



Portland General Electric Company
121 SW Salmon Street • Portland, Oregon 97204
PortlandGeneral.com

September 4, 2008

Email/US Postal Mail

Vikie Bailey-Goggins
Administrator
550 Capitol Street, N.E., Ste 215
Salem, OR 97301-2551

RE: UE-189 AMI Project REVISED Quarterly Status Updates – 2008-Q1 and Q2

OPUC Order No. 08-245 adopted the AMI Conditions filed with the Joint Party stipulation. The provisions of the Joint Party stipulation require that PGE file quarterly status reports throughout the deployment period with the Public Utility Commission of Oregon, detailing:

- Progress under the implementation plans, including any significant changes in timing, budget, or scope;
- Number of meters installed; and
- Actual costs by category.

PGE provided Quarterly Status Reports for the first and second quarter of 2008; periods ending March 31, 2008 and June 30, 2008, respectively. Enclosed are revisions to each of the quarterly reports filed this year. Pursuant to discussions with Staff, PGE is now reflecting O&M costs as of the start of the tariff, June 1, 2008. Other minor changes are noted in the reports.

If you have any questions or require further information, please call Alex Tooman at (503) 464-7623. Please direct all formal correspondence and requests to the following email address pge.opuc.filings@pge.com

Sincerely,

Patrick G. Hager
Manager, Regulatory Affairs

cc: UE 189 Service List



Quarterly Report to the OPUC

For quarter ending March 31, 2008 REVISED on 8/22/08

Advanced Metering Infrastructure (AMI) Project

Summary: This project carries out activities to deploy a two-way, fixed-network AMI system throughout PGE's service territory. Scope includes project planning, IT readiness, vendor selection & contracting, business process development, system acceptance testing, deployment of 852,000 meters and related radio-frequency (RF) communications equipment, and evaluation of certain customer & systems-related benefits.

Project Start Date	Project Completion Date	# of AMI Meters Deployed to Date	# of Meters Read by Network for Billing	JMR Routes Remaining with PGE	JMR Routes Remaining with NNG
August 2005	September 2010	0	0	1,691	568

Project Cost Summary * Unloaded and Rounded to Nearest Thousand	AMI Project Budget*	Actual Cost to Date*	Remaining Cost to Complete*
Meters	\$ 106,262,000	\$ 127,000	\$ 106,135,000
IT	7,902,000	1,140,000	6,762,000
Network	6,249,000	225,000	6,024,000
Business Processes	3,912,000	857,000	3,055,000
Project Management	7,245,000	371,000	6,874,000
Capital Sub-total	126,361,000	2,720,000	123,641,000
O&M Total	5,209,000	0	5,209,000
Total Unloaded Cost	\$131,570,000	\$2,720,000	\$ 128,850,000
Loadings	7,548,000	995,000	6,553,000
Total Loaded Costs	\$ 139,118,000	\$ 3,715,000	\$ 135,403,000

Variance Explanation: This report was revised for two purposes. 1. Previously reported budget and cost to date was for the entire PGE AMI Project. This revision reports only the portion of the project budget and cost tracked under the AMI Tariff. 2. Budget and cost to date were previously reported as loaded amounts. This revision reports unloaded budget and unloaded cost to date with loadings broken out on a single line (in above summary).

Project Milestones	Due Date	Status
▪ Begin System Acceptance Testing (SAT)	06/02/2008	16,000 meters to be deployed for functionality & end-to-end testing
▪ Complete System Acceptance Testing	12/31/2008	Final stages of test design and planning
▪ Begin Mass Meter Deployment	01/05/2009	Preliminary month-to-month deployment schedule prepared
▪ Complete RF Network Installation	12/31/2009	RF propagation study and tower location analyses nearing completion
▪ Complete Mass Meter Deployment	09/12/2010	To be followed by up to six-month system optimization process

