



UTILITY-SCALE SMART METER DEPLOYMENTS:

A FOUNDATION FOR EXPANDED GRID BENEFITS

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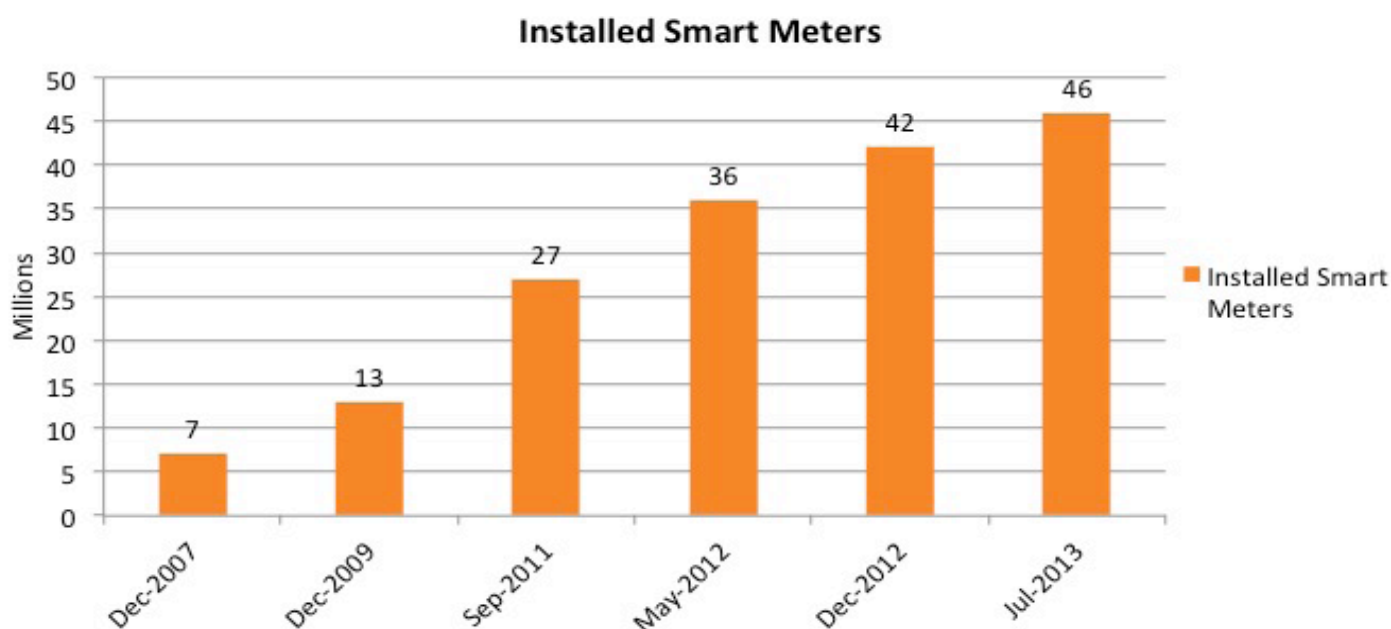
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EXECUTIVE SUMMARY

The electric power sector has turned a corner when it comes to smart meters and other smart grid investments. Electric utilities continue upgrading their customers' analog electric meters with digital 'smart' meters, according to the latest report from IEE, an Institute of The Edison Foundation.¹ As of July 2013, nearly 40 percent of households have a smart meter. This is up from about 33 percent of households in May 2012. As shown in Figure 1, IEE finds that about 46 million smart meters have been installed in the U.S.²

