

Project # 10A – Dissolved Gas Analysis

- i. Investment Plan Period
 - 1st Triennial (2012-2014).
- ii. Assignment to Value Chain
 - Transmission and Distribution.
- iii. Objective
 - Develop tools and algorithms that substation equipment (distribution and transmission) that tests for dissolved gasses or other precursor data that would assist in understanding the condition of the equipment.
- iv. Scope
 - Project scope being further evaluated – TBD.
- v. Deliverables
 - Project deliverables being further evaluated – TBD.
- vi. Metrics
 - To be determined at end of their initiation or planning phase.
- vii. Schedule
 - Project schedule being further evaluated – TBD.
- viii. EPIC Funds Encumbered
 - None.
- ix. EPIC Funds Spent
 - None.
- x. Partners
 - N/A.
- xi. Match Funding
 - N/A.
- xii. Match Funding Split
 - N/A.
- xiii. Funding Mechanism
 - N/A.
- xiv. Treatment of Intellectual Property
 - PG&E has no current patents or licensing agreements signed. Future Intellectual Property is to be determined.
- xv. Status Update
 - N/A.

Project # 10C – Underground Cable Analysis

- i. Investment Plan Period
 - 1st Triennial (2012-2014).
- ii. Assignment to Value Chain
 - Distribution.
- iii. Objective
 - Develop tools and algorithms that analyze load and operating characteristic data from underground cables in order to develop an understanding of potential failure points, cable maintenance needs, and cable life expectancy.
- iv. Scope
 - Project scope being further evaluated – TBD.
- v. Deliverables
 - Project deliverables being further evaluated – TBD.
- vi. Metrics
 - To be determined at end of their initiation or planning phase.
- vii. Schedule
 - Project schedule being further evaluated – TBD.
- viii. EPIC Funds Encumbered
 - None.
- ix. EPIC Funds Spent
 - None.
- x. Partners
 - N/A.
- xi. Match Funding
 - N/A.
- xii. Match Funding Split
 - N/A.
- xiii. Funding Mechanism
 - N/A.
- xiv. Treatment of Intellectual Property
 - PG&E has no current patents or licensing agreements signed. Future Intellectual Property is to be determined.
- xv. Status Update
 - N/A.

Project # 11 – Demonstrate Self-Correcting Tools to Improve System Records and Operations

- i. Investment Plan Period
 - 1st Triennial (2012-2014).
- ii. Assignment to Value Chain
 - Transmission and Distribution.
- iii. Objective
 - Demonstrate tools that identify and register existing assets in an attempt to improve the integration between utility planning and operations. As part of the demonstration, implement self-correcting technologies that identifies plan vs. actual discrepancies and updates system records automatically. High priority use cases include: 1) mapping of transformers to primary phase; (2) mapping of customers to transformers; and (3) precision mapping of PG&Es overhead and underground network.
- iv. Scope
 - Project scope being further evaluated – TBD.
- v. Deliverables
 - Project deliverables being further evaluated - TBD
- vi. Metrics
 - To be determined at end of their initiation or planning phase.
- vii. Schedule
 - Project schedule being further evaluated – TBD.
- viii. EPIC Funds Encumbered
 - None.
- ix. EPIC Funds Spent
 - None.
- x. Partners
 - N/A.
- xi. Match Funding
 - N/A.
- xii. Match Funding Split
 - N/A.
- xiii. Funding Mechanism
 - N/A.
- xiv. Treatment of Intellectual Property
 - PG&E has no current patents or licensing agreements signed. Future Intellectual Property is to be determined.
- xv. Status Update
 - N/A.

