FEDERAL UTILITY PARTNERSHIP WORKING GROUP SEMINAR



May 2-3, 2019 San Diego, CA

eProject Builder and UESCs

Elizabeth Stuart, Lawrence Berkeley Lab

Hosted by:







eProject Builder (ePB) Overview

- Secure, web-based project tracking/reporting system
- Free tool maintained by Berkeley Lab for U.S. DOE
- ePB enables agencies and utilities to securely:
 - Preserve and track UESC project information, performance assurance information, and related documents in perpetuity
 - Develop project scenarios using standardized calculations
 - Generate data and reports
- Status: contains ~780 projects; 60% fed, including 18 UESCs





The Power of Data Management

- Institutionalizes ability to report program & project impacts; enables you to be *audit-ready*
- Demonstrates the *value* of projects and programs
- Enables fulfilment of reporting requirements
- Identifies where work has been completed and where remaining potential exists
- Identifies savings achieved year over year
- Illustrates that benefits are being achieved in similar projects (by folks just like you)







ePB Benefits

- Enables UESC teams to leverage the power of data management
- Preserves your critical project data through the contract term and beyond
- Standardizes the types of data collected and reported for UESC projects very important
- Enables tracking persistence of realized savings year over year
- Enables analysis and reporting of project / program performance; enables you to tell your success stories!
- Empowers UESC teams by providing them direct access to data for their portfolio of projects
- Forthcoming: Enables transfer of data from ePB to CTS (pilot underway)







ePB Components and Security

• Two Key System Components

- Excel-based data template for utility/contractor to enter data and develop project scenarios
- Online system where data & documents are uploaded, accessed & tracked

• Security Features

- Encryped (https) and 2-step log-in similar to other secure sites
- Project access restricted to one customer and one utility account
- Zero cyber security risk score via 2 levels of security testing/remediation
 - National Lab IT security scans and other processes
 - 3rd-party scans from government cyber security expert







ePB User Roles

Customer "Project Initiator"



- Registers
- Initiates project (takes less than 1 minute)
- Reviews project data
- Approves submitted project
- Unlocks project for revision, if necessary
- Invites Project Viewer(s)

Utility "Project Builder"



- Registers
- Enters project data
- Reviews project data with customer
- Submits project for approval
- Revises project data, if necessary
- Invites Project Viewer(s)

Other Stakeholder "Project Viewer"



- Registers
- Views project information, only when invited







ePB Outputs

- Project financial/savings schedules
- Annual and cumulative performance verification reports
- Start with library canned queries or create your own
- Tables and graphs with analysis on portfolio of projects

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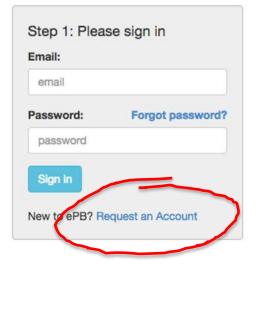
Registration and Log In

Benchmarking Help/Documentation About



ePB enables energy service companies (ESCOs) and their customers to securely:

- 1. Upload, track and access ESPC project-level information for the life of the performance contract
- 2. Quickly generate data for project and portfolio reports
- 3. Develop project scenarios using standardized amortization calculations
- 4. Benchmark new ESPC projects against historical project data



Learn more







Registration Page

	oject Builder Account Registration Form		
First Name: Last Name: Tite: Organization: Address: City: Office Enail Address: Zip: Office Enail Address: Zip: WWII You Be Using eProject Builder?* Rease check all frait apply ePB main site - to enter real project data ePB main site - to enter real project data ePB main site - to enter real project data Pederal Government Base check all frait apply Pederal Government Image: Context Cont	ed fields are indicated with an asterisk*		
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Register for account on main site, training site or both: <u>https://eprojectbuilder.lbl.gov/</u>

2nd email is required for training site; user receives both ESCO and customer type roles to explore complete project entry and approval cycle





Projects Summary Page - View Portfolio

		ta online, click ti											
						cts, click the gea e "manage view		e "download schedul	e" link.				
Search:													
Project ID	Project v	∲ Market	Agency	Award Date	Last Modified	¢	ESCO	Total Implementation Cost	Total Guaranteed Savings	Proposal + Status	M&V Status	Data %	Acti
52204	Nov 19 demo project	Federal Government	State		2015-11-19 19:48:48	test Customer Organization	ESCO Company name	\$7,082,480	\$8,689,789	Pending		100%	0
52205	LBNL test project 3	Federal Government	Office of Science		2015-11-25 16:36:59	Berkeley Lab	ESCO of the West	\$3,562,480	\$5,006,332	Pre-Approval		100%	0
52203	Demo project November	Federal Government	State		2015-11-30 20:35:11	Demo Customer	Demo ESCO	\$5,882,480	\$7,378,885	Approved	Pending	100%	0
52213	December Test Project II	K-12 Schools	Office of Science		2015-11-30 20:14:19	LBNL	Demo ESCO	\$7,682,480	\$10,088,917	Approved	Pending	100%	0
52212	Dec 1 demo	K-12 Schools			2015-11-30 18:07:23			\$0	<mark>\$0</mark>	Pending		0%	٥