Figure 1. Smart Meter Installations in the U.S. Top 45 Million



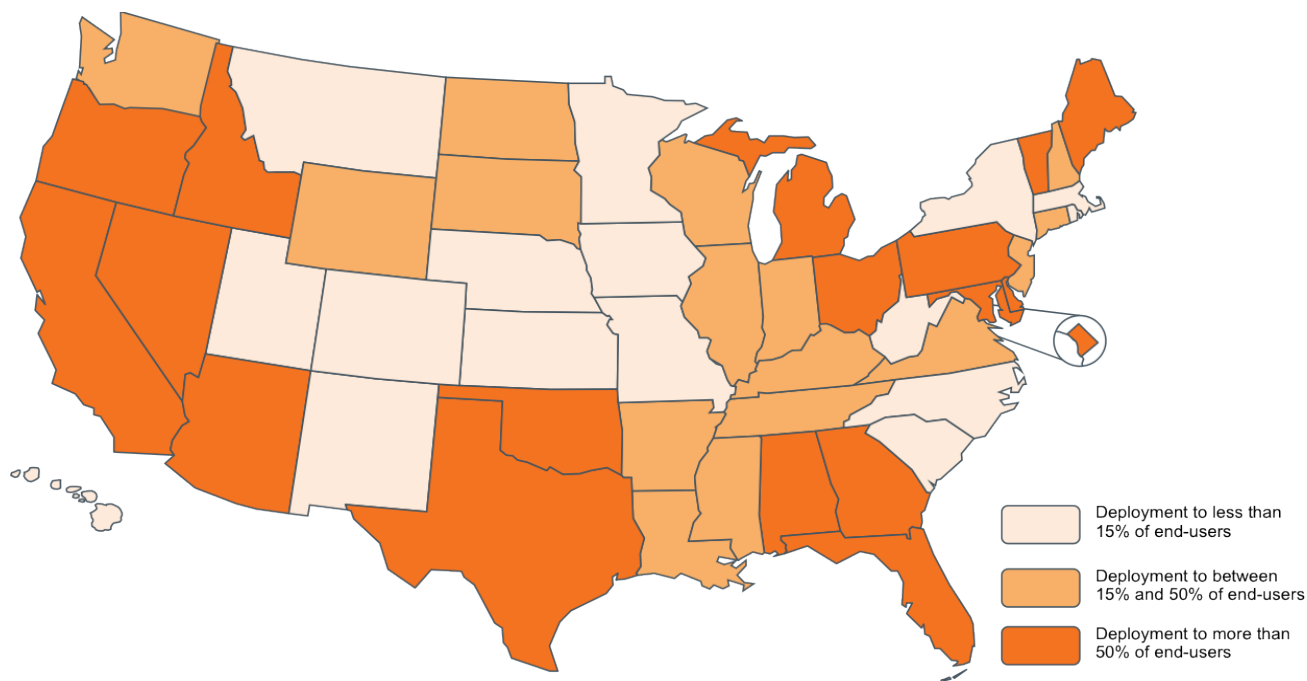
The era of pilots is a distant memory; the current focus is now on integrating and optimizing information gathered by smart meters and other investments that form the digital grid to provide maximum benefits to customers. Starting with this report, in addition to reporting the number of smart meter deployments by state and utility, IEE will highlight a few examples of innovations across the grid showing how smart meters and other digital grid assets are delivering advancements in areas such as: grid optimization, building efficiency, demand response, distributed generation, customer engagement, and big data.

¹ A smart meter is a digital electric meter that measures and records usage data hourly, or more frequently, and allows for two-way communications between the utility and the customer.

² Based on submitted and approved automated metering infrastructure (AMI) business plans, responses to survey questions and other public information. For inquiries or to provide feedback, please contact Adam Cooper at acooper@edisonfoundation.net. For further information, please visit <http://www.edisonfoundation.net/IEE/>.

Figure 2 shows the extent of smart meter deployments by state by 2015.

Figure 2. Expected Smart Meter Deployments by State by 2015³



With 46 million smart meters installed in the U.S., electric utilities are demonstrating the value of digital grid investments. Some examples include:

- Oklahoma Gas & Electric is working with ABB to reduce both energy losses and peak demand in its distribution system. They are implementing volt/VAR optimization (VVO) across 400 circuits to achieve a 75 MW load reduction by 2018. The VVO application monitors the distribution network and computes the optimal control settings.
- Following on a successful smart meter deployment and two years of solid pilot results, Pepco is in the process of deploying the Peak Energy Savings program to Delaware and Maryland residents. Pepco's Peak Energy Savings program connects data coming from smart meters with a peak time rebate. Customers that have a smart meter receive a price signal during peak demand times and are eligible for a bill credit of \$1.25 per kWh for responding by reducing demand. The program is expected to provide about 50 MW of DR and will generate revenue from PJM.
- NV Energy is working with Building IQ to engage casinos, schools, hotels, and offices in resource optimization through its mPowered for Commercial program. This program moves away from the typical "cash for kilowatts" design, allowing NV Energy to work with its customers to make long-lasting, financially sound, and technology-driven changes in large buildings. By upgrading and overlaying existing energy-management systems with open, automated DR communications, NV Energy delivers building efficiencies through an innovative application of HVAC optimization under a software-as-a-service platform. NV Energy will deliver 75 MW of savings by 2015 through this program.

