



# SmartMeter™ Technology Outperforms Analog Meters

97%  
function  
accurately

## Analog Meters (4.5 million)



Measurement Issues	Compromised Data / Misread	Communications / No Data
2 – 3%	0.3%	1%

September 2007 to March 2010  
(314 million total bills generated)

Analog meters are manually read - one time per month

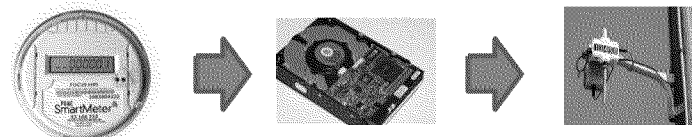
Volume = 284,000 per day  
Estimated Bills = 0.73%

Escalated customer complaints for non-SmartMeter™ accounts = 24,259

Errors Lead to Estimated Bills

99%  
function  
accurately

## SmartMeter™ Devices (5.5 million)



Installer Errors (one time)	Measurement Issues (meters)	Data Storage Issues (meters)	Communication Failures/No Data
0.4% (23,000)	0.001% (8)	0.2% (11,376)	0.1% (9,000)
Fixed	Sent in for testing	Meter still works	Manually read
Replaced	Replaced	Replaced	Replaced
Improving Process and Training	Researching root cause	Software correction	Enhance network, software improvements

SmartMeter™ devices electronically transmit data 24 times per day

Volume = 176,000 per day  
Estimated Bills = 0.21%

If 100% bills were from the SmartMeter™ program in March 2010, we would have approximately 2,500 fewer estimated bills.

Escalated customer complaints = 998

Confidential Pursuant to Public Utility Code Section 583



# SmartMeter™ Device Testing

**2 Years of Due Diligence Testing**

**Pilot Programs:**  
San Francisco  
(approx. 7,000 meters)  
Vacaville  
(approx. 5,000 meters)

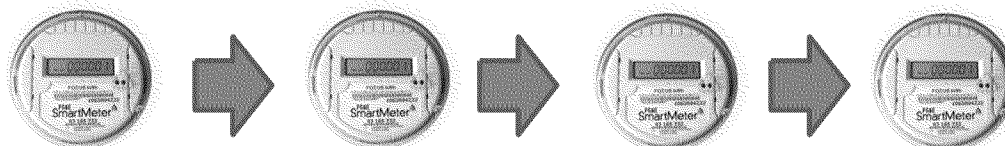
Monitored other pilots:  
Fort Lauderdale, FL  
(Florida Power and Light;  
50,000 meters)  
5 other utility locations

**End-to-end system testing**

**Individual meter testing**

## Testing Before Installation

100% Factory Tested	Independent 3 <sup>rd</sup> Party Random Factory Testing	PG&E Receiving: Random Testing	INSTALLED
---------------------	--	--------------------------------	-----------



## Testing After Installation

24/7/365 Monitoring	Billing Exception Tests	Random Field Tests	Side-By-Side Tests
---------------------	-------------------------	--------------------	--------------------



Confidential Pursuant to Public Utility Code Section 583