
THIRD-PARTY ENERGY EFFICIENCY PROGRAMS

REQUEST FOR ABSTRACTS

All Sectors
Data Interoperability for Public Benefit



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Together, Building
a Better California

1. Executive Summary

This Public Benefit component is the first of two interrelated Abstracts offered by [Construction Progress Coalition \(CPC\)](#), [Surety Resource Connection \(SRC\)](#), [SunSpec Alliance](#), [Wells Fargo](#) and [XBRL US](#), for continuing DOE Green/Orange Button public/private collaboration efforts to establish federally recognized machine readable data interoperability throughout the national energy infrastructure supply chain as a Public Benefit.

PG&E should continue and expand its participation in the construction and operations of the Smart Grid infrastructure, to promote small business, ConstrucTech, InsurTech and FinTech innovation and competition enabled by the cost effective and reliable Orange Button data exchange, and to prevent silo approaches, proprietary systems, endorsements or exclusivity given to any provider of products or services.

For 3P commercial interests to meet its maximum potential there must be a foundation provided by PG&E that enables B2B, B2G or any combination of data exchange that is widely adopted, reliable, secure and cost effective. With PG&E leadership and the Green/Orange Button, the foundation is no longer a technology question; it is a consensus challenge that when overcome will produce a Public Benefit that enables small and large Commercial Interests the ability to innovate.

For the Public Benefit, the responders will lead a collaboration effort with PG&E to further expand the [Green/Orange Button XBRL](#) and [Surety](#) Taxonomy to incorporate any data elements requested by any of the other participating 3P's for digital communications and electronic transactions through a Common Data Exchange (CDX) to support PG&E's new vision and business plan.

This approach will focus on specific, collaborative Action Plans focused on Data Interoperability, Financial and Surety eCommerce and cyber security. While the Public Benefit of the ease of data interoperability is somewhat immeasurable, PG&E and the Construction, Finance and Surety industries will all have significant savings in terms of time, cost and scope of doing business in California. The costs to PG&E will be minimal; primarily focused on corporate and IT participation in existing and proposed industry-wide initiatives.

Program Concept

Data Interoperability as A Public Benefit

During the recent [Global Climate Action Summit in San Francisco](#) the [On-Bill Repayment program was presented as a model example](#) with a limited number of data elements are shared by a wide range of stakeholders. Where data interoperability and **Impact Policy** for mandated electronic transactions could significantly reduce soft costs throughout the supply chain, promote **Impact Programming** for development of innovative software applications, increase **Impact Underwriting** for innovative financial products and services from emerging FinTech and InsureTech companies and attract better financing from **Impact Investors**.

For the Public Benefit the proposed PG&E/CPC/SRC/XBRL collaboration will demonstrate how data interoperability can be leveraged to promote competitive financing for installing solar by enabling portfolio scale digital performance monitoring for risk management from the smallest solar carport to the largest utility scale facility, all while expanding the pool of qualified solar installation contractors by improving access to surety credit and other resources.

For the Public Benefit the proposed PG&E/CPC/SRC/SunSpec/WF/XBRL collaboration will also coordinate and administer the continuation of the [AGC Surety Connection Project at CSU Chico STEM education program](#) to provide students with educational opportunities related to building the Smart Grid in areas like taxonomy development for AI applications for fighting climate change, producing both an expanding taxonomy resource for FinTech/InsurTech innovations and graduates prepared for the new demands of a digital economy.

The Public Benefit is not limited to this Abstract, PG&E, or California, but part of an international effort to address the challenge of climate change, and in support of the [UN Sustainable Development Goals](#), [Taskforce on Climate Related Financial Disclosures](#) (TCFD), [Global Sustainability Index Institute](#) (UNGSII) along with California efforts AB 32, the Global Warming Solutions Act of 2006, SB 350 the Clean Energy and Pollution Reduction Act of 2015 and 2018 SB 100 the California Renewables Portfolio Standard Program.

Specifically, we propose two inter-related collaborations. One focused on policies and standards across the Construction, Finance and Surety industries. The other focused on IT enabling these policies and standards through impacted associations, many of which are represented in this proposal.

Response to Specific Questions

Portfolio Alignment

PG&E's continued engagement in the Green/Orange Button and collaboration with the Construction Progression Coalition, XBRL US and Surety Resource Connection to provide stakeholders engaged in building the Smart Grid with reliable and secure data exchange will enable a wide range of entities to develop products and services as 3P strategic partners without proprietary constraints, exclusivity or endorsement of any kind.

