



Continuing The Transition To The Utility Of Tomorrow



2010-2011 Annual Report This Page Left Intentionally Blank

General Manager's Message

This has been a year of continuing transition at Glendale *Water & Power* (GWP). We are moving our utility from middle-of-the pack functionality into a leadership position in the forefront of the technological revolution.

The Smart Grid will take us from yesterday well into tomorrow. As GWP transitions toward the future, we offer a model to the nation and the world on how to do it.



This year, with the installation of 120,000 electric and water smart meters, we have become the first U.S. utility to automate both systems together. The careful planning we began in 2008 enabled us to complete the project years ahead of schedule in just 18 months.

While doing so, we conducted a successful outreach campaign -- including ten Coffee in the Park sessions -- to educate customers about Smart Meters and their future potential. Soon customers will be able to interact with the system to monitor their energy and water use in real time and more efficiently manage their costs. Energy reports will help them analyze their usage and how they compare to other customers.

Customers are already starting to see benefits:

- In just a few months, the system has helped us detect leaks that were wasting thousands of gallons of water.
- The system has improved customer service by enabling representatives to answer customer questions using real time usage information provided by the Smart Grid.
- Larger customers are already using a demandresponse program to help them manage their load demands and integrate with the Smart Grid.

Smart Grid technology will enable GWP to increase efficiency, manage capacity needs, and lower costs. It will help us respond to new power demands, such as for electric cars, and integrate alternative energy sources into our grid. These abilities are critical in an era of shortages where we continue to face tough environmental choices.

Although California's drought officially ended in March of 2011, we know that our water supply is unpredictable and conservation will always be essential. Likewise, we face accelerating mandates regarding our use of fossil fuels and the need to lower carbon emissions.

GWP continues to grow our alternative resource portfolio, signing new contracts this past year with a wind farm and

a hydroelectric plant. These bring our system to about 24% renewable. As a result of purchasing the Scholl Canyon landfill gas facility -- which generates electricity -- we have been able to cut residential electric rates about 11% over the past two years.

To improve and increase our supply of energy and water:

- We have begun a pipeline project to double our ability to supply water to Glendale from the massive Diederich Reservoir.
- We are reducing our need to purchase water by increasing our use of groundwater. We have rehabilitated the old Foothill Well and brought it back into service, and drilled a new well which is being readied for service.
- We incorporated Smart Grid technology as we upgraded the Glorietta Substation, more than doubling its capacity to meet customer demand.

As we look ahead, a focus of our strategic planning includes a strong partnership with our customers. Increasingly, they will have the ability to make smart choices about the water, energy and alternative resources they can use. The more they know, the more they will help GWP reduce demand for water and electricity and balance our use of natural resources.

This past year we revised the timelines for our five-year Strategic Plan, while retaining the same primary goals. The Smart Grid is now incorporated into all our planning. Its state-of-art capabilities will serve us for decades.

In 2011, GWP received among the highest customer scores for 93 utilities surveyed about their Smart Grid projects.

We were among the first to utilize

the newest technology, and we will continue to be among the best.

We have laid a strong foundation for our transition to the future.

GWP expects to be able to meet 100% of water demand now and into the future.

Safeguarding Water Quality

Glendale water is sampled and tested weekly both internally and by outside laboratories. We continue to exceed all standards and health requirements.

GWP remains a leader in new technologies to remove chromium 6 from local groundwater sources. Our two new chromium 6 testing and treatment facilities are operational.

This past year we received \$400,000 from the U.S. Department of the Interior, Bureau of Reclamation for evaluating these technologies.

Much of our work takes place underground. Customers see only the benefits as we continue to clean, line and rehabilitate old water pipes to minimize leakage, increase pressure, and improve water quality.

Accomplishments this past year include:

- Cleaning and lining 40,000 linear feet of old pipes and replacing old service lines and meters as part of the Central Avenue project
- Cleaning and renovating seven water storage reservoirs and tanks
- Exercising one-third of all small system valves and some large system valves

Water: Ready & Running

Glendale *Water & Power* delivers about 8.4 billion gallons of safe drinking water to the city's 33,500 customers. This past year we successfully operated the system night and day with greater than 99.99% reliability.

