

DELIVERING ON THE **SMART GRID** PROMISE



LAYING A FOUNDATION FOR THE FUTURE

ComEd
An Exelon Company

powering lives

LETTER FROM THE CEO



We're proud to present the third annual ComEd Progress Report, *Delivering on the Smart Grid Promise: Laying a Foundation for the Future*. It outlines our on-time, ahead-of-schedule efforts to modernize the grid, as well as the resulting benefits to our customers and our economy—while also highlighting our work to build upon the Smart Grid foundation to create the clean-energy future we all want.

Customers are currently experiencing the best reliability in the company's history, thanks to our Smart Grid and system-hardening efforts. We recently hit the halfway mark on smart meter installations and are on track to complete all 4 million installations by the end of 2018. Customers are increasingly using our smart meter-enabled programs to achieve greater control, convenience, and savings. And, as we work to deliver a premier experience to our customers, our customer satisfaction scores continue to rise.

These successes speak to the exceptional commitment of our talented workforce to innovate for our customers, while engaging the communities we serve and leading the drive toward Illinois' clean energy future. ComEd continues to lead the industry in grid modernization, and our record-setting results for customers in 2015 helped Illinois achieve its recent Grid Modernization Index ranking of #2 in the nation for overall Smart Grid modernization and #1 for innovative Smart Grid policy.

As we continue to deliver on the promise of the Smart Grid, we look forward to continued work with our many partners as we seek to fully leverage the Smart Grid, bringing new value to our customers while driving toward a clean-energy future.

A handwritten signature in cursive script that reads "Anne R. Pramaggiore". The signature is written in a dark color, likely black or dark blue ink.

Anne Pramaggiore
President and CEO, ComEd

DELIVERING ON THE **SMART GRID** PROMISE

LAYING A FOUNDATION FOR THE FUTURE

Nearly five years after the Illinois General Assembly passed the Smart Grid Law, ComEd proudly continues to deliver on the Smart Grid promise.

In fact, we were ranked No. 2 in the country by GridWise® Alliance for our overall Smart Grid efforts and No. 1 for forward-looking policy support.

Through the investments authorized by the Energy Infrastructure Modernization Act (EIMA), the Smart Grid program is providing ComEd customers with record reliability, more options for energy savings, and jobs and development in our communities. The Smart Grid foundation that ComEd is building is setting Illinois on a path to the smart, clean, custom, and ultra-reliable energy future we all want.

Our progress in this effort—and the resulting value our customers are seeing—is detailed throughout this report.

DELIVERING RELIABILITY

Thanks to Smart Grid investments and ComEd's continuous innovation and process improvement, ComEd customers are experiencing fewer and shorter power outages, with the **best grid reliability in history.**

12%
REDUCTION
IN FREQUENCY OF OUTAGES



RECORD RELIABILITY

- In 2015, ComEd customers experienced a **12 percent** reduction in the frequency of outages as compared to 2014.
- During that same time, the average duration of outages has been reduced by **42 percent.**
- Out of **3.8 million** customers, **3 million** experienced **zero** or only **one** outage last year.

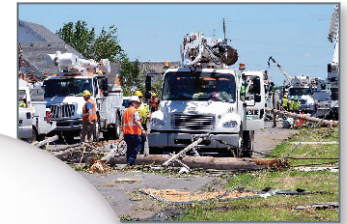
1.5 MILLION
AVOIDED
CUSTOMER INTERRUPTIONS

4.8 MILLION
AVOIDED
customer interruptions
\$1.1 BILLION
SAVED

- EIMA and other grid-hardening system improvements reduced storm-related customer outages by approximately **30 percent** in 2015.
- In 2015, "smart switch" distribution automation (DA) investments resulted in **1.5 million** avoided customer interruptions—bringing the total to **4.8 million** avoided customer interruptions since 2012, with an associated **\$1.1 billion** in societal savings, **\$976 million** of that from DA alone.

FASTER RESTORATION (STORM RESPONSE)

- ComEd's Storm Task Forces continue to drive real results for customers.
- ComEd earned an **Edison Electric Institute Emergency Response Award** for its response to the June 2015 storm affecting Coal City.
- While no two storms are identical, comparable storms show that Smart Grid investments are working. A November 2015 windstorm resulted in **44 percent** fewer customer interruptions than a comparable 2005 storm.



2005 *vs.* **2015**
136,000 customer interruptions **76,000** customer interruptions

Storm restoration performance also improved, with:

45%
of outages restored within
1 HOUR

70%
of outages restored within
2 HOURS

90%
of outages restored within
4 HOURS

99%
of outages restored within
13 HOURS

SAVING CUSTOMERS MONEY

As we deliver on our promises, our customers are seeing increased savings and more ways to manage their energy use and costs.