³ Note: Figure 2 shows the extent of smart meter deployments by state by 2015 that are either completed, underway, or planned. This map does not include automatic meter reading (AMR) installations. The data that is represented in this report was compiled June – August 2013. Readers are encouraged to verify the most recent developments by contacting the utility or regulator.

Electric utilities are using information provided by smart meters and other investments in the digital grid to improve the efficiency and reliability of the electric system. For example, following Superstorm Sandy and Hurricane Irene, utility smart grid investments provided valuable information that helped restore power to thousands of customers earlier than anticipated.

Partnerships between technology companies and utilities are critical to catalyzing innovation across the power grid. In October 2013, IEE will release its first ***Innovations Across the Grid*** report, highlighting over 30 examples of how innovations in the digital grid are delivering value to customers.

Smart Meter Installations and Projected Deployments by Utility

Utility	State	Meters Installed	Target Number of Meters	Notes	Resources
AEP	AR, IN, KY, LA, MI, OH, OK, TN, TX, VA, WV	1,034,000	5,200,000	AEP plans on deploying smart meters to all 5.2 million customers served by their operating companies. AEP's Indiana Michigan Power (I&M) subsidiary has deployed 9,927 meters to customers in South Bend, IN; AEP Ohio has deployed 131,501 in the Columbus area; AEP Texas has deployed 875,008; and AEP's Public Service Company of Oklahoma (PSO) has deployed 31,795 meters. Timing for the remaining deployments will depend on specific conditions in each of the operating company subsidiaries and approval by the relevant utility commissions.	IEE Smart Meter Survey Q2 2013; AEP Corporate Sustainability Report 2009 ¹ ; AEPOhio.com ²
Allete (d/b/a Minnesota Power)	MN	6,500	8,000	Allete plans to invest \$3M and deploy 8,000 smart meters in northeast Minnesota. The utility also intends to purchase automation equipment and begin dynamic pricing program. \$1.5M of the project cost is covered by federal funds.	SmartGrid.gov ³ ; Minnesota St. Paul Business Journal ⁴
Alliant Energy	IA, MN, WI	442,300	442,300	Wisconsin Power & Light, a subsidiary of Alliant Energy, reached full deployment in 2011. Interstate Power & Light has a 1,000 meter pilot supporting the Sustain Dubuque Initiative, which fully deployed in 2010. Additional AMI deployment in IA and MN has been deferred indefinitely.	IEE Smart Meter Survey Q2 2013
Ameren Illinois	IL	0	780,000	Ameren Illinois is planning to begin AMI installation in June 2014, and anticipates 62% of customers (780,000) will have smart meters by 2021.	EIA Form 826; Ameren.com ⁵
Austin Energy	TX	418,900	418,900	Austin Energy's smart meter program was approved in 2008, and reached full deployment of 418,900 in 2009.	greentechgrid.com ⁶ ; IEE Smart Meter Survey Q1 2012
Avista Utilities	ID, WA	13,000	13,000	Avista has installed 13,000 smart meters in Pullman, WA as part of a five-state, five-year demonstration project leveraging DOE SGDGF funds. Long term decisions about future deployment have yet to be made.	IEE Smart Meter Q2 2013 Survey; The Spokesman-Review ⁷
Arizona Public Service	AZ	1,061,000	1,250,000	APS' deployment is over 90% complete, with full installation of 1.25 million meters by 2014. The utility is expecting to replace first generation AMI meters in addition to deploying a second advanced meter for all customer sited generation.	IEE Smart Meter Q2 2013 Survey