Project Job Status	Due Date	Budget *		Costs to Date *	
		Capital	O&M	Capital	O&M
Meter Installation – SAT	09/2008	7,456,000	0	127,000	0
Meter Installation – Full Deployment	09/2010	98,806,000	0	0	0
<i>Meters Subtotals – Capital / O&M</i>		<i>106,262,000</i>	<i>0</i>	<i>127,000</i>	<i>0</i>
Meters – Total		106,262,000		127,000	
IT Infrastructure Support	09/2010	4,237,000	646,000	866,000	0
MDC – General AMI Requirements	01/2010	0	24,000	0	0
MDC – CS SAT Testing	12/2008	0	0	0	0
IT AMI Software	06/2010	1,691,000	7,000	148,000	0
Interval Date Storage & Usage	11/2009	1,297,000	0	126,000	0
<i>IT – Subtotals – Capital / O&M</i>		<i>7,225,000</i>	<i>677,000</i>	<i>1,140,000</i>	<i>0</i>
IT – Total		7,902,000		1,140,000	



Quarterly Report to the OPUC

For quarter ending March 31, 2008 REVISED on 8/22/08

Project Job Status	Due Date	Budget*		Costs to Date*	
		Capital	O&M	Capital	O&M
Host System Installation – SAT	05/2008	500,000	0	225,000	0
Host System Installation – Full Deployment	12/2008	700,000	0	0	0
Tower Site Deployment	12/2009	4,449,000	600,000	0	0
<i>Network – Subtotals – Capital / O&M</i>		<i>5,649,000</i>	<i>600,000</i>	<i>225,000</i>	<i>0</i>
Network – Total		6,249,000		225,000	
Automated Meter Exchange	06/2008	1,172,000	33,000	855,000	0
On Cycle Billing	06/2008	160,000	2,000	0	0
Routine Meter Exchange	08/2008	157,000	196,000	0	0
Remote Connect/Disconnect	04/2009	476,000	166,000	0	0
Customer-Selected Due Date	08/2009	125,000	125,000	0	0
Move-in/Move-out	01/2010	348,000	178,000	0	0
Lost Revenue Protection	01/2010	169,000	96,000	2,000	0
Meter Reading Process Redesign	09/2009	0	17,000	0	0
Information-Driven Energy Savings	08/2010	416,000	76,000	0	0
<i>Bus Processes – Subtotals Cap / O&M</i>		<i>3,023,000</i>	<i>889,000</i>	<i>857,000</i>	<i>0</i>
Business Processes – Total		3,912,000		857,000	
Project Office	09/2010	856,000	3,001,000	371,000	0
Contingencies	09/2010	3,346,000	42,000	0	0
<i>Project Mgmt – Subtotals Cap / O&M</i>		<i>4,202,000</i>	<i>3,043,000</i>	<i>371,000</i>	<i>0</i>
Project Management – Total		7,245,000		371,000	

* Unloaded, rounded to nearest thousand

Implementation Activities – 2005 to 2007

- Completed initial AMI business case and project plan (March 2005); updated AMI business case (August 2005)
- Received PGE Board approval and funding for initial phase of AMI project (August 2005)
- Initiated RFP processes for selection of AMI vendor (January 2006) and contract meter installer (July 2006)
- Completed IT readiness assessment and initial cost estimates (March 2006)
- Received PGE Board approval and funding for Phase 2 of AMI project (May 2006)
- Selected Sensus as preferred AMI vendor and initiated contract negotiations (August 2006)
- Initiated planning and development on seven core business processes (September 2006)
- Initiated radio frequency (RF) propagation analysis work with AMI vendor (December 2006)
- Submitted preliminary draft AMI Implementation Plans to OPUC (January 2007)
- Filed AMI tariff request with OPUC (March 2007)
- Completed first round of testing on automated meter exchange (AME) process (June 2007)
- Completed pre-contract scalability testing on vendor's AMI host system software (September 2007)
- Executed contracts with AMI vendor (Sensus) and contract meter installer (Wellington) (September 2007)
- Received initial AMI host system software version (1.2) (October 2007)

