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October 26, 2007

Benchmarking Work Group – Meeting Notes

Teleconference – 10:00-10:30 am, Friday, October 26, 2007

Attending:

EPA – Tracy Narel, Tom Oliver, Steve Miller, Peter Flippen (ICF)

PG&E – Sukhwant Singh, Keith Forsman, Ken Barsky

SCE – Mike Wadler

SMUD – Sherri Hengel, Wanda Yee, Theresa Thurston

Sempra – (not present)

State – Elaine Hebert (CEC), Mike Langley (DGS)

HMG – Doug Mahone

1) AB 1103 Summary

a) Signed by Governor

i) Requires utilities to make automated benchmarking available to all customers by start of 2009

ii) Requires benchmarking data to be disclosed at time of building sale, lease and/or refinance by start of 2010

b) Challenges for the next two years.

i) Get munis engaged in the process. Gas utilities as well.

ii) Not all details specified, but should result in universal benchmarking

c) EPA - this really got their attention, are fully engaged in preparations on their end

d) Will still need to work out how to deal with ratings for buildings that don't rate. Add additional reporting capabilities - comparisons to similar buildings

e) Legislation doesn't specify a leader to make it happen - problem with munis may remain

i) HMG looking into funding to continue its coordination efforts

ii) Companies that work with utilities on their websites target utilities might help do this

- 2) EPA enhancements being considered (see attachment)
 - a) EPA has been adapting their existing IT infrastructure for CA utilities (was developed for commercial ESPs). Added new web services, and utilities have been able to adopt/adapt to their billing systems
 - b) EPA/SRA have been thinking about how to make process more complete and effective - both for CA and for others around the country. Second generation data system.
 - c) Have prepared preliminary map of what would be included
 - i) E.g., Easier release of customer data and ESP access to it
 - ii) Key objectives and new features
 - iii) Simplify automated benchmarking, more step-by-step, more complete process, more sustainable, less labor intensive
 - iv) Better connect ESP and their customers
 - d) Timeline - proposal being reviewed for next year high priority - likely to go forward in early 2008, perhaps completed by mid-year
 - e) Can we get an enhancement that more quickly shows how score would improve after a retrofit (instead of waiting for 12 mos of data)? Separate item on the wishlist - need to revive the wishlist.
 - f) Marketing consistency and customer terminology - perhaps have a logo that utilities could put on web site?
- 3) Utility progress
 - a) PG&E (Sukhwant) - DONE
 - i) Remains an internal authorization step (handled by Keith), but would like a more automated procedure - data released one-by-one
 - ii) To become universal - EPA's upgrades will have to happen to automate the process and the authorization release (two unique identifiers - service ID, city of location). Then customer does check-off on EPA site. Could then release the data back to 2003.
 - iii) Need for consistent national approach for doing this - lawyers will need to sign-off
 - b) SCE (Mike W.) – 95% done
 - i) Uploaded data for all state agencies. Working with retrocommissioning to get data consistent - correct unique identifiers (weren't consistent), some non-standard naming was done
 - ii) most data uploaded through July 2007 - now uploading latest monthly data for state agencies

- iii) Still a couple of state agencies (e.g. CHP, HCD, one other)
- c) SMUD (Theresa) – Data uploading going into production this week
 - i) Code went into production yesterday
 - ii) Some mapping issues for facilities - done.
 - iii) Uploading usage data next week
 - iv) Some duplicate facilities from other users (about eight) - can those be deleted? Steve looking into details on how to clean them up.
 - v) Sending bill (\$) info, but it's not showing up. Look at individual meters for them? Not a column in automated benchmarking table (SRA will add), but PM users can see it.
 - vi) Seeing data for other utilities, not just SMUD. Is that an issue for anybody? Would make data much less useful if data is filtered out. Common-goods perspective more useful than competitive perspective. May need to revise language in release authorization, to account for multiple utilities serving a customer.
- d) Sempra - no report
- 4) DGS update
 - a) Only Parks & Rec info missing still. CalTrans and CalFire still owe some data, but it's coming
 - b) All data authorizations getting processed w/ wet signatures - if missing any, tell Mike Langley
 - c) Green Action Team meeting – October 31 (Wednesday)
 - i) Will include a brief benchmarking update, with some actual data to show
- 5) Other Issues:
 - a) Contact information - can this be provided to the utilities, for when questions arise with each agency?
 - i) Mike has list of state agency contacts for BM, but doesn't know who actual person is for each. Send questions to Mike Langley.
 - ii) SRA will be adding contact info of account holder in PM. Need to make that field current.
 - iii) SMUD (Theresa) has partial list - will send to Mike Langley, who will update it
 - b) Sukhwant issue - when invalid SAID, how get back to right person to fix? SRA will add to next stage system. E.g. if building is not accepted or is denied.