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Project Dashboard

ФеРВ	Home Projects Summary	Benchmarking Help/Documentation	About			Liz Test Customer -
<u>Project Summary</u> Demo proje Location:	ct November Berkeley, CA		ed project has one or more M&V years in pend ble for the ESCO to submit.	ing View / Approve M&V	Data	
Customer: ESCO: Award Date:	Demo Customer Demo ESCO					
Implementation Cost:	\$5,882,480	Project Financial Schedules Archive	Documents			
Your Role:	Project Initiator		File Name	Date Uploaded	File Size	
		 Nov 25, 2015 04:50:04 pm PST Nov 25, 2015 04:39:49 pm PST 	ePB Project Contact List.docx	11/30/2015 6:15:34 pm PST	11.10 KB 💼	
Action Menu			ePB Test Upload Document.docx	11/30/2015 6:17:04 pm PST	11.10 KB 💼	
View Project Details			Total Disk Usage		22.20 KB	
Edit M&V Data			Upload a Document			
View Project Financia	al Schedules (html)					
View Project Financia	al Schedules (.pdf)					
Manage Project Parti	cipants					
Download blank data	template					
		If you have questions, issues o	or feedback on eProject Builder please email: epb-support@lb	l.gov		







Excel-based Data Template

\mathbb{D}		SUMMARY SCHE BASIC PROJECT INFO			<u></u>	
	Role:	Institution:	Name:	Email:	Phone:	
	KOIE:	Institution:	Name:	email:	Phone:	
	Project Fadilitator, il applicable					
	Customer (Project initiator)					
Project Contact Information	ESCO (Project Builder)					
	Rinance Specialist					Impler
	Primary Rnander					Perf
	Project Ide	ntitication:	-	Project Characteris	Jes	
	Task Order #, if applicable			by commos):		
	Contract #			Number of Buildings in Project:		
	Project Name:		1	List of Buildings in Project		
			-	(separated by commas)		
Roject	Primary Project Location-Oity:		-	Market Segment:	·	
Identification & Characteristics				Total Floor Area Affected by project (Square Feet):		
				Average Annual Energy		
	Primary Project Location-Zocade:			Consumption of Affected Buildings (MMBtu/yr)		
	Agency Nome (cobineHevel):			Implementation Period (months)		
	Project initiator (Customer)		1	-		
	ESCO Nome (Project Builder)		1			
	Financin	g Terms:		Project Capit dizati	on:	
	Applicable Rhandial Index			Total Implementation Price (from Schedule-2 Total):	\$0	
	ContractTerm (years):	0		PLUS Prioring Procurement Price-capitalized construction period Interest (5):		
	index Rate:			PLUS Phonoing Procurement Price—other expenses (\$):		
	Added Premium (adjusted for tax Incentives):			LESS implementation Period Payments (from Schedule-1, (c)):	\$0	
Costs & Financials	Project interest Rote:	0.00%		Tatal Amount Rhanced (Principal):	\$0	
	Rhanding issue Date (mm/dd/yyyy):			Performance Band Amount		
	Source (financier):			Annual Dollar Savings Retained by Customer		
	Effective Through (mm/dd/yyyy):					
	Primary Type of Financing (choose from list) :					
			.			
	Project Agreement Type (choose from list):					
	Project Agreement Type (choose from list): Payment Tming (beginning or end					
	Project Agreement Type (choose from list):					Tot
	Project Agreement Type (choose from list): Payment Tming (beginning or end					Tot
Other	Project Agreement Type (choose from list): Payment Timing (beginning or end of gerformance year):					Tot
Other	Project Agreement Type (choose from list): Poyment Timing (beginning or end of performance year): Guarantee % of Estimated Sovings:					
	Project Agreement Type (choose tem list): Reyment Timing (beginning or end or gerformance year): Guarantee 5 of Estimated Sovings: Rederal Contract Type					Toto

SCHEDULE #1 COST SAVINGS AND PAYMENTS						
	(a)	(b)	(c)			
Implementation Period:	Estimated Cost Savings	Guaranteed Cost Savings	Payments			
	(d)	(e)	(1)			
Performance Period (Year):	Estimated Annual Cost Savings	Guaranteed Annual Cost Savings	Annual Paymen			
1						
2						
3						
4						
5						
6						
7						
8						
9						
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11						
12						
13						
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17						
18						
19						
20						
21						
22						
23						
24						
25						
Total Performance Period:	\$0	\$0	\$0			
Total Implementation	& Performance Period	Total Guaranteed Cost Savings (b+e)	Total Payments (c			
		\$0	\$0			

Excel-based data template for utility and agency to:

- 1) Develop project scenarios
- Enter project data for uploading to the online system

There are two different template versions:

- 1) Default: automates calculations of payment and savings schedules
- 2) Override: manual entry of all data









ePB and UESC

- Berkeley Lab is enlisting your input today on a Beta version of a new ePB data template
 - Current USEC projects in ePB have had to use workarounds
 - New version will fully align with UESC project structure

