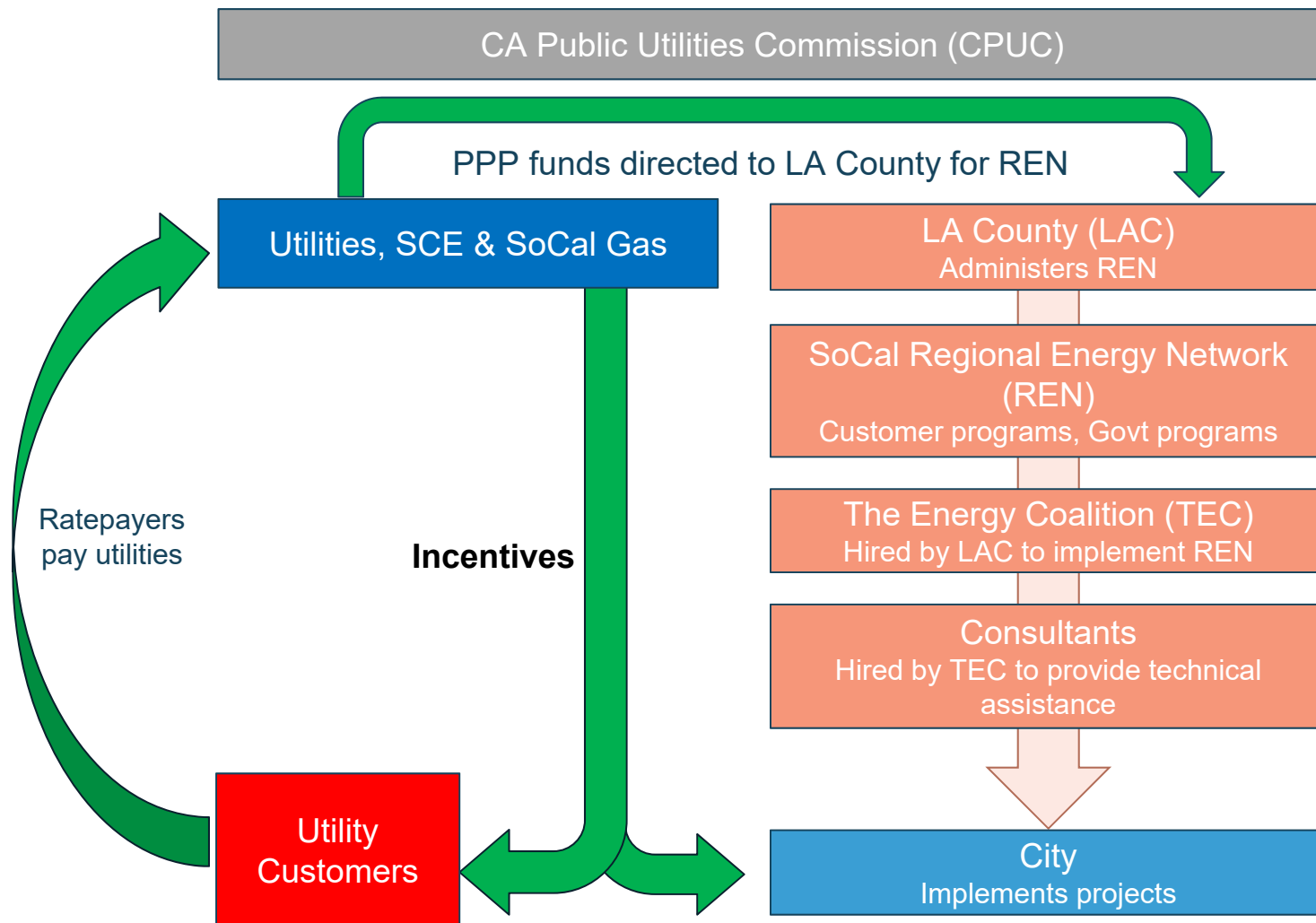


EE Incentive Process: Roles, Process, and Sample Project



Jonathan Rossi, PE
Program Manager,
C&I Programs
TRC Solutions

Energy Efficiency Program Flow



Influence and Influence Job Aid

O' 'a1, z' '1u' a3l a' ; a' N a' a' Y' i% a' ; suz' e' '1- a' 1; a' M' ' a' u' B1+ i' z' ' a' B a' l' a' z' ; ^+ ; i' a' 2' e' B ; u' ^ a' z' a' B1 a' l' a' N a' ' ' ; ' ; a' l' ^ N' N' i

