	606,519	635,617
Total Operating Revenues	<u>280,452,721</u>	<u>278,970,406</u>
Operating expenses before depreciation:		
Fuel purchases/Demand charges	162,740,343	162,680,198
Operating expenses	39,808,896	41,180,788
General and administrative	<u>13,898,390</u>	<u>13,109,511</u>
Total Operating Expenses Before Depreciation	<u>216,447,629</u>	<u>216,970,497</u>
Operating income before depreciation	64,005,092	61,999,909
Depreciation and amortization expense	<u>51,615,039</u>	<u>50,820,326</u>
Operating Income	<u>12,390,053</u>	<u>11,179,583</u>
Non-operating revenues (expenses):		
Return on investment	(19,451,298)	(19,451,298)
Earnings on investment	1,678,712	1,405,124
Interest expense	(12,322,745)	(11,312,217)
Other	(2,785,504)	(1,477,865)
Net transfers	(268,478)	(3,069,687)
Capital contributions	11,450	—
Net Non-operating Revenue (expense)	<u>(33,137,863)</u>	<u>(33,905,943)</u>
Net Income (Loss)	(20,747,810)	(22,726,360)
Retained Earnings at Beginning of Year	<u>373,731,057</u>	<u>396,457,417</u>
Retained Earnings at End of Year	<u>\$ 352,983,247</u>	<u>\$ 373,731,057</u>

The losses for Fiscal Years 2016 and 2017 reflect GP&L's planned reduction in fund balance and the payoff of TMPA generation debt by Fiscal Year 2018.

Audited financial statements providing greater detail can be obtained from the City of Garland Comprehensive Annual Financial Report for the Fiscal Year Ended September 30, 2017. The CAFR report is located on the City of Garland website at <http://www.garlandtx.gov/gov/eg/finance/compfinanreport.asp>

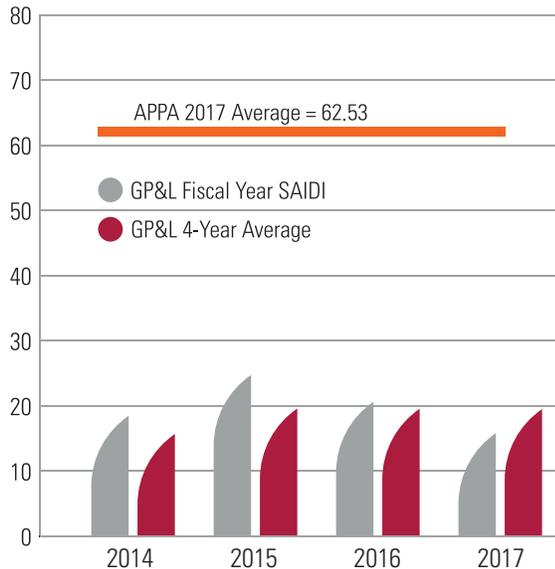
System Map



- ◆ GP&L Substation
- 138kV
- 69kV

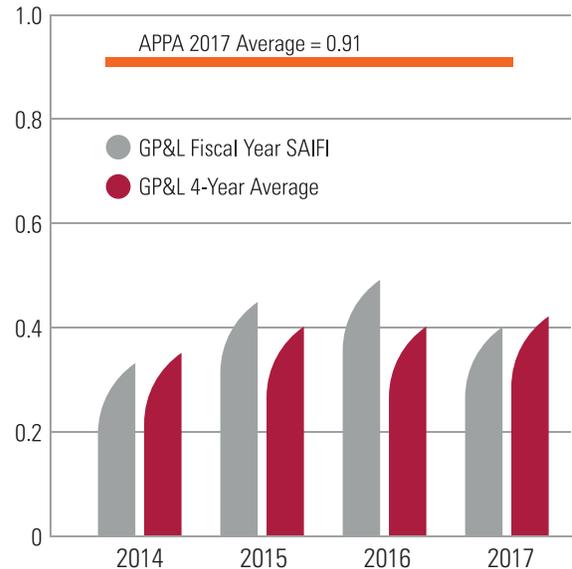
Key Statistics

System Average Interruption Duration Index (SAIDI) Fiscal Year Ended September 30



System Average Interruption Duration Index (SAIDI) – Designed to give information about the average time that customers are interrupted. This index is commonly referred to as Customer Minutes of Interruption or Customer Hours. It is a measure of the response time or restoration time when outages occur, and is computed by dividing the sum of all customer interruption durations by the total number of customers served.

System Average Interruption Frequency Index (SAIFI) Fiscal Year Ended September 30



System Average Interruption Frequency Index (SAIFI) – This is defined as the average number of times that a customer is interrupted during a specified time period. It is determined by dividing the total number of customers interrupted in a time period by the average number of customers served. The resulting unit is “interruptions per customer.”

2017 Transmission & Distribution Statistics

Distribution lines	7.5 miles of overhead added or replaced
	16.3 miles of underground added or replaced
Distribution poles added or replaced	650
Overhead operations & repairs	108
Overhead construction projects	370
Underground operations & repairs	382
Underground construction projects	440
Streetlights	1,930 operations & repairs
	1,484 LED conversions
Residential meter sets & changeouts	703
Commercial meter sets & changeouts	249
Meter operations, repairs & testing	1,965
Trouble calls	2,563
Tree trimming requests	208



City Manager
Bryan L. Bradford

Garland City Council

Standing (left to right)

- Robert Vera – District 6
- Scott LeMay – District 7
- Robert John Smith – District 8
- Jerry Nickerson – District 3
- Rich Aubin – District 5
- Anita Goebel – District 2

Seated (left to right)

- David Gibbons – District 1
Mayor Pro Tem
- Douglas Athas – Mayor
- B.J. Williams – District 4