Project # 12 – Demonstrate New Technologies That Improve Wildlife Safety and Protect Assets From Weather-Related Degradation

- i. Investment Plan Period
 - 1st Triennial (2012-2014).
- ii. Assignment to Value Chain
 - Transmission and Distribution.
- iii. Objective
 - Demonstrate new strategies and technologies in an attempt to improve animal and bird protection, reduce outages caused by animals and birds, and protect assets from expensive weather-related degradation such as fog related corrosion.
- iv. Scope
 - Project scope being further evaluated – TBD.
- v. Deliverables
 - Project deliverables being further evaluated – TBD.
- vi. Metrics
 - To be determined at end of their initiation or planning phase.
- vii. Schedule
 - Project schedule being further evaluated – TBD.
- viii. EPIC Funds Encumbered
 - None.
- ix. EPIC Funds Spent
 - None.
- x. Partners
 - N/A.
- xi. Match Funding
 - N/A.
- xii. Match Funding Split
 - N/A.
- xiii. Funding Mechanism
 - N/A.
- xiv. Treatment of Intellectual Property
 - PG&E has no current patents or licensing agreements signed. Future Intellectual Property is to be determined.
- xv. Status Update
 - N/A.

Project # 13 – Demonstrate New Communication Systems to Improve Substation Automation and Interoperability

- i. Investment Plan Period
 - 1st Triennial (2012-2014).
- ii. Assignment to Value Chain
 - Transmission and Distribution.
- iii. Objective
 - Demonstrate new strategies and technologies in an attempt to convert and integrate multiple existing proprietary technologies within the substation environment for more effective operations. Substations are key operational hubs and represent significant investments, which must be further leveraged by engaging with vendors to create the next generation of interoperable substation services and products.
- iv. Scope
 - Project scope being further evaluated – TBD.
- v. Deliverables
 - Project deliverables being further evaluated – TBD.
- vi. Metrics
 - To be determined at end of their initiation or planning phase.
- vii. Schedule
 - Project schedule being further evaluated – TBD.
- viii. EPIC Funds Encumbered
 - None.
- ix. EPIC Funds Spent
 - None.
- x. Partners
 - N/A.
- xi. Match Funding
 - N/A.
- xii. Match Funding Split
 - N/A.
- xiii. Funding Mechanism
 - N/A.
- xiv. Treatment of Intellectual Property
 - PG&E has no current patents or licensing agreements signed. Future Intellectual Property is to be determined.
- xv. Status Update
 - N/A.

Project # 14 – Next Generation SmartMeter™ Telecom Network Functionalities

- i. Investment Plan Period
 - 1st Triennial (2012-2014).
- ii. Assignment to Value Chain
 - Transmission and Distribution.
- iii. Objective
 - This project explores and attempts to discover effective, new network applications and devices to leverage and improve the SmartMeter™ communications network.
- iv. Scope
 - Leverage the existing SmartMeter™ network to support additional applications. Inform future uses of the SmartMeter™ network as to message capability, security, latency, and engineering constraints. Specifically focus on:
 - i. Testing new devices to support network functions and capabilities not previously envisioned (e.g., new data streams, faster data collection).
 - ii. Evaluating alternatives to decrease future upgrade, maintenance and/or operational costs.
 - iii. Demonstrating different network applications, each focused on separate use cases.
- v. Deliverables
 - Evaluation of new applications and devices, their associated data traffic impact on the SmartMeter™ network, and a recommendation of which items warrant consideration for full-scale deployment. Evaluation should provide key inputs to a business case for general deployment.
- vi. Metrics
 - To be determined at end of their initiation or planning phase.
- vii. Schedule
 - 1.5 years.
- viii. EPIC Funds Encumbered
 - None.
- ix. EPIC Funds Spent
 - None.
- x. Partners
 - N/A.
- xi. Match Funding
 - N/A.
- xii. Match Funding Split
 - N/A.
- xiii. Funding Mechanism
 - N/A.
- xiv. Treatment of Intellectual Property
 - PG&E has no current patents or licensing agreements signed. Future Intellectual Property is to be determined.
- xv. Status Update
 - Project has begun an initiation or planning phase.