Assessment of Program Benefits

By PG&E continuing to lead and support the Green/Orange Button in alignment with the UNSDG's, along with the international movement towards data interoperability, it can be assumed system developers will have significantly reduced R&D and implementation expenses to create new innovative applications, products and services free from any barriers.

Customers will respond to reduced financing costs and increased risk management through contractor pre-qualification and project monitoring.

End-to-End Approach

The Public Benefit objective is to continue expanding the XBRL taxonomy as a public resource for data elements that are used in permitting, financing, estimating, construction, insurance, surety and operations once constructed. The XBRL taxonomy is already operational and being implemented, adoption is all that is required.

Marketing and Outreach

There is always resistance to something new, different or disruptive. The collaboration will work with PG&E resources to shape the narrative for transitioning to fully on-line energy

project management. To engage the general population in a non-technical format, we have already have various outreach and media resources.

[Shared Pain Podcast](#)

[Hirsch Media - Data Standards on the Horizon for Construction](#)

[Orange is the New Green \(Button\)](#)

[American Resilience Project - Current Revolution](#)

[Prime Numbers Films](#)

[Faux Reels Productions](#)

Channel and Partnership Strategies

This collaboration will include multiple public and private entities, regulatory agencies, trade associations, standards bodies and incorporate past and present PG&E, DOE and NREL efforts. The final list of initial collaborations and participants will be developed as part of the RFP phase. Additional collaborators and participants are unlimited, as the data standards are available to everyone without restriction.

Energy Savings Measurement Platforms

To measure energy of financial savings there needs to be a way to quantify the data with terms and definitions that are consistent and universally understood.

The already approved taxonomy provides the ability to quantify data with reliable and consistent data elements.

Coordination with CCAs / RENs / LGPs

Community Choice Aggregators (“CCA’s”), Renewable Energy Networks (“REN’s”), and Local Government Partnerships (“LGP’s”) can all benefit from data interoperability with their respective stakeholders.

Incentive Structure / Value to Customer

The incentive for adopting and implementing data interoperability is reduced cost, improved data exchange and to enable data analytics.

Data interoperability can also be utilized by the standardized permit process, the On-Bill Repayment program, and many others that will be offered by other 3P's.

Performance Pricing

Contracting terms between PG&E and collaborators will depend on industry contributions for the Public Benefit.

Contributing to a cost-effective program portfolio which

Serves all PG&E customer sectors and sub-sectors outside the scope of EE Programs identified for statewide administration (see D.18-05-041, page 91);

- Data interoperability extends to all customer sectors of PG&E.

Serves all PG&E customer sizes;

- Data interoperability extends to all customer sizes of PG&E.

Serves all geographies within PG&E's service territory;

- Data interoperability extends to all geographies of PG&E.

Addresses the specific needs of Hard-To-Reach Markets and Disadvantaged Communities;

- Data interoperability to help reduce the cost of installing solar systems for energy efficiency will have the biggest impact on Hard-To-Reach Markets and Disadvantaged Communities where the cost of energy as it relates to income is greatest, and energy poverty is a real problem.

Promotes long-term Market Transformation of the EE market;

- Data interoperability is a long-term solution, with short term payoff.

Includes local pilot ideas to test new programs in PG&E territory with potential for future Statewide Administration;

- The national standardized permit process and the On-Bill Repayment are just two of the many pilot programs that data interoperability will enable.

Includes any combination of resource and/or non-resource program elements that support energy savings acquisition;

- The combination "PG&E system for administering On-Bill Repayment" synergizes with Data interoperability for attracting third party financing from capital markets, and insurance and surety products from the financial markets to promote construction of energy projects.

Utilizes Deemed, Custom and/or Meter-based energy savings calculation methodologies or any combination of these methodologies;

- The solar system installed will reduce the cost of energy as the demand for external power will be reduced as it is generated internally, with saving tracked.

Utilizes any combination of upstream, midstream, downstream or direct installation delivery channels;

- As an example of data interoperability, the administration of the permit process and/or the On-Bill Repayment program demonstrate engagement with all upstream, midstream, downstream or direct installation delivery channels;

Includes EE programs that have an integrated Demand Response (“DR”) capability;

- The installation of solar systems that align with DOE Green/Orange Button and the Smart Grid that includes monitoring, results in components that can utilize the data for Smart energy usage, including HVAC and smart appliance.