Implementation Activities – Q1 2008

- Received AMI host system software version 1.4 for testing; version 1.5 for use during SAT is due May 19
- Continued refinement of RF propagation analysis to determine tower locations for SAT/mass deployment phases
- Successfully tested proof of concept for interfaces between AMI vendor's system and PGE's meter data consolidator
- Entered testing requirements and test plans into TestDirector system in preparation for SAT phase
- Met with NW Natural (NWN) to plan orderly transition from joint meter reading (JMR) program



Quarterly Report to the OPUC

For quarter ending March 31, 2008 REVISED on 8/22/08

- Continue working with affected employee groups as part of employee transition plan activity
- Completed customer focus groups on AMI communications and field deployment practices (Feb. 25-27)
- Completed second round on-site assessments of vendor's manufacturing facilities (week of March 17)
- Ordered first sets of AMI meters for SAT; meter deliveries expected May 5, May 12 and June 9
- Initiated meeting to prepare for training for Community Action Agencies

Planned Activities – Q2 2008

- Install version 1.5 of AMI vendor's host system software in readiness for SAT
- Receive/test initial orders of AMI meters
- Begin meter deployment in three SAT test areas: inner SE Portland, downtown Portland, Banks/Gales Creek rural area
- Complete implementation of system to facilitate automation of meter exchange data transfer into PGE's meter inventory, meter data management and customer information systems during SAT and mass deployment phases
- Complete deployment of RF towers for SAT
- Complete requirements gathering and submit revised project plans to OPUC (mid-July) for business processes
- Continue site reviews and documentation of tower locations for mass deployment
- Conduct pre-SAT employee training (Customer Service, Meter Services, Distribution, Billing & Credit, etc.)
- Finalize detailed test plans, testing requirements and ready test scripts for SAT; initiate testing activity
- Complete work with OPUC on revisions to Periodic and Sample Testing requirements
- Complete long-range staffing plan for Meter Reading and Field Collections

Contacts: Joel Westvold, AMI Director, 503-464-7583
Alex Tooman, Rates & Regulatory Affairs, 503-464-7623



Quarterly Report to the OPUC

For quarter ending June 30, 2008 REVISED on 8/22/08

Advanced Metering Infrastructure (AMI) Project

Summary: This project carries out activities to deploy a two-way, fixed-network AMI system throughout PGE's service territory. Scope includes project planning, IT readiness, vendor selection & contracting, business process development, system acceptance testing, deployment of 852,000 meters and related radio-frequency (RF) communications equipment, and evaluation of certain customer & systems-related benefits.

Project Start Date	Project Completion Date	# of AMI Meters Deployed to Date	# of Meters Read by Network for Billing	JMR Routes Remaining with PGE	JMR Routes Remaining with NNG
August 2005	September 2010	714	0	1,691	568

Project Cost Summary * Unloaded and Rounded to Nearest Thousand	AMI Project Budget*	Actual Cost to Date*	Remaining Cost to Complete*
Meters	\$ 106,262,000	\$ 592,000	\$ 105,670,000
IT	7,902,000	788,000	7,114,000
Network	6,249,000	1,330,000	4,919,000
Business Processes	3,912,000	919,000	2,993,000
Project Management	7,245,000	635,000	6,610,000
Capital Sub-total	126,361,000	4,118,000	122,243,000
O&M Total	5,209,000	146,000	5,063,000
Total Unloaded Cost	\$131,570,000	\$4,264,000	\$ 127,306,000
Loadings	7,548,000	1,244,000	6,304,000
Total Loaded Costs	\$ 139,118,000	\$ 5,508,000	\$ 133,610,000

Variance Explanation: This report was revised for three purposes. 1. Previously reported budget and cost to date was for entire PGE AMI Project. This revision reports only the portion of the AMI project budget and cost tracked under the AMI Tariff. 2. Budget and cost to date were previously reported as loaded amounts. This revision reports unloaded budget and unloaded cost to date with loadings broken out on a single line (in above summary). 3. A clarification of the previously reported IT Infrastructure Support cost changes. In Q1, capital costs were \$866,000. In Q2, the costs were reduced to \$421,000. The reduction was due to \$648,000 being transferred to Tower Site Deployment job. **Please Note:** In Q3 2008, AMI budgets will be revised due to reorganization of business process jobs. This reorganization will not result in an overall budget change.