To ensure reliability we:

- Completed the Dryden main replacement project and replaced 11,000 linear feet of old water pipes
- Completed renovation of the San Luis Rey pump station to improve water flow and pressure in that area

We continued long-term planning as we prepared the 2010 Urban Water Management Plan and updated our planning and projections as far as 25 years into the future.



Ensuring Our Water Supply

GWP purchases 62% of our water from the Metropolitan Water District and produces about 38% of our drinking water from local sources, including groundwater. About 7% of our supply is from the city's Glorietta wells and the Verdugo Park Water Treatment Plan.

In 2010 we discovered a well abandoned by previous utility districts long before GWP existed. After testing, we determined it was feasible to use this Foothill Well. We built a 3,420-foot pipeline connecting the well to GWP's New York Reservoir and put it back into service in July of 2011.

The Foothill Well produces up to 200 gallons per minute – and each gallon collected means one less gallon of water purchased. The well will save about \$245,000 per year on imported water costs.



Electric Service With A Switch

Glendale *Water & Power* provides electric service to 84,800 customers by generating, transmitting and distributing more than 1,100 billion kilowatt-hours of power. We continually repair, overhaul or replace the systems, towers and turbines that ensure system reliability and efficiency.

Significant system improvements this past year include:

- Converting 11 feeders from 4kV to 12kV and replacing two underground vaults
- Upgrading fuses in the field to minimize the number of customers who would potentially be affected by an outage



Ensuring Energy Delivery

Increasing energy demands make improving and maintaining our local power generation units in peak condition a high priority. We began or completed 10 projects to replace, upgrade, overhaul or reconstruct generating units.

This year the Glorietta substation came on line to serve north Glendale. By upgrading it from 34kV to 69kV, we substantially increased power reliability as well as tripling our capacity. The reconstructed substation employs Smart Grid technology and is much more compatible in appearance with the neighborhood.

GWP continues efforts to minimize the City's exposure to market spikes in power and natural gas prices. To capture market opportunities and optimize the system through the sale of surplus system resources in the wholesale market, we booked more than \$800,000 in net revenues.

Our Resource Planning Group created a task force to study repowering options for the old Grayson Power Plant and how best to reconfigure it to meet future needs. GWP's Smart Grid project received the highest customer score of all smaller utilities.

Our move to the "Smart Grid" offers several advantages. It helps us detect power outages and water leaks, makes our operation more efficient, and makes it easier to incorporate renewable energy sources into our supply portfolio.

As one of the nation's first utilities to successfully install Smart Meters for both water and electricity, GWP has received national attention.

Our Smart Grid Project Management Team members have given over 30 presentations nationally and internationally about our successful project.

GWP's General Manager, Glenn Steiger was named one of 11 top "Movers and Shakers" by Intelligent Utility Magazine.

GWP's Smart Grid Project received the highest customer score of all smaller utilities and among the highest customer scores for all 93 utilities responding to the Smart Grid Maturity Model Survey.

As a respected industry voice, GWP has been invited to provide input relating to state associations and legislators concerning water quality legislation and renewable portfolio legislation.

GWP has earned the Reliable Public Power Provider recognition from the Public Power Association two years in a row. This coveted recognition was awarded for providing GWP customers with the highest degree of reliable and safe electric service.



Using Water Wisely

GWP continues to educate and advocate for responsible use of natural resources and green energy sources. Although the California drought was officially declared over in March of 2011, water conservation will always be necessary.

Public education is a critical part of our conservation strategy. Customers become motivated when they are educated. Through outreach efforts they learn, for example, that a running bathroom faucet uses 6 gallons per minute. We distributed more than 2,000 free energy and waters surveys, teaching customers how to use resources more efficiently and to save money.

GWP paid more than \$450,000 in rebates to customers who purchased efficient appliances and home improvement products that help reduce their energy and water use.

We distributed over 3,000 shower timers.