Utility	State	Meters Installed	Target Number of Meters	Notes	Resources
Baltimore Gas & Electric	MD	350,000	1,360,000	BG&E piloted 3,000 smart meters in 2008 and was awarded \$200M in SGIG funds to support a full deployment by 2014. It had installed 350,000 meters by June 2013, and expects to have 800,000 installed by the end of the year. BG&E will not be reimbursed for installation costs until 2014, pending commission approval.	IEE Smart Meter Q2 2013 Survey; Constellation (BG&E) Press Release ⁸ ; Baltimore Sun ⁹
Bangor Hydro-Electric	ME	113,500	113,500	BHE has fully deployed 113,500 smart meters in its service territory.	Itron Press Release ¹⁰ ; BHE.com ¹¹ ; Email correspondence (04/2009)
Black Hills Energy	CO	96,200	96,200	Black Hills Energy has fully installed 96,249 smart meters in Colorado and is now testing direct load control and peak time rebate offers with their residential customers. The utility received \$6.1M in SGIG funds (\$12.2M total project value).	IEE Smart Meter Q2 2013 Survey; SmartGrid.gov ¹²
Black Hills Power	MT, SD, WY	69,600	69,600	Black Hills Power has fully deployed 69,607 in its service areas across Montana, Wyoming, and South Dakota. The utility received \$9.6M in SGIG matching funds to install smart meters, upgrade information communication technology infrastructure, and other equipment.	IEE Smart Meter Q2 2013 Survey; smartgrid.tmcnet.com ¹³
CenterPoint Energy	TX	2,283,000	2,283,000	CenterPoint received approval in 2008 to install an advanced metering system across its service territory, and was awarded \$150M in SGIG funds (\$639M total project value). It completed deployment in July 2012, installing 2,283,012 smart meters.	PUCT Docket 36699 ¹⁴
Central Maine Power Company	ME	617,900	617,900	Central Maine Power Company completed its smart meter deployment in 2012, installing 617,793 AMI meters. The utility was awarded \$96M in SGIG funds (\$192M total project value) to assist with the project.	EIA Form 826, Intelligent Utility ¹⁵
Cheyenne Light, Fuel & Power	WY	39,700	39,700	Cheyenne Light, Fuel & Power completed its smart meter installation in 2011. It was awarded \$5M in SGIG funding.	IEE Smart Meter Q2 2013 Survey
Cleco Power	LA	255,000	277,000	Cleco Power intends to install a smart meter network for the utility's entire service territory, after receiving approval from the Louisiana Public Service Commission in 2011. \$20M in SGIG funds (\$72.9M total project value) was awarded to the utility.	Louisiana Public Service Commission ¹⁶ ; SmartGrid.gov ¹⁷ ; EIA Form 826; Acadia Parish Today ¹⁸
Commonwealth Edison	IL	130,000	3,890,000	In June 2013, ComEd received regulatory approval for full deployment of smart meters. Deployment in addition to the initial 130,000 pilot isn't planned to begin until September 2013, and will be completed by 2021.	IEE Smart Meter Q2 2013 Survey; ComEd.com ¹⁹ ; Chicago Business ²⁰

UTILITY-SCALE SMART METER DEPLOYMENTS & PLANS

Utility	State	Meters Installed	Target Number of Meters	Notes	Resources
Consolidated Edison	NY	1,500	1,500	Con Edison piloted a \$6M smart grid program in northwest Queens. 1,500 meters will be deployed and 300 customers will test in-home displays that monitor energy usage by appliance. It is not expected ConEd will file for additional deployment in the near future, due to the state commission's concerns of rate increases.	ConEd Press Release ²² ; GreenTech Media ²³
Consumers Energy	MI	90,000	1,800,000	In November 2008, Consumers signed an agreement with IBM to help plan, deploy and test an AMI and field pilot network. By 2019 the utility anticipates converting its 1.8M electric customers to smart meters.	MLive ²⁴ ; ConsumersEnergy.com ²⁵ ; smartgridnews.com ²⁶
CPS Energy	TX	40,000	707,000	CPS intends to install 700,000 smart meters by 2018. Its initial 40,000 meter pilot, which started in 2011, is complete. Phase two of the deployment will begin in 2014.	smartgrid.tmcnet.com ²⁷ ; CPSEnergy.com ²⁸
Dominion	VA, NC	88,100	2,704,000	Dominion has completed its pilot installation of roughly 88,000 smart meters in Midlothian, Charlottesville, and Northern Virginia. It is still developing the business case and implementation plan for the full deployment of 2.7M meters.	IEE Smart Meter Q2 2013 Survey; Richmond Times Dispatch ²⁹
DTE Energy	MI	1,000,000	2,600,000	DTE received \$84M in SGIG funds (\$168M total project value) for its "Smart Currents" program. It plans to have 1.05M meters installed by the end of 2013, and 2.6M fully deployed.	IEE Smart Meter Q2 2013 Survey; EIA Form 826; DTEEnergy.com ³⁰ ; SmartGrid.gov ³¹
Duke Energy	FL, IN, KY, NC, OH, SC	885,700	1,076,000	Duke has installed 597,090 smart meters in Ohio after receiving approval from the state commission in May 2010 to deploy 700,000 meters. Duke has installed 49,419 meters in Florida, 39,000 fully deployed in Kentucky, and expects to deploy 31,505 in South Carolina and 168,657 in North Carolina by the end of 2013. It is still in its planning stages for deployment in Indiana. Duke was awarded \$200M in SGIG funds for a grid modernization project that can support the deployment of 1.5M smart meters in Indiana and Ohio.	IEE Smart Meter Q2 2013 Survey; Duke Press Release ³²
Entergy Louisiana	LA	300	12,400	Entergy Louisiana is conducting a pilot of smart meters to test the technology.	EIA Form 826
Entergy New Orleans	LA	4,800	7,400	Entergy has installed 4,755 smart meters in a dynamic pricing pilot for low-income households in New Orleans. The utility was awarded \$5M in SGIG funding (\$10M total project value) to support this project. However, equipment problems and a perceived learning curve have slowed deployment.	Entergy New Orleans Press Release ³³ ; EIA Form 826; NOLA.com ³⁴