Project Milestones	Due Date	Status
▪ Begin System Acceptance Testing (SAT)	06/02/2008	Started 6/2/08 with meter deployment and testing
▪ Complete System Acceptance Testing	12/31/2008	Final stages of test design and planning
▪ Begin Mass Meter Deployment	01/05/2009	Preliminary month-to-month deployment schedule prepared
▪ Complete RF Network Installation	12/31/2009	RF propagation study and tower location analyses nearing completion
▪ Complete Mass Meter Deployment	09/12/2010	To be followed by up to 6-month system optimization process

Project Job Status	Due Date	Budget *		Costs to Date *	
		Capital	O&M	Capital	O&M
Meter Installation – SAT	09/2008	7,456,000	0	592,000	0
Meter Installation – Full Deployment	09/2010	98,806,000	0	0	0
<i>Meters Subtotals – Capital / O&M</i>		<i>106,262,000</i>	<i>0</i>	<i>592,000</i>	<i>0</i>
Meters – Total		106,262,000		592,000	
IT Infrastructure Support	09/2010	4,237,000	646,000	421,000	0
MDC – General AMI Requirements	01/2010	0	24,000	0	6,000



Quarterly Report to the OPUC

For quarter ending June 30, 2008 REVISED on 8/22/08

Project Job Status	Due Date	Budget *		Costs to Date *	
		Capital	O&M	Capital	O&M
MDC – CS SAT Testing	12/2008	0	0	0	3,000
IT AMI Software	06/2010	1,691,000	7,000	199,000	0
Interval Date Storage & Usage	11/2009	1,297,000	0	159,000	0
<i>IT – Subtotals – Capital / O&M</i>		<i>7,225,000</i>	<i>677,000</i>	<i>779,000</i>	<i>9,000</i>
IT – Total		7,902,000		788,000	
Host System Installation – SAT	05/2008	500,000	0	500,000	0
Host System Installation – Full Deployment	12/2008	700,000	0	0	0
Tower Site Deployment	12/2009	4,449,000	600,000	830,000	0
<i>Network – Subtotals – Capital / O&M</i>		<i>5,649,000</i>	<i>600,000</i>	<i>1,330,000</i>	<i>0</i>
Network – Total		6,249,000		1,330,000	
Automated Meter Exchange	06/2008	1,172,000	33,000	892,000	0
On Cycle Billing	06/2008	160,000	2,000	0	0
Routine Meter Exchange	08/2008	157,000	196,000	0	0
Remote Connect/Disconnect	04/2009	476,000	166,000	0	0
Customer-Selected Due Date	08/2009	125,000	125,000	0	0
Move-in/Move-out	01/2010	348,000	178,000	0	0
Lost Revenue Protection	01/2010	169,000	96,000	6,000	9,000
Meter Reading Process Redesign	09/2009	0	17,000	0	1,000
Information-Driven Energy Savings	08/2010	416,000	76,000	11,000	0
<i>Bus Processes – Subtotals Cap / O&M</i>		<i>3,023,000</i>	<i>889,000</i>	<i>909,000</i>	<i>10,000</i>
Business Processes – Total		3,912,000		919,000	
Project Office	09/2010	856,000	3,001,000	508,000	127,000
Contingencies	09/2010	3,346,000	42,000	0	0
<i>Project Mgmt – Subtotals Cap / O&M</i>		<i>4,202,000</i>	<i>3,043,000</i>	<i>508,000</i>	<i>127,000</i>
Project Management – Total		7,245,000		635,000	