Project # 15 – Grid Operations Situational Intelligence

- i. Investment Plan Period
 - 1st Triennial (2012-2014).
- ii. Assignment to Value Chain
 - Transmission and Distribution.
- iii. Objective
 - The objective of this pilot is to attempt to develop and pilot a real-time data visualization software platform for use by Electric Distribution Operations end users. If viable, data will be integrated from various data sources and displayed on Distribution Control Center video walls and individual desktop computers, with potential for future scalability to handheld devices.
- iv. Scope
 - Scope includes the integration of data (network model, loading, SmartMeters™, outages, fire, weather, etc.) and a real-time data visualization platform for Distribution Operations. The Distribution Management System (DMS) platform and predictive analytics are not included in the scope.
- v. Deliverables
 - Demonstrate Real-time Data Visualization Platform—with data integration from variety of data sources and a visual interface that include geospatial, list and trending layers.
- vi. Metrics
 - To be determined at end of their initiation or planning phase.
- vii. Schedule
 - 2.5 years.
- viii. EPIC Funds Encumbered
 - None.
- ix. EPIC Funds Spent
 - Approximately \$5,900.
- x. Partners
 - N/A.
- xi. Match Funding
 - N/A.
- xii. Match Funding Split
 - N/A.
- xiii. Funding Mechanism
 - N/A.
- xiv. Treatment of Intellectual Property
 - PG&E has no current patents or licensing agreements signed. Future Intellectual Property is to be determined.
- xv. Status Update
 - Project has begun an initiation or planning phase.

Project # 16 – Vehicle-to-Grid Operational Integration

- i. Investment Plan Period
 - 1st Triennial (2012-2014).
- ii. Assignment to Value Chain
 - Distribution.
- iii. Objective
 - Demonstrate whether electric vehicles can be used as a resource that could provide the capability to connect to the distribution grid to improve power quality, reduce the length of customer planned or unplanned outages, reduce feeder congestion, and manage costs associated with increased demand and reliability. A demonstration would include using PG&E's electric vehicle fleet to supply power to individual customers during distribution system repairs.
- iv. Scope
 - Develop approximately 125 kilowatt (kW) exportable power capabilities from an extended range hybrid electric truck. Seek to create the protocols necessary to safely connect the truck to the appropriate grid connection points.
- v. Deliverables
 - Develop operating requirements for the vehicle.
 - Solve engineering challenges with high power export.
 - Develop safety and interconnection protocols to connect the vehicle to the grid.
 - Define and document power requirements for different outage/usage scenarios.
 - Develop operating protocols (when and how the vehicles will be used).
 - Develop emergency protocols.
 - Develop the hardware and software required to connect the vehicle to PG&E's system.
 - Build a limited number of vehicles for field testing.
- vi. Metrics
 - To be determined at end of their initiation or planning phase.
- vii. Schedule
 - 2.5 years.
- viii. EPIC Funds Encumbered
 - None.
- ix. EPIC Funds Spent
 - None.
- x. Partners
 - N/A.
- xi. Match Funding
 - N/A.
- xii. Match Funding Split
 - N/A.
- xiii. Funding Mechanism
 - N/A.
- xiv. Treatment of Intellectual Property
 - PG&E has no current patents or licensing agreements signed. Future Intellectual Property is to be determined.
- xv. Status Update
 - Project has begun an initiation or planning phase.

Project # 17 – Industry Participation to Leverage EPIC Dollars

- i. Investment Plan Period
 - 1st Triennial (2012-2014).
- ii. Assignment to Value Chain
 - Transmission and Distribution.
- iii. Objective
 - Leverage and participate in RD&D industry collaboration efforts.
- iv. Scope
 - Potential programs include EPRI's Intelligrid, Integration of Distributed Renewables, Energy Storage, Risk Mitigation Strategies, and Distribution Grid Modernization programs.
- v. Deliverables
 - N/A.
- vi. Metrics
 - To be determined at end of their initiation or planning phase.
- vii. Schedule
 - 3 years.
- viii. EPIC Funds Encumbered
 - None.
- ix. EPIC Funds Spent
 - None.
- x. Partners
 - N/A.
- xi. Match Funding
 - N/A.
- xii. Match Funding Split
 - N/A.
- xiii. Funding Mechanism
 - N/A.
- xiv. Treatment of Intellectual Property
 - PG&E has no current patents or licensing agreements signed. Future Intellectual Property is to be determined.
- xv. Status Update
 - Project has begun an initiation or planning phase.