- c) Tech Support: Tom Oliver will be out for most of November... use technical support e-mail address to raise issues:
buildings@energystar.gov
 - d) Is kW demand getting added? Tracy has it on his list, although not part of the new proposal. Still need to agree upon a definition of demand. Schedule a meeting to discuss this with the utilities, CEC and others. HMG to set up a meeting.
 - e) Dollars per energy type in the reporting. Also Btu/sf for buildings that don't qualify for a rating. Still on Tracy's plate.
- 6) Next meeting – Friday, November 9th, 2007 at 10 a.m. (Elaine at GreenBuild)

Proposed Enhancement: Second Generation Automated Benchmarking

(Updated 10/26/07)

Purpose of Document: to present a business case for upgrading the Automated Benchmarking system with the intent to provide Energy Service Providers (ESPs) and their Customers (Portfolio Manager users) an easier and more sustainable way to set up and use Automated Benchmarking.

Current State of the Automated Benchmarking System: In September 2005, EPA deployed its first generation Automated Benchmarking System (ABS), allowing ESPs to submit large building data sets on behalf of their customers in exchange for receiving the ENERGY STAR Rating and several related performance metrics. The system was designed primarily to support full-service ESPs who intended to provide all building data (general info, space, and meter) for their customers. In Summer 2006, EPA began working with several of the major California utilities, as part of a state-wide benchmarking initiative, to adopt the Automated Benchmarking System as a state benchmarking tool. These discussions led to the development of a new service delivery model that the Automated Benchmarking System had not yet been set up to support. In the CA process, the utilities required that their customers first set up the building in Portfolio Manager and then release that building to them so that they could then provide only the energy data. To bridge the gap and enable utilities to be able to do this at all, EPA released a few new incremental features to help them to link their energy data and customer identifiers to what was already in Portfolio Manager.

Future Needs: While several technology bridges have been put in place to make it possible for utilities to use the Automated Benchmarking System, no complete solutions have been put in place to make this both “easy” and “sustainable.” For this system to fully succeed at a national level, it will be necessary to build an end-to-end system that enables ESP’s and their customers to work together through the Automated Benchmarking System and Portfolio Manager to be able to:

- more easily release ESP Customer data and authorize ESPs to access it;
- simplify the setting up and performing of Automated Benchmarking for both ESPs and their customers;
- provide ESP Customers with better ways to monitor the activities of their ESP and remove or change access, as required; and
- enable ESPs to communicate with their customers through Portfolio Manager.

The Proposed Technical Solution: Build and release a second generation upgrade to the current Automated Benchmarking system that provides ESP customers and ESPs with an “end-to-end” solution for setting up, conducting, and, if necessary, ending Automated Benchmarking. “End-to-end,” is referring to redesigning parts of the system to provide more of a step-by-step set of guidance, tools, and Web services. The primary objective of this enhancement is to make it obvious to both ESPs and ESP Customers what steps are needed to be performed, how far along they are, and what still needs to be done. This upgrade will also serve to more directly connect the ESP to their customer through EPA’s tools. The expected benefits of this upgrade include:

- increased ability to scale to support a national market

- reduced need to have technical staff “hand hold” ESPs to set up and use the Automated Benchmarking System
- easier marketing and explanation of the Automated Benchmarking system, particularly to audiences that are not technical
- higher customer satisfaction (ideally, this would lead to gaining product “champions”)
- increased marketing of Automated Benchmarking and Automated Benchmarking providers to Portfolio Manager users (prospective ESP Customers)
- reduction or elimination in the need for manual steps in the process (i.e., increased ESP automation)
- decreased level of technical and general customer support for each ESP
- easier to maintain system, requiring fewer, smaller “one-off enhancements”

In the following section, the key features included in our proposed Second Generation Automated Benchmarking System are presented.

Key Features of the Second Generation: Automated Benchmarking System

More Easily Release ESP Customer Data and Authorize ESPs to Access it

Feature 1: Data Release Authorization. Implement new functionality, within the Automated Benchmarking System, that will enable an ESP to tell Portfolio Manager what information it needs from the ESP Customer to release access of the building to the ESP (e.g., ESP customer name, account number). Build a Data Release Authorization form into Portfolio Manager that will allow the EUO Customer, once they have selected their ESP, to complete and submit this form to the ESP. *Note: this feature will replace the current capability that was put in place in 2007 to allow an ESP customer to share buildings with an ESP.*

Feature 2: Meter Identification. Modify the functionality put into place in 2007 to allow an ESP Customer to enter the meter ID of the ESP into Portfolio Manager as a way of identifying which meters will be updated by which ESPs. In this second generation, we will allow an ESP to indicate, through the Automated Benchmarking System, what specific ID they want their EUO Customer to use and whether that identifier is required or not. We will integrate this new meter identification feature into **Feature 1: Data Release Authorization** to ensure that it gets done prior to completing a data release transaction.

Simplify the Setting up and Performing of Automated Benchmarking for Both ESPs and Their Customers

Feature 3: End-to-End Web Services. Revise the current set of XML-based Web Services to provide ESPs with a complete suite of services that will assist them to fully automate the Automated Benchmarking process. These services will include:

Data Release service (New) – this service will replace the “Get Shared Facilities List” service launched in 2007. This new service will provide a means for the ESP to check with the Automated Benchmarking System to see if any new buildings have been released to them. It will provide information about the user and building such as ESP

Customer userid, EUO_ID (if the customer is already registered with the ESP), Building IDs, Meter IDs (as required by ESP), Data Release information (as required by ESP).