Utility	State	Meters Installed	Target Number of Meters	Notes	Resources
FirstEnergy Corporation	MD, OH, PA, WV	29,800	2,153,000	FirstEnergy issuing a \$57.4M SGIG award and matching company money for AMI efforts in Ohio and Pennsylvania. It also launched pilots in Morgantown, WV and Urbana, MD to test smart meters, installing 1,140. Further deployment in WV and MD has yet to be determined. The Illuminating Company in Cleveland, OH installed 5,033 meters as part of their 44,000 meter pilot. In Pennsylvania, Act 129 (2008) requires electric distribution companies with more than 100,000 customers to file a smart meter technology procurement and installation plan. According to FirstEnergy's implementation plan (Docket M-2013-2341990), these Pennsylvania subsidiaries will begin their pilot in late 2013, and plan to start full deployment in 2017.	Public Utility Commission of Ohio Press Release ³⁵ ; Cleveland.com ³⁶ ; EIA Form 826; SmartGrid.gov ³⁷ ; MD H.B. 1072; PA Implementation Order & Tentative Order, June 2009 (Docket M-2009-2092655); First Energy Implementation Plan (Docket M-2013-2341990) ³⁸
Florida Power & Light Company	FL	4,512,000	4,800,000	FPL has fully deployed its smart meter program, except a small number of large residential and business customers. Full deployment began in 2009, supported by \$200M in SGIG funds. The remaining 300,000 customers are expected to have smart meters installed by 2014.	IEE Smart Meter Q2 2013 Survey; EIA Form 826; Sun Sentinel ³⁹ ; FPL.com ⁴⁰
Hawaii Electric Company	HI	30	448,200	HECO is planning to deploy smart meters throughout its service territory by 2018. 30 smart meters have been deployed to date across all islands.	E-mail correspondence 08/2013; Energy Efficiency News ⁴¹ ; HECO Press Release ⁴² ; eMeter Strategic Consulting
Idaho Power	ID, OR	512,300	512,300	Idaho Power has fully deployed 512,207 smart meters across its service territory in Idaho and Oregon. The utility received \$47M (\$94M total program cost) in SGIG funding.	IEE Smart Meter Q2 2013 Survey; EIA Form 826; Idaho Power press release ⁴³ & AMI FAQ page ⁴⁴ ; Idaho Power AMI Deployment Map ⁴⁵
Indianapolis Power & Light	IN	10,700	42,000	IPL received \$20M in SGIG funds (\$48.78 total program cost) to deploy smart meters along with complementary technologies. It has installed 10,748 meters, and does not anticipate installing additional meters during 2013. It will also not fully deploy AMI to its service territory, instead pairing it with AMR meters.	IEE Smart Meter Q2 2013 Survey; IPL Press Release ⁴⁶ ; SmartGridNews.com ⁴⁷