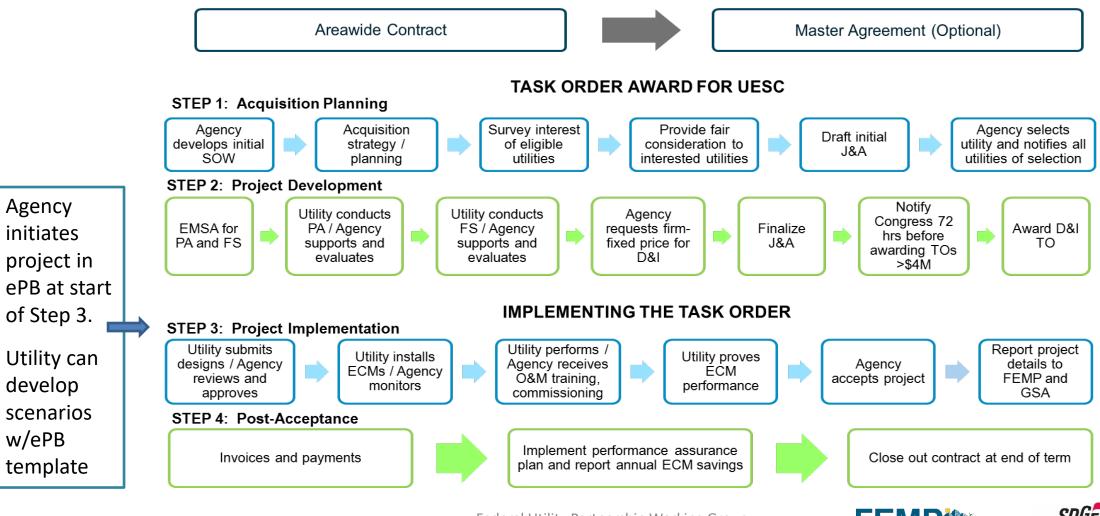






ePB and UESC

OVERARCHING DOCUMENTS



Federal Utility Partnership Working Group May 2-3, 2019 San Diego, CA

Federal Energy Management Program

A 🔀 Sempra Energy utility



48

UESC Template Demonstration

A	В	С	D	E	F	G
	Project ID #					
-	Financing Ter	ms			Project Capitalizat	ion
	Applicable Financial Index				Total Implementation Price (from Schedule-2a Total)	\$0
	Performance Period (years)	0			PLUS Financing Procurement Price- capitalized construction period interest (\$)*	
	Index Rate*				PLUS Financing Procurement Price- other expenses (\$)*	
	Added Premium (adjusted for tax incentives)*				LESS Implementation Period Payments (from Schedule-1, (c))	\$0
Costs &	Project Interest Rate (sum of two above inputs)	0.00%			Total Amount Financed (Principal)	\$0
Financials	Financing Issue Date (mm/dd/yyyy)				Bonded Amount	
	Project Award Date (mm/dd/yyyy)				Start date of Performance Period (mm/dd/yyyy)	
]	Effective Through (mm/dd/yyyy)					
	Primary Type of Financing (choose from list)				Project Financial Sum	imary
1	Secondary Type of Financing				Annual Estimated Energy Savings	
	(choose from list)				(MMBtu)	
	Project Agreement Type (choose from list)	UESC			Annual Estimated Water Savings (kGal)	
	Payment Timing (beginning or end of performance year)*				Total Estimated Cost Savings	
					Total Guaranteed Cost Savings	\$0
	% Savings devoted to Payments	95.00%			Total Payments	
	Federal Contract Type					
Other	Primary Electric Utility				Template Errors/War	nings
Information	Primary Natural Gas Utility					
	Primary Water Utility					
IMPORTANT INFO						
					e with completing these schedules, terminolog	y, etc.
	contractor shall complete the installation of a			ed in the contra	ict.	
(4) Prior to award,				time of award.	The rate will be locked at time of award and wi	ll be fixed throu
performance perio	od.					

	A	В	С					
1		SCHEDULE #10						
2	С с	OST SAVINGS AND PA	YMENTS					
3								
4		(a)	(c)					
5	Implementation Period (Year 0)	Estimated Cost Savings*	Payments*					
6	(10410)							
7	Performance Period	(d)	(f)					
	(Year)	Estimated Annual Cost	Annual Payments					
8		Savings	,					
9	1							
10	2							
11	3							
12	4							
13	5							
14	6							
15	7							
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21	13							
22	14							
23	15							
24	16							
25	17							
20	10							







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- Challenges around preserving and accessing UESC project information, e.g., for:
 - Reporting, tracking what has been implemented, sharing success stories
- Challenges around tracking performance assurance
- Training materials that will be most useful
- Other questions







Thank you!

- Website: <u>eprojectbuilder.lbl.gov</u>
- Introductory training webinars (all project types)
 - 2nd Thursday and 4th Tuesday of every month in 2019 @ 1:00 eastern
 - See the ePB Help/Documentation page for upcoming webinars: <u>https://eprojectbuilder.lbl.gov/home/#/help</u>
- Technical support: epb-support@lbl.gov
- Contact: Elizabeth (Liz) Stuart: <u>estuart@lbl.gov</u>