ENERGY EFFICIENCY PROGRAMS

- Since launching in 2008, ComEd's award-winning Smart Ideas® Energy Efficiency program has saved residential and business customers **\$1.7 billion** on their electric bills, eliminated **22.3 billion** pounds of CO₂ emissions from the atmosphere (the equivalent of removing **2.3 million** cars from the road), and reduced energy usage by more than **16.1 million** megawatt hours—enough electricity to power more than **1.7 million** homes for a year.
- ComEd is a six-time ENERGY STAR® Partner of the Year and has received the organization's Sustained Excellence Award for the past **two** years.



SMART THERMOSTAT PROGRAM

- ComEd launched the Smart Thermostat Initiative, the **only program of its kind in the country**, offering ComEd customers at least **\$100** in rebates and discounts on the ecobee3 and Nest Learning Thermostats. Customers can expect to save an average of **\$130–\$145** on their annual energy bills.

SMART-METER-ENABLED PRICING

- Participants in ComEd's Hourly Pricing program are using data to control their energy usage and costs, with **10,000** customers saving over **\$1.3 million** in 2015, an average savings of **8 percent** as compared to the fixed-price rate.
- Peak Time Savings program participants are earning financial incentives by reducing energy usage during peak demand hours, with **52,000** customers saving **\$385,000** in a few short hours last summer. Launched in 2015, the program is available to customers as soon as they receive their smart meters.



**ComEd DELIVERED
A RATE DECREASE OF
\$66.7 MILLION**

RATE REDUCTION

- Through Smart Grid savings and deliberate cost management, ComEd delivered a rate decrease of **\$66.7 million**—an average of \$1 per month on a typical residential bill—for 2016, providing a rate reprieve for customers amidst the modest rate increases associated with a historic and much-needed investment in the system. The formula ratemaking process is working, allowing savings to be passed on to customers in a timely fashion.

POWERING THE ECONOMY

Because ComEd understands that infrastructure programs like EIMA are not just about lights but also about lives, we work with companies and communities to ensure that they benefit from how we do our work. As a result, our customers are seeing more jobs, growing companies, and training opportunities in their communities.

JOBS AND DIVERSITY

- ✓ Created **4,569** full-time equivalent jobs
- ✓ Over **\$4 billion** in supply chain spend in Illinois
- ✓ Over **\$1.6 billion** in diverse supply chain spend
- ✓ Creating diverse teams
 - New hires
 - **641** new hires
 - **56 percent** of our new hires were women or minorities (**6 percent** year-over-year increase)
 - ComEd had **58** military hires in 2015
 - **60 percent** of our interns were minorities or women (**3 percent** year-over-year increase)

ECONOMIC DEVELOPMENT

- ComEd secured **15** new economic development projects for Northern Illinois, which will result in **2,682** new jobs and **\$735 million** in capital investment.
- ComEd was included in *Site Selection* magazine's annual list of Top 10 Utilities in Economic Development for 2015.

TOP 10 UTILITIES IN ECONOMIC DEVELOPMENT

GROWING SMALL, DIVERSE BUSINESSES

- In 2015, our total diverse spend reached an all-time high of **\$654 million** (**29 percent** of total supply)—**\$187 million** higher than 2014—providing new opportunities for African American-, Hispanic-, Native American- and women-owned enterprises.
- ComEd was named **Corporation of the Year by the Chicago Minority Supplier Development Council.**

OVER
\$1.6 BILLION
IN DIVERSE
SUPPLY CHAIN SPEND

TRAINING THE WORKFORCE OF THE FUTURE



- The Chicago Training Center opens in 2016 and will serve as the training site for **4,000** ComEd employees who will maintain the Smart Grid. ComEd is partnering with After School Matters to develop a program to expose Chicago high school students to careers in construction.

The CTC is truly a neighborhood investment:

- The Center was built using more than 90 percent diverse suppliers.
- Artwork was provided by Project Onward, a Bridgeport neighborhood arts program that supports artists with developmental disabilities.
- Neighborhood business Entertaining Company catered the ribbon-cutting.



- CONSTRUCT is an **eleven-week**, multi-partner jobs program spearheaded by ComEd to train diverse workers in the field of construction. Of the **150** graduates, **80 percent** have been offered full-time jobs in Illinois.
- The Dawson Tech collaboration between ComEd and Kennedy-King College, which trains participants to be electrical apprentices, celebrated its **10th** anniversary.