Project # 18 – Appliance-Level Load Disaggregation

- i. Investment Plan Period
 - 1st Triennial (2012-2014).
- ii. Assignment to Value Chain
 - Demand-Side Management.
- iii. Objective
 - This project focuses on delivering the energy cost by major appliances to customers.
- iv. Scope
 - This project will use the data enabled by the SmartMeter™ platform in an attempt to provide appliance-level itemization of monthly bill charges to customers, without their completing any audit or subscribing to any new service. This project assumes that minute level meter data is available.
- v. Deliverables
 - Results of disaggregation accuracy.
 - Strategy for deployment appliance level billing.
- vi. Metrics
 - To be determined at end of their initiation or planning phase.
- vii. Schedule
 - 3 years.
- viii. EPIC Funds Encumbered
 - None.
- ix. EPIC Funds Spent
 - None.
- x. Partners
 - N/A.
- xi. Match Funding
 - N/A.
- xii. Match Funding Split
 - N/A.
- xiii. Funding Mechanism
 - N/A.
- xiv. Treatment of Intellectual Property
 - PG&E has no current patents or licensing agreements signed. Future Intellectual Property is to be determined.
- xv. Status Update
 - Project has begun an initiation or planning phase.

Project # 19 – Enhanced Data Techniques and Capabilities via the SmartMeter™ Platform

- i. Investment Plan Period
 - 1st Triennial (2012-2014).
- ii. Assignment to Value Chain
 - Grid Operation/Market Design and Demand-side Management.
- iii. Objective
 - The project is to explore and attempt to discover effective, new data that can be collected and studied for further benefits. Demonstrate the type of additional data that can be collected and/or processed through the SmartMeter™ platform. Evaluate impact of any increased data traffic on the SmartMeter™ network. Focus on new data collection that makes the SmartMeter™ platform more robust for more customers.
- iv. Scope
 - Demonstrate the collection of new data from SmartMeters™. Current working list under consideration includes:
 - i. Highly Granular kWh (e.g., 1 minute).
 - ii. New Data Channels.
 - iii. New meter ‘trap’ alarm (e.g., when temperature values are exceeded).
 - iv. Alarm: interval usage exceeds customer *max*.
 - v. Alarm: interval usage exceeds customer preset limit.
 - vi. Security *event* of certain meter conditions.
 - vii. Validate and improve outage messages and logs.
- v. Deliverables
 - Evaluation of new data, their associated data traffic impact on the SmartMeter™ network, and a recommendation of which data warrants consideration for full-scale deployment. Evaluation should provide key inputs to a business case for general deployment.
- vi. Metrics
 - To be determined at end of their initiation or planning phase.
- vii. Schedule
 - 1.5 years.
- viii. EPIC Funds Encumbered
 - None.
- ix. EPIC Funds Spent
 - None.
- x. Partners
 - N/A.
- xi. Match Funding
 - N/A
- xii. Match Funding Split
 - N/A.
- xiii. Funding Mechanism
 - N/A.

- xiv. Treatment of Intellectual Property
 - PG&E has no current patents or licensing agreements signed. Future Intellectual Property is to be determined.
- xv. Status Update
 - Project has begun an initiation or planning phase.

Project # 20 – Demonstrate the Benefits of Providing the Competitive, Open Market With Automated Access to Customer-Authorized SmartMeter™ Data to Drive Innovation

- Formally notified CPUC on 10-31-13, project may be terminated as refined scope does not appear to meet safety, reliability and affordability guiding principles for priority R&D.