Provides novel approaches to improving the customer experience and outcomes;

- On Bill Repayment that leverages streamlined online applications, digital monitoring and electronic transactions will provide for an improved customer experience.

Adds to the diversity, safety and sustainability of PG&E’s supplier base.

- Data interoperability will improve access to surety credit for the entire supply chain with a focus on helping small and local companies.

Confirming no conflicts

EE Programs identified for statewide administration (see D.18-05-041, page 91);

- Data interoperability enables more efficient implementation of EE programs, existing or proposed, it does not conflict.

- Data interoperability would conflict with EE Programs that were based on non-standard data, or proprietary systems that required manual processing.
- However, the objective should be to revise those programs to take advantage of data interoperability.

Non-Resource activities provided by lead local partners of Local Government Partnerships (“LGPs”). LGP proposals will be collected in a separate process;

- Data interoperability does not have any Local Government Partnerships that would be a conflict.

Workforce Education and Training (“WE&T”), Emerging Technologies (“ET”), and Codes and Standards (“C&S”) programs;

Workforce Education and Training (“WE&T”)

- The STEM program at CSU Chico is a workforce education program, but under a university curriculum, not an independent program and not a training program

Emerging Technologies (“ET”)

- The DOE Orange Button leverages existing technology, not emerging technology.

Codes and Standards (“C&S”) programs;

- In this reference Codes and Standards is about component details and building requirements and is not related to data standards.

Programs that overlap with PG&E’s Low-Income Energy Savings Assistance (“ESA”) Program;

- Data Interoperability does not conflict with this excluded program

Programs that overlap or duplicate EE programs offered by other entities active in PG&E service territory like Community Choice Aggregators (“CCAs”) such as Marin Clean Energy (“MCE”) and Regional Energy Networks (“RENs”) such as San Francisco Bay Area REN (“BayREN”).

- Data Interoperability does not conflict with this excluded program

Standalone Demand Response Programs. However, the integration of EE with DR, as described by D.18-05-041, where EE is the main component of the Program, is allowed;

- Data Interoperability is not a standalone demand response program.

Cogeneration, distributed generation, or self-generation projects. However, 3P Programs that can demonstrate alignment with or tangential benefits to other programs beyond EE is allowed and encouraged (community solar, electric vehicles, energy storage, etc.)

- Data Interoperability is not a Cogeneration, distributed generation, or self-generation program.

Programs that solely rely upon unproven new technology, technologies in research and development (“R&D”), or limited production technologies that cannot support an effective EE Program.

- The DOE Orange Button leverages existing and proven technology.
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Recommended Action Plans

Action Plan – Pilot Projects with Cities

- Collaborate on projects in support of cities engaged in the [UNGSII Cities Leadership Platform](#) and the [American Cities Climate Challenge](#), along with cities participating in CDX pilots for building infrastructure projects leveraging data interoperability and electronic transactions.

Action Plan - Data Interoperability

- Promote the use of XBRL, FIBO and other federally recognized machine readable data standards to stimulate innovation and competition.
- Prohibit the use of proprietary data standards for data exchange that constrains innovation and stifles competition for compliance with public laws.
- Promote the use of industry trade group published data sets to be synergized with federally recognized machine readable data standards like XBRL and FIBO, and to have the respective trade associations maintain and update their data sets as warranted and under their control, and for the benefit of their constituency.
- Prohibit any industry trade group from imposing any constraints, licensing requirements, or fees of any kind on the use of the trade association data set if that data set is contributed to, and incorporated into, machine open data standards like XBRL and FIBO.

Action Plan – Digital Commerce

- Promote the use of secure electronic bonds. There are a number of competitive companies that already provide the service now and are in place ready to serve.
- Prohibit the continued use of expensive and burdensome paper bonds that are subject to fraud.
- Promote the use of competitive industry standardized surety bond delivery and administration systems on all public works.
- Prohibit public agencies from imposing proprietary bond delivery and administration systems. Examples are PennDOT and Nationwide Multistate Licensing System and Registry (NMLS)

Company Experience and Qualifications (Suggested Length - 3 pages)**Request for Abstract – Responders**

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