UTILITY-SCALE SMART METER DEPLOYMENTS & PLANS

Utility	State	Meters Installed	Target Number of Meters	Notes	Resources
Los Angeles Department of Water and Power	CA	7,900	76,500	Los Angeles DPW intends install AMI technology for 64,000 residential customers with monthly energy consumption over 1200 kWh, 10,000 high turn-over residencies, and 2,500 critical care residential customers.	EIA Form 826; California Energy Commission ⁴⁸
JEA	FL	43,100	43,100	JEA received \$13M in SGIG funding to install smart meters across its service territory. After an initial dynamic pricing pilot for 3,000 customers, JEA has now installed over 40,000 smart meters.	EIA Form 826; SmartGrid.gov ⁴⁹
Kansas City Power & Light	MO	14,000	14,000	KCP&L completed the installation of 14,000 smart meters in 2011 for its SmartGrid Demonstration project in midtown Kansas City, MO. The project includes piloting in-home displays, demand response thermostats, a web portal, and investments in distributed energy resources, distribution, and substation automation. The project concludes in 2014.	IEE Smart Meter Q1 2012 Survey; KCP&L Smart Grid Presentation ⁵⁰
Louisville Gas & Electric	KY	2,000	2,000	LG&E is in the fourth year of a Responsive Pricing and Smart Meter pilot program. 100 customers have time of use (TOU) pricing.	LG&E SmartRate Program ⁵¹
Madison Gas & Electric	WI	5,100	5,900	MGE is installing a small scale smart grid network , including meters, EV charging stations, and in-home management systems. \$5.5M in SGIG funds (\$11M total project value) were awarded to the utility to support their pilot.	IEE Smart Meter Q2 2013 Survey; SmartGrid.gov ⁵² ;
National Grid	MA	5,000	15,000	National Grid's pilot was approved by the DPU in August 2012, and as of January 2013, had installed 5,000 smart meters. It intends to deploy a total of 15,000 meters for its Worcester pilot by 2014.	NationalGridUS.com ⁵³
Nebraska Public Power District	NE	47,400	68,500	NPPD is in the process of installing smart meters throughout the state. 68,500 smart meters will be installed by 2015.	NPPD Press Release ⁵⁴ ; Smart Grid Investment Clearinghouse ⁵⁵ ; EIA Form 826
NV Energy	NV	1,197,000	1,300,000	NV Energy has installed nearly 1.2 million meters with an anticipated full deployment of 1.3 million, which was pushed back to the end of 2013. The utility was awarded \$138M in SGIG funds (\$301M total project value).	E-mail correspondence 07/2013; NVEnergy.com ⁵⁶ ; Las Vegas Sun ⁵⁷

Utility	State	Meters Installed	Target Number of Meters	Notes	Resources
Oklahoma Gas & Electric	AR, OK	871,700	871,700	OG&E has fully installed 871,708 meters with dynamic pricing options; 804,078 in Oklahoma, and 67,630 in Arkansas. OGE received \$130M in SGIG funds (\$366M total project cost).	E-mail correspondence 07/2013; AR Docket 10-109-U, Order No. 8; IEE Smart Meter Survey Q1 2012; SmartGrid.gov; smartmeters.com ⁵⁸
Oncor	TX	3,263,000	3,263,000	According to its December 2012 PUCT filing, Oncor has fully deployed 3,262,864 smart meters across its service territory.	PUCT Project 36157 ⁵⁹
Pacific Gas & Electric	CA	5,120,000	5,630,000	PG&E has deployed 5.12M meters, and expects to be fully deployed with 5.63M by the end of 2013. Customers with smart meters can participate in PG&E's SmartRate plan, a voluntary critical peak pricing (CPP) rate plan that will help manage system load during hot summer days.	IEE Smart Meter Q2 2013 Survey; EIA Form 826; PGE Smart Meter Program Data ⁶⁰
Pacific Northwest Smart Grid Demonstration Project	ID, MT, OR, WA, WY	30,700	60,000	Avista, NorthWestern Energy, Portland General Electric and Seattle City Light represent the investor-owned and large public power utilities involved in a 5-year project that will provide two-way communication between distributed generation, storage, demand assets and the existing grid. Note: Meters related to Avista, PGE, and other electric distribution companies included in the Demonstration Project are not double counted in the summary total.	Bonneville Power Authority ⁶¹ ; Pacific Northwest Smart Grid ⁶² ; SmartGrid.gov ⁶³
PECO Energy Company	PA	481,700	1,600,000	PECO has installed over 480,000 smart meters, and has moved up its full deployment timeline by five years, indicating 1.6M meters will be installed by the end of 2014. PECO was awarded \$200M in SGIG funding to support these efforts.	EIA Form 826; Philly.com ⁶⁴ ; PECO.com ⁶⁵
PEPCO Holdings, Inc.	DC, DE, MD, NJ	1,155,000	1,159,000	PEPCO reached full deployment in Delaware and with 309,400 meters installed. 278,500 of 280,000 meters have been installed in DC, and 567,034 of 570,000 meters have been installed in PEPCO's Maryland service area. PEPCO received \$168.1M in SGIG funds to support the \$300M cost of the DC and MD projects. There is no active AMI project in New Jersey.	PEPCO.com ⁶⁶ ; Maryland Gazette ⁶⁷ ; EIA Form 826; PEPCO.com ⁶⁸ ; NPR - WAMU ⁶⁹
Portland General Electric	OR	832,700	832,700	PGE's smart meter program was approved by the commission in 2008; full deployment was completed by the fall of 2010.	EIA Form 826; PGE Earnings Report ⁷⁰ ; PGE Smart Meters web page ⁷¹