Project # 21 – Automatic Identification of Distributed Photovoltaic Resources

- i. Investment Plan Period
 - 1st Triennial (2012-2014).
- ii. Assignment to Value Chain
 - Distribution and Demand-side Management.
- iii. Objective
 - This project is to validate and attempt to integrate a software platform to identify unauthorized interconnection leveraging SmartMeter™ data collected. The funding from EPIC will focus solely on integration and piloting of a software solution with PG&E's billing and interconnection database.
- iv. Scope
 - Develop partnerships to develop or pilot software.
 - Develop integration and communication platform for auto-ID of Unauthorized Interconnections (UI).
 - Successfully demonstrate ability to automatically integrate software with billing and interconnection.
- v. Deliverables
 - Successful integration of software with PG&E's Advanced Billing System (ABS).
 - Successful tracking of all UIs identified.
 - Successful tracking of communication and conversion of UIs to interconnection.
- vi. Metrics
 - To be determined at end of their initiation or planning phase.
- vii. Schedule
 - 3 years.
- viii. EPIC Funds Encumbered
 - None.
- ix. EPIC Funds Spent
 - None.
- x. Partners
 - N/A.
- xi. Match Funding
 - N/A.
- xii. Match Funding Split
 - N/A.
- xiii. Funding Mechanism
 - N/A.
- xiv. Treatment of Intellectual Property
 - PG&E has no current patents or licensing agreements signed. Future Intellectual Property is to be determined.
- xv. Status Update
 - Project has begun an initiation or planning phase.

Project # 22 – Electric Vehicle Submetering

- i. Investment Plan Period
 - 1st Triennial (2012-2014).
- ii. Assignment to Value Chain
 - Distribution and Demand-side Management.
- iii. Objective
 - EV submetering pilot to test subtractive metering process and Electric Vehicle Service Providers (EVSP) business models.
- iv. Scope
 - EV submetering pilot will entail EVSPs delivering submeter data to IOU for subtraction from customer's primary meter to create an EV and a house bill. Customer will be responsible for both bills. In Phase 2, EVSP will be responsible for bill.
- v. Deliverables
 - Process to receive EVSP submetered data.
 - Process to subtract EV data from primary meter to create two bills.
 - Inclusion of EV portion of bill on customer's monthly bill.
 - Obtain third-party evaluator for both phases of pilot through an RFP.
 - Incentive payments to EV Meter Data Management Agents (MDMA).
- vi. Metrics
 - To be determined at end of their initiation or planning phase.
- vii. Schedule
 - 2.5 years.
- viii. EPIC Funds Encumbered
 - None.
- ix. EPIC Funds Spent
 - None.
- x. Partners
 - N/A.
- xi. Match Funding
 - N/A.
- xii. Match Funding Split
 - N/A.
- xiii. Funding Mechanism
 - N/A.
- xiv. Treatment of Intellectual Property
 - PG&E has no current patents or licensing agreements signed. Future Intellectual Property is to be determined.
- xv. Status Update
 - Project has begun an initiation or planning phase.

Project # 23 – Photovoltaic Submetering

- i. Investment Plan Period
 - 1st Triennial (2012-2014).
- ii. Assignment to Value Chain
 - Distribution and Demand-side Management.
- iii. Objective
 - To obtain additional un-netted photovoltaic (PV) data in an attempt to support customer experience and provide additional information to customers.
- iv. Scope
 - Submeter chip to be installed at output of customer owned PV. Data will be used to help customers understand Net Energy Metering (NEM) bills. Additionally, current PV providers with NGOM may submit their data to PG&E for presentation on My Energy.
- v. Deliverables
 - Obtain third party through Requests for Proposals (RFP) to install submeter chips.
 - Develop communication protocol between submeters and PG&E billing system.
 - Develop protocol for PV providers to send Net Generation Output Meter (NGOM) information to PG&E.
 - Display on My Energy.
- vi. Metrics
 - To be determined at end of their initiation or planning phase.
- vii. Schedule
 - 2.5 years.
- viii. EPIC Funds Encumbered
 - None.
- ix. EPIC Funds Spent
 - None.
- x. Partners
 - N/A.
- xi. Match Funding
 - N/A.
- xii. Match Funding Split
 - N/A.
- xiii. Funding Mechanism
 - N/A.
- xiv. Treatment of Intellectual Property
 - PG&E has no current patents or licensing agreements signed. Future Intellectual Property is to be determined.
- xv. Status Update
 - Project has begun an initiation or planning phase.