DRIVING RECORD CUSTOMER SATISFACTION

As we deliver on the promise of the Smart Grid Law, our customers are feeling the difference, with **record customer satisfaction** and a wealth of innovation underway to deliver a premier experience to our customers.



MOST-IMPROVED UTILITY IN CUSTOMER SATISFACTION SINCE 2012

- ComEd is seeing record customer satisfaction, including the most-improved satisfaction scores among large utilities over the last several years.

PROVIDING A PREMIER CUSTOMER EXPERIENCE

In 2015, ComEd debuted many new tools and systems to improve our customers' experience, including:

- The **Landlord Portal** is an online tool for property managers to manage tenant accounts.
- **Outage communications** include enhanced messaging and graphics to provide more robust restoration updates and outage management tips.



- The **Preference Communications Center** allows customers to choose what information they receive from us through various channels, such as phone, text, and email.
- **Community Care Crews** first launched during the June tornadoes and provide mobile hotspots, charging stations, access to our outage map, and additional restoration information.

KEEPING OUR WORKERS AND THE PUBLIC SAFE

Ensuring the safety of our workforce and the public is ComEd's top priority, in delivering on the promise of the Smart Grid and beyond.

SAFETY ACHIEVEMENTS

- For the **fifth** year in a row, we delivered top-decile safety performance.
- ComEd was named **one of America's Safest Companies** in 2015 by *EHS Today*.
- ComEd received the National Safety Council's Million Work Hours Award for achieving **1 million** hours without a lost workday case.



PUBLIC SAFETY AWARENESS

- ComEd launched an advertising campaign, *One Line You Should Never Cross*, to raise public awareness about electrical safety and the dangers surrounding power lines.

ONE LINE YOU SHOULD NEVER CROSS

Call 1.800.EDISON.1
before working near overhead wires

ComEd

SAFETY INNOVATION

- **Manhole Flash Shield:** ComEd's industry-leading arc flash testing analysis was recognized at the 2015 Chicago Innovation Awards.
- **Thermal Cameras:** Employees are using thermal cameras in their underground work, providing an additional layer of safety as well as preventative maintenance.

MAKING A DIFFERENCE IN OUR COMMUNITIES

A local company with deep roots in Northern Illinois, ComEd is committed to making a difference in our communities. Through our volunteerism, our support for critical programs, and our community-centered EIMA infrastructure investments, we create constant connection with our communities, enabling us to understand our customers and meet their needs.

INVESTING IN OUR COMMUNITIES, WHERE OUR EMPLOYEES LIVE, WORK, AND PLAY

- ComEd volunteered a record-breaking **18,600** hours in 2015.
- ComEd executives serve on the boards of **90** local community non-profit organizations in our service territory.
- ComEd employees raised **\$1.13 million** during the annual United Way Campaign.
- More than **400** ComEd employees took part in the annual Polar Plunge, raising **\$148,000** for Special Olympics in 2015.



INSPIRING THE WORKFORCE OF THE FUTURE

- ComEd's **second** Icebox Derby challenged **30** teenage girls to build electric racecars out of recycled refrigerators from ComEd's Fridge & Freezer Recycling program, while earning **\$2,000** scholarships. Community partners included Girl Scouts of Greater Chicago and Northwest Indiana, the Chicago Urban League, Girls 4 Science and Operation PUSH.
- More than **200** students, ages 14 to 18, participated in ComEd's Youth Ambassador program, a partnership with After School Matters.
- ComEd and Exelon celebrated the **10th** anniversary of the Stay in School Program (SIS) at Navy Pier in September. SIS has involved more than **23,000** students, **100** mentors and **75** interns to date.
- ComEd's Energy Force is a one-of-a-kind energy efficiency ambassador program designed for, and taught by, individuals with developmental disabilities.



CARING FOR OUR ENVIRONMENT

- ComEd awarded **19** winners a combined **\$200,000** in funding through the Green Region Program for open-space projects.
- ComEd also partnered with the Arbor Day Foundation to donate **8,000** trees to customers whose trees had to be removed due to ComEd work.
- The Zoo Browse program has saved the Chicago Zoological Society more than **\$1.25 million** over **five** years by delivering tree trimmings for the animals.

18,600
VOLUNTEER
HOURS IN 2015

SUPPORTING OUR CUSTOMERS

- ComEd has distributed **\$40 million** in assistance for customers struggling to pay their bills through its CARE program, with another **\$10 million** committed in 2016.