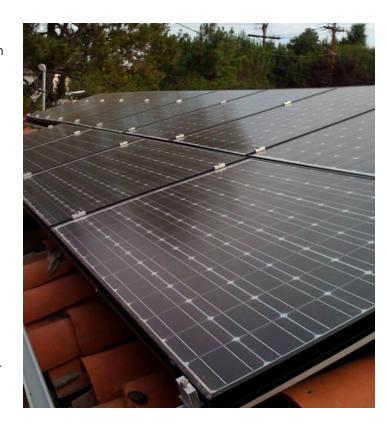
More than 200 customers attended "Creating a Water-Smart Garden" classes in 2011. The three-hour water conservation and landscaping classes were held Saturday mornings.

Renewable Energy Resources

We remain committed to developing and using renewable energy resources that are available at reasonable cost. We supply nearly 24% of our energy requirements from alternative generation resources including hydroelectric, wind, geothermal and solar.

In Glendale, 30 customers this past year received incentive payments for installing rooftop solar panels through the Solar Solutions Program.

We continue to negotiate for energy from renewable generation facilities. We completed a long-term power agreement with the Milford II Wind project in Utah and continued negotiations with the La Paz Solar Tower Project. We received City approval to participate in an exploration of geothermal sites near the Salton Sea.





We participated in over 40 community sponsored events and held 10 of our own.

GWP reaches out to educate customers about conservation, the Smart Grid and Public Benefit Programs. We participated in over 40 community-sponsored events and held 10 of our own "Coffee in the Park" sessions. More than 200 customers came to listen, learn and ask questions.

We are using social media to reach customers as well. GWP made 100 posts on Facebook and Twitter.

Follow us on:



www.facebook.com/GlendaleWaterAndPower



www.Twitter.com/COGwaterpower

We sponsored the Verdugo Power Academy in conjunction with Glendale Community College and the Workforce Investment Board that included 400 hours of training. GWP hired four full-time employees and three hourly workers from program graduates.



Innovation in Public Benefits

We work in partnership with lowincome customers and enrolled over 10,700 households in our subsidy programs: Cool Care, Glendale Care and Helping hand.

We helped low-income customers replace old refrigerators and receive discounts on their electric bills.

Through these successful programs, GWP:

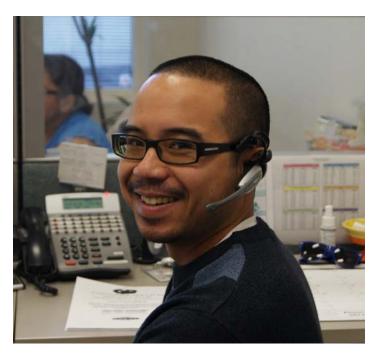
- Distributed over 4,000 brochures and information on Public Benefit Programs and Smart Meters
- Distributed over 500 CFL light bulbs to customers at Cruise Night

Customer Service to Count On

When our customers have issues, concerns or questions, we want to have answers.

We serve customers in a variety of convenient ways:

- In person: 13,764 customers were helped at our Customer Services counter and 94,325 at the cashier counter.
- On the phone: 113,385 telephone calls handled
- On-line at www.GlendaleWaterAndPower.com: 3,067 customers served through web access and 72,149 contacts were handled through the Interactive Voice Response System



40% of customers made their payments electronically.

28% of customers have enrolled in eCare - giving them online access to view their account history and make electronic payments.

To help customers in need, GWP approved 23,167 payment extensions.

Customer service staff receives regular training, including First Aid and CPR. In addition, 60 customer-contact employees received training to help them recognize patterns or practices that could indicate identity theft.

Customers also partner with GWP to help protect rates and keep our community safe. GWP investigated more than 90 reports of meter tampering and service theft. Of these cases, 83% were prosecuted and 98% of the amounts charged were recovered.





Glendale City Council

April 2010 - April 2011 Ara Najarian, Mayor John Drayman Laura Friedman Frank Quintero Dave Weaver

April 2011 - April 2012 Laura Friedman, Mayor Rafi Manoukian Ara Najarian Frank Quintero Dave Weaver

Glendale Water & Power Commission

Terry Chan, President Armen Adjemian Zanku Armenian Deborah Dentler Hugh Yao