Project # 24 – Demand-Side Management for Transmission and Distribution Cost Reduction

- i. Investment Plan Period
 - 1st Triennial (2012-2014).
- ii. Assignment to Value Chain
 - Grid Operation/Market Design, Transmission, Distribution and Demand-side Management.
- iii. Objective
 - Assess how to best utilize DSM resources to create a “surgical” customer- and location-specific approach to assist with distribution capacity constraints.
- iv. Scope
 - Acquire data and develop the tools, methodology and framework to target, value, acquire and make use of high impact customer load reductions at the distribution feeder level.
- v. Deliverables
 - Deployment of data logging devices on a scientific sample of existing SmartAC Cycling customers to enable load impact analysis at the feeder level;
 - An infrastructure to make real time data available on feeder level load impacts to distribution operations; and
 - A report describing a case study methodology of targeting and valuing customer side peak load reductions at the feeder level. Final deliverables subject to Phase I planning outcomes.
- vi. Metrics
 - To be determined at end of their initiation or planning phase.
- vii. Schedule
 - 2.5 years.
- viii. EPIC Funds Encumbered
 - None.
- ix. EPIC Funds Spent
 - Approximately \$1,400.
- x. Partners
 - N/A.
- xi. Match Funding
 - N/A.
- xii. Match Funding Split
 - N/A.
- xiii. Funding Mechanism
 - N/A.
- xiv. Treatment of Intellectual Property
 - PG&E has no current patents or licensing agreements signed. Future Intellectual Property is to be determined.
- xv. Status Update
 - Project has begun an initiation or planning phase.

Project # 25 – Direct Current Fast Charging Mapping

- i. Investment Plan Period
 - 1st Triennial (2012-2014).
- ii. Assignment to Value Chain
 - Distribution and Demand-side Management.
- iii. Objective
 - Attempt to develop, pilot, and validate approaches that help determine the optimal location of direct current (DC) fast chargers based on traffic patterns and distribution grid infrastructure.
- iv. Scope
 - Acquire travel pattern data and grid infrastructure capability data in an attempt to identify low-cost, high utilization areas in which to integrate DC fast chargers into PG&E's distribution system.
- v. Deliverables
 - Process to identify optimal DC fast charging sites.
 - A map that presents the locations of optimal DC fast charging sites in a meaningful manner to customers.
- vi. Metrics
 - To be determined at end of their initiation or planning phase.
- vii. Schedule
 - 1.5 years.
- viii. EPIC Funds Encumbered
 - None.
- ix. EPIC Funds Spent
 - None.
- x. Partners
 - N/A.
- xi. Match Funding
 - N/A.
- xii. Match Funding Split
 - N/A.
- i. Funding Mechanism
 - N/A.
- ii. Treatment of Intellectual Property
 - PG&E has no current patents or licensing agreements signed. Future Intellectual Property is to be determined.
- iii. Status Update
 - Project has begun an initiation or planning phase.

Project # 26 – Pilot Measurement and Telemetry Strategies and Technologies That Enable the Cost-Effective Integration of Mass Market Demand Response Resources Into the California Independent System Operator Corporation Wholesale Market

- i. Investment Plan Period
 - 1st Triennial (2012-2014).
- ii. Assignment to Value Chain
 - Grid Operation/Market Design and Demand-side Management.
- iii. Objective
 - Attempt to develop, pilot and validate approaches and technologies that enable the cost-effective integration (specifically, the measurement and telemetry) of mass market demand response (DR) resources into the CAISO wholesale market. While other DR projects focus on integration of DR resources into various utility and future ISO operational needs, this project intends to test alternative telemetry solutions and technologies to satisfy CAISO operational visibility requirements.
- iv. Scope
 - Project scope being further evaluated – TBD.
- v. Deliverables
 - Project schedule being further evaluated – TBD.
- vi. Metrics
 - To be determined at end of their initiation or planning phase.
- vii. Schedule
 - TBD.
- viii. EPIC Funds Encumbered
 - None.
- ix. EPIC Funds Spent
 - None.
- x. Partners
 - N/A.
- xi. Match Funding
 - N/A.
- xii. Match Funding Split
 - N/A.
- xiii. Funding Mechanism
 - N/A.
- xiv. Treatment of Intellectual Property
 - PG&E has no current patents or licensing agreements signed. Future Intellectual Property is to be determined.
- xv. Status Update
 - N/A.