UTILITY-SCALE SMART METER DEPLOYMENTS & PLANS

Utility	State	Meters Installed	Target Number of Meters	Notes	Resources
PPL	PA	1,438,000	1,438,000	PPL is in compliance with PA Act 129 and has installed AMI in its service territory. The PA electric distribution companies are engaged in a collaborative process to develop standards and formats for electronic communication of meter data and access by customers and third parties. Once standards are set customers will be able to access their interval data readings over the web.	IEE Smart Meter Q2 2013 Survey; PA Docket No. M-2009-2092655
PSE&G	NJ	0	17,500	PSE&G received approval from NJ Board of Public Utilities to install 17,500 AMI in three Passaic County towns. However, PSE&G is reconsidering its AMI plans due to cost concerns.	NJ.com ⁷² ; Washington Post ⁷³ ; PR Newswire ⁷⁴
Puget Sound Energy	WA	50	60,000	PSE is testing a demand response pilot program with 700 customers on Bainbridge Island. It is experimenting with the technology through 2014, and can foresee full deployment of 60,000 beginning in 2015. However, it has not funded or fully scoped the requirements of installation.	IEE Smart Meter Q2 2013 Survey; PSE Press Release ⁷⁵
Sacramento Municipal Utility District	CA	617,500	617,500	SMUD completed full deployment of smart meters within its service territory in 2012. The overall smart grid plan includes dynamic pricing, 100 EV charging stations, and 50,000 demand response controls. SMUD was awarded \$127.5M in SGIG funds (\$307.7M total project value) to support their efforts.	SacObserver ⁷⁶ ; SmartGrid.gov ⁷⁷
Salt River Project	AZ	862,000	1,000,000	Salt River Project has currently installed over 860,000 smart meters, and has scheduled to have 1M meters installed by 2013. SRP received \$56.9M in SGIG funds (\$114M total program cost). It will also provide dynamic pricing to customers, and expects to conserve 210,000 gallons of fuel through the use of AMI.	EIA Form 826; SRPnet.com ⁷⁸
San Diego Gas & Electric	CA	1,406,000	1,406,000	SDG&E has fully deployed over 1.4M meters across its service territory. It was awarded \$28.1M in SGIG funds (\$60.1M total project value) for the installation. SDG&E is using its Itron meters for bill/usage alerts, demand response, and remote connect/disconnect, among other uses.	IEE Smart Meter Q2 2013 Survey; SDG&E Smart Meter Deployment Metrics ⁷⁹
Southern California Edison	CA	4,950,000	5,001,000	As of July 2013, SCE is fully deployed with about 4.95M smart meters. Additional deployments are scheduled through 2015 to accommodate population growth. SCE's SmartConnect program uses the meters to offer Critical Peak Pricing (CPP) and Peak Time Rebate (PTR) rates to customers with enabling technology.	E-mail correspondence 07/2013; SCE SmartConnect ⁸⁰