* Unloaded, rounded to nearest thousand

Implementation Activities – Q2 2008
<i>Previously Planned Activities</i>
<ul style="list-style-type: none"> ▪ Installed versions 1.4, 1.5 and 1.5.1 of AMI vendor's host system software (FlexWare) in readiness for SAT ▪ Received/tested initial deliveries of AMI meters from primary meter vendor, Sensus Metering Systems ▪ Began meter deployment in inner SE Portland SAT test area; completed 714 meter exchanges in first month ▪ Completed implementation of system to facilitate automation of meter exchange data transfer into PGE's meter inventory, meter data management and customer information systems during SAT and mass deployment phases ▪ Completed construction and commissioning of four of five radio towers required for SAT ▪ Completed requirements gathering for business processes in preparation of submitting revised project plans to OPUC ▪ Completed site reviews and documentation for all radio tower locations for mass deployment ▪ Conducted pre-SAT employee training (Customer Service, Meter Services, Distribution, Billing & Credit, etc.) ▪ Finalized detailed test plans, testing requirements and ready test scripts for SAT; initiated testing activity ▪ Completed work with OPUC on revisions to Periodic and Sample Testing requirements ▪ Continuing to work on long-range staffing plan for Meter Reading and Field Collections



Quarterly Report to the OPUC

For quarter ending June 30, 2008 REVISED on 8/22/08

Additional Activities Undertaken

- Submitted project plans to OPUC for Improved Outage Management, Distribution Asset Utilization, Interval Data Usage and Information-Driven Energy Savings
- Selected vendors and established rules for processing/recycling of non-AMI meters removed from the field
- Established policy/procedure for when customer-owned equipment requires repairs before meter exchange can be completed
- Launched "smart metering" pages on PGE customer website (www.PortlandGeneral.com/smartmeter)
- Initiated customer telephone survey to evaluate meter exchange and customer notification processes
- Provided NWN with notification of PGE's intent to terminate joint meter reading (JMR) agreement effective September 2010; filed letter with OPUC on 5/28/2008
- Attended US DOE workshop in Washington DC on Smart Grid and appliance market transformation

Planned Activities – Q3 2008

- Continue meter deployment in SAT test areas: SE Portland, downtown Portland and Banks/Gales Creek area
- Complete construction/commissioning of final RF tower for SAT (Main substation)
- Receive/install version 1.6 FlexNet software
- Submit revised business process project plans to OPUC
- Apply for permits to construct additional radio towers in preparation for start of full deployment in January 2009
- Continue monthly training for Customer Service personnel
- Conduct training for Distribution personnel, including line departments, field connection, service & design
- Initiate AMI meter deployment for all new construction and routine meter exchange work
- Continue SAT testing activity
- Complete long-range staffing plan for Meter Reading and Field Collections
- Prepare amendment to JMR contract with NWN to cover operational issues during AMI deployment
- Conduct second annual Career Fair for employee groups whose positions are affected by AMI implementation
- Complete telephone surveys of customers who received new meters during SAT period
- Conduct meeting with Low Income Agencies to discuss AMI efforts

Additional Notes and Updates

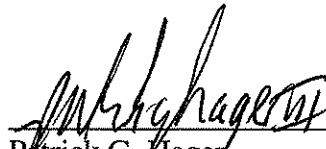
- PGE expects a proposed change to the December 15, 2008 training date for CAPO and associated organizations. In Q3 we will meet with CAPO to review our work plan and training schedule.
- PGE anticipates issuing the RFP for peak demand side capacity from large business customers by the end of Q3 2008. The RFP will be expanded to include additional peaking capacity from residential and small business customers which was not scheduled to be issued until 2010. PGE believes that by combining the two requests that awareness and enrollment synergies will be facilitated.
- PGE is developing an experimental critical peak pricing (CPP) program design that will utilize AMI meter data for determining target customer segments and integration of price responsive enabling technology. Prior to hosting an informal workshop with stakeholders in approximately Q3 2008, PGE has scheduled an update meeting with OPUC Staff in July 2008.

Contacts: Joel Westvold, AMI Director, 503-464-7583
Alex Tooman, Rates & Regulatory Affairs, 503-464-7623

CERTIFICATE OF SERVICE

I hereby certify that I have on September 4, 2008 caused the following: **PORTLAND GENERAL ELECTRIC COMPANY'S UE 189, AMI PROJECT REVISED QUARTERLY STATUS UPDATE 2008 Q1 AND Q2** to be served to the following parties or attorneys listed on the attached service list by electronic mail and by First Class US Mail, postage prepaid and properly addressed, to those parties on the attached service list who have not waived paper service.