INVESTMENTS
BY THE NUMBERS

2015
YEAR IN REVIEW

INVESTING TO STRENGTHEN OUR GRID

ON BUDGET, AHEAD OF SCHEDULE

\$2.4 BILLION CAPITAL INVESTMENT

- In 2015, ComEd's capital investment was \$2.4 billion with \$663 million related to EIMA

5,400 MANHOLES ASSESSED and COMPLETELY REFURBISHED

INSTALLED **610** DA DEVICES

DEPLOYED **1,077,758** SMART METERS

Replaced **302** WOODEN transmission STRUCTURES with **257** STEEL STRUCTURES

REPLACED **1,153** miles of underground CABLE

replaced or refurbished **4,281** POLES

YEAR BY THE NUMBERS: GRID SMARTENING

- Deployed **1,077,758** smart meters, exceeding accelerated goal of **984,617** by **9 percent**; more than **1.8 million** installed since 2012
- Installed **610** Distribution Automation (DA) devices

Converted **56 MILES** of overhead wires to **UNDERGROUND CABLES**

YEAR BY THE NUMBERS: GRID HARDENING

- Replaced or refurbished **1,153** miles of underground cable
- **5,400** manholes assessed and completely refurbished
- Converted **56 miles** of overhead wire to underground cable and installed approximately **153 miles** of tree-resistant spacer cable
- Replaced **302** wooden transmission structures with **257** steel structures
- Replaced or refurbished **4,281** poles

BUILDING ON THE SMART GRID FOUNDATION

As ComEd has been laying the Smart Grid foundation, we have also been driving innovation that will help revolutionize our industry and deliver new value to customers. We are already building on the foundation of the Smart Grid, driving toward a clean, custom energy future through innovation that is bringing new technologies, greater savings, and more choices to our customers.

\$1.2 MILLION
GRANT FROM THE U.S. DEPT. OF ENERGY
to build a first-of-its-kind microgrid
MASTER CONTROLLER



NEW TECHNOLOGIES

- Unmanned Aircraft System (UAS) Program – ComEd was the **first** utility in the United States to receive FAA permission to use unmanned aircraft systems and is now using them to inspect transmission and distribution lines for hotspots and storm damage, helping to restore outages more quickly and saving customers money.
- In 2015, ComEd approved innovative companies to test 4 new technologies in the ComEd Smart Grid Test Bed. From voltage regulators to unique EV car-charging stations, this work is bringing us closer to the grid of the future.

SMART, RESILIENT, EMPOWERED COMMUNITIES

- **Smart Streetlights:** ComEd is piloting smart streetlights in Bensenville and Lombard, with several additional communities ready to receive smart-ready, energy efficient LED streetlights.
- **Microgrids:** In a time of increased weather volatility and security events, resiliency is the new performance standard for the 21st century—and microgrids will help deliver this resiliency to our customers. A planned microgrid demonstration project in Chicago's Bronzeville neighborhood is already underway, funded in part by a **\$1.2 million** grant from the U.S. Department of Energy (DOE) to build a **first-of-its-kind** microgrid master controller. Another \$4 million grant from the DOE's SHINES Initiative will be used to design and deploy solar and battery storage technology within this microgrid, making it the most sophisticated solar project in the Midwest.



CLEAN TECHNOLOGIES

- **Solar and Battery Integration to Microgrids:** ComEd will use a **\$4 million** award from the U.S. Department of Energy SunShot Initiative to design and deploy solar and battery storage technology within the Bronzeville microgrid. This will make possible the most sophisticated solar project in the Midwest, while also serving as a blueprint for other community microgrids around the country.
- **Community Energy Storage Pilot Program:** ComEd is integrating storage into our grid, with 25–50 kWh batteries that can improve pocket reliability issues and, in the future, potentially be used to keep critical municipal operations functioning without skipping a beat in the event of an outage.

CUSTOMER CHOICES/SAVINGS

ComEd is innovating to ensure that new technologies provide our customers with choices and control. There are pilot projects already underway.

- **Bidgely HomeBeat™ Energy Monitor:** To fully leverage the benefits of the expanding digital network, ComEd partnered with analytics company Bidgely to offer customers the new HomeBeat™ Energy Monitor, which provides customers with personalized and detailed energy reports down to the appliance level.
- **MeterGenius:** ComEd also partnered with MeterGenius, a Northwestern University startup, for a **six-month** pilot program that allows **6,500** randomly selected ComEd customers to track their real-time energy usage and receive incentives for reducing consumption in the form of points that can be used to make purchases.



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The statements and claims contained in this Progress Report are based on the best-available information as of March 31, 2016 and are subject to revision or change.