Utility	State	Meters Installed	Target Number of Meters	Notes	Resources
Southern Company	AL, FL, GA, MS	4,399,000	4,572,000	Southern Company's Georgia Power, Alabama Power, and Gulf Power (FL) are fully deployed. Georgia Power reached full deployment in 2012 with 2,460,139 meters, Alabama Power reached full deployment in 2010 with 1,491,034 meters, and Gulf Power reached full deployment in 2012 with 441,119 meters. Mississippi Power has currently installed 6,723 meters and is awaiting approval from the PSC for its full deployment of 180,000, scheduled to be completed by 2016.	IEE Smart Meter Q2 2013 Survey; Georgia Power Smart Meter ⁸¹ ; GreenTech Media ⁸² ; EIA Form 826
State Program (Pennsylvania)	PA	1,943,000	5,770,000	Signed into law in October 2008, Pennsylvania Act 129 mandates that electric distribution companies with more than 100,000 customers provide smart meters either to customers that request one, for newly constructed buildings, or to all customers within fifteen years. Most companies will reach full deployment well before the allotted timeline. Note: Meters listed for FirstEnergy Corporation, PPL, PECO, and other PA electric distribution companies included in the State Program (Pennsylvania) total are not double counted in the summary total.	PA Act 12928 ⁸³ ; smartmeters.com ⁸⁴
Tampa Electric	FL	0	160,000	Tampa Electric does not plan to begin its smart meter deployment until 2016, when it intends to fully deploy 160,000 meters.	E-mail correspondence 07/2013; IEE Smart Meter Survey 2012
Tacoma Public Utilities	WA	18,100	152,000	Tacoma Public Utilities currently has over 18,000 smart meters installed and intends to fully deploy over 150,000 meters.	TPU Press Release ⁸⁵ ; EIA Form 826
Texas New Mexico Power	TX	106,100	240,000	In July 2011, TNMP received PUCT approval for full deployment of 240,000 meters in Texas by 2016. It is using Itron meters to facilitate outage detection/restoration and remote connect/disconnect.	IEE Smart Meter Q2 2013 Survey; TrueEnergy ⁸⁶ ; Reuters ⁸⁷ ; PUCT Project 39772
United Illuminating	CT	113,000	350,000	United Illuminating has installed 113,004 of its projected 350,000 smart meters. The company is considering expanding its use of IBM meters to natural gas customers as well.	EIA Form 826; IBM ⁸⁸ ; New Haven Register ⁸⁹
Unitil	MA, NH	104,000	104,000	Unitil has fully deployed 104,000 smart meters across its service territory around Concord, NH and Fitchburg, MA. It has used this technology to, among other things, implement a TOU pricing pilot.	IEE Smart Meter Q2 2013 Survey

UTILITY-SCALE SMART METER DEPLOYMENTS & PLANS

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Vermont Utilities (VT Elec Coop, Green Mountain, Stowe Electric, Washington Elec Coop, Burlington Elec)	VT	333,200	333,200	Vermont's five major utilities have fully deployed AMI meters across their service territories. This effort to install smart meters in 85-90 percent of homes across Vermont was awarded \$69M in SGIG funds.	Vermont PSD ⁹⁰ ; Vermont Today ⁹¹
Westar Energy	KS	44,900	48,000	Westar is piloting smart meters in its SmartStar project in Lawrence, KS. SmartStar is a customer-centric project and all customers will be offered a personal energy web portal accompanying the smart meter installation. The project includes other infrastructure required to support system wide deployment of smart metering. The project is expected to take between 24 and 36 months to implement, with meter installations beginning Q2 2011. Westar was awarded \$19M in SGIG funds (total project value, approx. \$40M).	SmartGrid.gov ⁹² ; WestarEnergy.com ⁹³
Xcel Energy	CO	23,700	23,700	Xcel Energy has completed deployment of its pilot project in Boulder, CO, as part of its SmartGridCity initiative. It has deployed 23,000 residential meters and 700 commercial meters. The utility initially planned to install 50,000 meters, but was forced to decrease the deployment due to cost overruns.	SmartGridCity ⁹⁴ ; Finance & Commerce ⁹⁵ ; Heartland.org ⁹⁶
Other Coops and Municipal Utilities	45 States	4,266,000	5,694,000	Information obtained from EIA Form 826, eMeter Strategic Consulting, SmartGrid.gov, or other news sources. Over 4M meters have been installed by some municipal utilities, cooperatives, and other electric distribution companies, with plans to deploy about 5.7M. These electricity providers operate in 45 states.	EIA Form 826; eMeter Strategic Consulting; SmartGrid.gov
Total as of July 2013		45,832,000	69,821,000		

The following utilities have or will complete system wide deployment of smart meters by December 2013:

Alabama Power (AL); Oklahoma Gas & Electric (AR); Pacific Gas & Electric (CA); Sacramento Municipal Utility District (CA); San Diego Gas & Electric (CA); Southern California Edison (CA); Black Hills Energy Corp (CO); Pepco (DC); Delmarva Power (DE); Gulf Power (FL); Georgia Power (GA); Idaho Power (ID); Bangor Hydro Electric Company (ME); Central Maine Power (ME); NV Energy (NV); Oklahoma Gas & Electric (OK); Idaho Power (OR); Portland General Electric (OR); PPL (PA); Black Hills Power (SD); Austin Energy (TX); CenterPoint Energy (TX); Oncor (TX); Wisconsin Power and Light (WI); Cheyenne Light, Fuel, and Power (WY); Black Hills Power (WY)

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