Dated this 4th day of September, 2008.



Patrick G. Hager
Manager, Regulatory Affairs
On behalf of Portland General Electric Company



eDockets

Docket Summary

[Return to Search Page](#)

[eFiling](#)

Docket No: UE 189 **Docket Name:** PORTLAND GENERAL ELECTRIC

[Print Summary](#)

Subject Company: PORTLAND GENERAL ELECTRIC

In the Matter of PORTLAND GENERAL ELECTRIC COMPANY Request to Add Schedule 111, Advanced Metering Infrastructure (AMI) Filed by Pamela G. Lesh. (See Initial Utility Filing for electronic version.)

Filing Date: 3/7/2007

Advice No: 07-08

Effective: 6/1/2008

Expiration:

Status: **ACCEPTED**

Final Order: 08-245

Order Signed: 5/5/2008

[Email Service List \(semi-colon delimited\)](#) [Email Service List \(comma delimited\)](#)
 If you experience problems with the above 'Email Service List' links, please try one of these:
[Service List Popup \(semi-colon delimited\)](#) [Service List Popup \(comma delimited\)](#)
[General information about Tariffs](#)

<u>ACTIONS</u>	<u>SERVICE LIST (Parties)</u>	<u>SCHEDULE</u>
W=Waive Paper service	C=Confidential HC=Highly Confidential	Sort by Last Name Sort by Company Name
W	CITIZENS' UTILITY BOARD OF OREGON	
	OPUC DOCKETS	610 SW BROADWAY STE 308 PORTLAND OR 97205 dockets@oregoncub.org
	ROBERT JENKS (C)	610 SW BROADWAY STE 308 PORTLAND OR 97205 bob@oregoncub.org
	COMMUNITY ACTION DIRECTORS OF OREGON	
	JIM ABRAHAMSON COORDINATOR	PO BOX 7964 SALEM OR 97301 jim@cado-oregon.org
	DAVISON VAN CLEVE PC	
	S BRADLEY VAN CLEVE	333 SW TAYLOR - STE 400 PORTLAND OR 97204 mail@dvclaw.com
W	DEPARTMENT OF JUSTICE	
	STEPHANIE S ANDRUS (C) ASSISTANT ATTORNEY GENERAL	REGULATED UTILITY & BUSINESS SECTION 1162 COURT ST NE SALEM OR 97301-4096 stephanie.andrus@state.or.us
W	NORTHWEST NATURAL	

	INARA K SCOTT (C) REGULATORY AFFAIRS MANAGER	220 NW 2ND AVE PORTLAND OR 97209 iks@nwnatural.com
W	NW NATURAL RATES & REGULATORY AFFAIRS	220 NW 2ND AVE PORTLAND OR 97209-3991 efiling@nwnatural.com
W	OREGON DEPARTMENT OF ENERGY ROBIN STRAUGHAN (C)	625 MARION ST NE SALEM OR 97301-3742 robin.straughan@state.or.us
W	PACIFIC POWER & LIGHT MARK TUCKER REGULATORY ANALYST	825 NE MULTNOMAH ST - STE 2000 PORTLAND OR 97232 mark.tucker@pacificorp.com
W	PACIFICORP OREGON DOCKETS OREGON DOCKETS	825 NE MULTNOMAH ST STE 2000 PORTLAND OR 97232 oregondockets@pacificorp.com
	PORTLAND GENERAL ELECTRIC PATRICK HAGER RATES & REGULATORY AFFAIRS (C)	121 SW SALMON ST 1WTC0702 PORTLAND OR 97204 pge.opuc.filings@pgn.com
	DOUGLAS C TINGEY (C)	121 SW SALMON 1WTC13 PORTLAND OR 97204 doug.tingey@pgn.com
	PUBLIC UTILITY COMMISSION OF OREGON LISA C SCHWARTZ (C)	PO BOX 2148 SALEM OR 97308-2148 lisa.c.schwartz@state.or.us