5. Conclusion

a. Key Results – PG&E’s 2013 EPIC Program

As of January 31, 2014, PG&E’s EPIC program had been operating for just over two months. Current progress includes PG&E’s establishment of a Program Management function, the initial launch of projects following a prioritization and review process, and beginning implementation of compliance items required by the Commission. In addition, PG&E completed a joint webinar in collaboration with the other EPIC administrators, as well as established a PG&E EPIC webpage highlighting the EPIC program. The EPIC webpage guides interested parties to PG&E’s 2012-2014 Investment Plan as well as PG&E’s Bid Opportunities webpage. Furthermore, PG&E has engaged in communications with vendors interested in learning more about the EPIC program and PG&E’s portfolio of projects.

As outlined in the attached Project Status Report, there are currently 19 projects in an initiation or planning phase, 12 of which have committed funding and the other seven are finalizing their initiation requirements through an internal process. There are seven projects that are being internally evaluated to determine whether their benefits are still viable or if these projects are in need of a refined scope or possible withdrawal from PG&E’s investment plan. For calendar year 2013, PG&E spent approximately \$217,400, of which \$14,000 was spent on TD&D and \$203,400 was spent on program administration.

As of February 28, 2014, PG&E has issued a total of zero technology related RFPs through EPIC and is not in the process of negotiating any RFPs. With the EPIC program focus on TD&D, PG&E will focus its future reporting of solicitations on technology related contracts and will not be reporting the procurements for various general planning and support roles. Additionally, PG&E expects the EPIC program to continue through 2020 and is in the process of preparing the filing for its Second Triennial Investment Plan 2015-2017.

b. Next Steps for EPIC Investment Plan

PG&E, in conjunction with the other IOU administrators and the CEC, recently hosted two stakeholder webinars. One webinar took place December 18, 2013 and focused on the launching of the First Triennial Plan. The other webinar, held on February 21, 2014, previewed some preliminary Second Triennial Investment Plan areas. Two additional stakeholder workshops are planned for March to further showcase the Second Triennial Investment Plan and to receive additional stakeholder input prior to filling the plan on May 1, 2014.

In January, PG&E launched an EPIC webpage which provides information and updates about the EPIC program, links to the Investment Plans and other EPIC-related information. Additionally, it will direct vendors to the PG&E Bid Opportunities link where relevant competitive solicitations for EPIC projects are intended for public posting.

c. Issues That May Have Major Impact on Progress in Projects

Inherent to the RD&D nature of the EPIC program, as projects progress through the phases, it is likely some projects will not be executed exactly as planned. Projects may have their scope/approach refined and some will be stopped or redirected when no longer seen to be in the best interest of customers. PG&E is mitigating some of this risk by managing the EPIC projects and phases with a stage-gated approach, providing an off-ramp for projects if they are deemed to be no longer efficient uses of funds. Some potential reasons that projects may not be successful include: changes in the market place have made the project obsolete (or relatively less attractive); a different technology has emerged that could produce the desired results at a lower cost so the original project is no longer a compelling use of funds; or, as is typical with R&D projects in other industries, the technology may prove to not yet be ready for commercialization. Furthermore, while the more obvious goal of technology demonstration is to help advance the pre-commercial technologies to market, there are related goals, which include determining the clean technology areas that are feasible for additional study and investment versus the areas that should no longer be pursued. In some cases, success may be defined by determining a conclusion about a lack of commercial scalability for the technology prior to spending the entire amount for which the project was budgeted.

APPENDIX A
ELECTRIC PROGRAM INVESTMENT CHARGE
2013 ANNUAL REPORT