Data Management service (Enhanced) – this service will continue to serve as the primary service used to add, update, and delete building data for an ESP Customer in Portfolio Manager. The principal difference is that this service will now allow ESPs to do the “mapping” or “synchronization” of data at the same time. Therefore, it will replace the current “Map Facility IDs” service released in 2007. To reduce and possibly eliminate ESP errors that result in duplication, the enhanced Data Management service will require ESPs to tell us whether the ESP Customer, building, space, and/or meter is an existing one in Portfolio Manager or a new one. If existing, and this is the first time they are submitting data for it, they will be required to provide us with the appropriate IDs so that we can map the building at the same time we add all of the data. This is intended to simplify the mapping process and make it a little more rigid so as to reduce costly mistakes.

Energy Update service (New) – this service will allow an ESP to add, modify, or delete meter data for multiple buildings *and* multiple ESP customers in one transaction.

Rating Exchange service (Unchanged) – this service will continue to be used as a reporting service for ESPs.

Feature 4: Upgraded Automated Benchmarking System web interface. Redesign parts of the Automated Benchmarking System to make it easier for ESPs to access key features of the tool, understand what steps they need to take, and monitor their Automated Benchmarking Activity. Examples of these upgrades include:

- A new set of navigation designed around the primary phases of the ESP Automated Benchmarking life cycle [see Figure 1] as well as key Troubleshooting guidance.

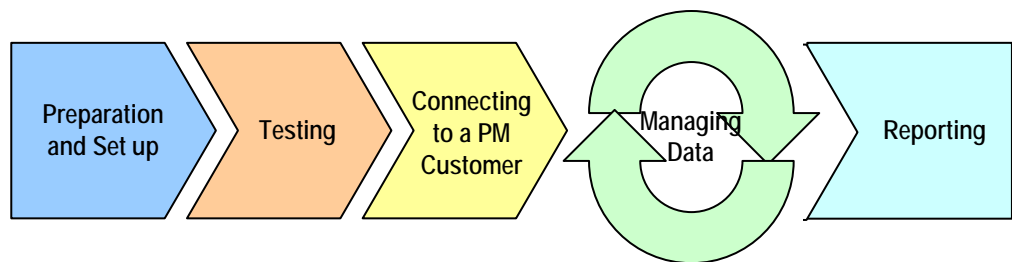


Figure 1 – Primary Phases of the Energy Service Provider Automated Benchmarking Life Cycle

- More on-screen guidance related to the steps to complete each stage of Automated Benchmarking. This guidance will include enhanced help files, standalone overviews and step-by-step guidance, and multi page forms (wizards) to complete more complex tasks.
- Quick access to most often used features (view portfolio, use services, download transactions) from the Automated Benchmarking System home page. This functionality may mimic “Quick Links/Quick Finder” functionality from the public web site.

Provide ESP Customers with Better Ways to Monitor the Activities of Their ESP and Remove or Change Access, As Required

Feature 5: Automated Benchmarking (in Portfolio Manager). Add a new module to Portfolio Manager called Automated Benchmarking. The purpose of this module will be to provide Portfolio Manager users with a complete understanding of Automated Benchmarking; who currently provides this service; guidance for how to use it if they are working with an ESP; and a centralized set of tools to designate access and authorize release to an ESP (see Feature 1: Data Release Authorization and Feature 2: Meter Identification for a complete description) and monitor ESP-provided Automated Benchmarking activity. In addition to Features 1 and 2, other upgrades include:

- New pages that provide access to information about Automated Benchmarking and navigation designed around the primary phases of the ESP Customer Automated Benchmarking life cycle [see Figure 2]

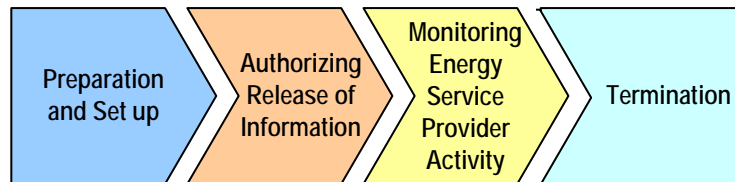


Figure 2 – Primary Phases of the Portfolio Manager User Automated Benchmarking Life Cycle

- An interface to allow ESP Customers to transfer buildings participating in Automated Benchmarking to other ESPs.
- A new monitoring console to show the status of buildings (e.g., waiting to be connected, last updated) that are participating in Automated Benchmarking. This console will show a building management history including timestamps of updates by the energy service providers and breakdown of management history by transaction and by building.

Enable ESPs to Communicate with Their Customers through Portfolio Manager.

See **Feature 1: Data Release Authorization**, **Feature 2: Meter Identification**, and **Feature 5: Automated Benchmarking (in Portfolio Manager)** for descriptions relating to enabling better communication between ESPs and ESP Customers.