O' ' a' u' e' : ' e' ^ a' B1 a' : ' a' B l a' ; a' e' a' a' u' B' a' u' + B1 a' B, a' u' B' e' e' N' N' B1 a' N' ^, a' ; suz' e' '1- N a' 1; a' M' - a' i' + ' e' u' ^ a' ; suz' e' '1- N a' ^ a' ; N u' z' N a' i, z' '1u' a' 1; O' B e' a' e' 1/2 B1 ; ' e' '1u' a' B, a' Y' ; '1u' a' N a' ' , '1 ; a' l' z a' : ' a' 1' e' z a' , Y' N' B1 a' 1; a' : ' M' : ^+ ' T' M' ; ' a' W B e' e' i% a' e' B z' 1/2 a' 1; a' ^ Y' a' l' ' '1 a' 1/2 e' B Y' ; a' e' B z' : ' a' a' u' B' a' l' B e' + B1 a' l' ' T' M' ' '1 a' M' - a' i' z' l' a' u' a' M' u' + B e' a' u' e' +1' e' N' 1/2 N e' j a

O' ' e' ; a' u' e' z a' 1; a' ^ u' z' ^+ ; a' r' z' N' + B e' u' ; a' 1; a' l' B O' l' * ^ a' 2' e' B e' e' e' N' i

- O' ' N' a' u' B' a' l' B e' + Y' a' e' B z' 1/2 N e' | z' e' ; a' ^ a' N' N' e' B1 N a' B, a' e' B e' e' e' a' i, z' '1u' a' l' a' l' u' e' ; a' z' a' M' : ' a' z' 1/2 B e' : i% a' ; suz' e' '1- + B1 a' : ^ a' u' a' e' z a' ' e' B1 N' e' + N a' : ' a' e' 1/2 a' e' '1- e' N a' 1; a' z' : ^ a' z' a' e' B' a' N a' i a' i, z' '1u' i% a' u' z' N' + B e' ' e' a' ; ' u' N' B1 N a' 1; a' u' + B1 N a' u' e' B e' e' e' a' i, z' '1u' a' e' z' N' a' ' e' B1 N' e' + ' a' : ^ a' : ' a' 1' e' z a' , ' u' '1u' z' a' e' B e' e' e' a' u' z' N' ; a' a' l' : a' l' '1' , a' u' B e' a' : ' a' e' + 1/2 ^ z' ' e' N a' l' z' a' e' B + Y' + i% a' : ' a' u' z' N' + B e' ' e' a' B a' e' 1/2 a' e' '1- a' l' N' i : a' : ' a' 2' e' B e' e' e' a' i' + ' e' Y' '1- B1 i

O' ' N' a' e' e' ' a' l' z' ^ a' , ' e' N a' N' B z' a' ; a' l' a' e' z a' e' Y' e' N a' B a' Y' e' z a' e' B - u' +

o' i' '1- + , u' + B1 } O' ' a' 2' e' B e' e' e' a' N' N' + N a' : ' a' u' z' N' + B e' ' e' a' i a' ; '1- + , z' i% a' 1' e' z a' , , u' '1u' z' a' 1/2 B e' z' 1' : ^ N

U' i' O' ' u' '1 u' ^ a' N' N' N' ^ '1u' { O' ' a' 2' e' B e' e' e' a' e' B e' Y' ; ' N a' : ' u' '1 u' ^ a' e' N' B z' e' u' N a' B a' u' ^ a' : ^+ : a' : ' a' 2' e' B - u' a' i' e' a' i' | z' 1/2 e' '1- a' '1 Y' '1- B e' z' a' | z' 1/2 e' '1- a' : N' i% a' i' a' ^+ a' i% a' i% a' i' u' e'

2 i' 4 i' ^ '1u' ^ a' l' N' N' N' ^ '1u' { W ' '1 a' : ' a' Y' ^ a' l' ^ a' : z' a' B, a' i' u' '1- Y' ' a' z' 1/2 B e' : a' B a' : ' a' u' z' N' + B e' ' e' a' ; ' e' u' + z' a' l' u' B e' ' N a' : ' a' ; ' u' ; i% a' ^ u' + B e' a' i a' : ' a' N' a' u' + B1 a' B, a' a' e' B e' a' , , u' '1- a' ^+ : ' e' u' ^+ Y' a' N' B z' + B1 a' B a' : ' a' B1' a' B e' B1' N a' : ^ a' M' B z' a' ; a' B + ' e' M' N' a' l' a' N' a' u' + ;

- O' ' N a' ; suz' e' '1- a' M' ^ N a' ' Y' ' B 1/2 ; a' B {
- e' 1/2 e' B Y' a' : ' a' l' z' ^ a' : z' a' B, a' i, z' '1u' a' 1; a' Y' ; '1u' a' 2' e' B Y' ; ' ; a' i' a' 2' e' B - u' a' i' a' e' e' + Y' N a' u' e' a' u' e' B - u' a' i' a' ^ N' l' ^ a' : z' a' M' z' ; ' N e' i
 - O' B a' ' 1/2 a' e' B Y' ; a' z' ; ' a' 1' N a' B1 a' M' : ^ a' N a' l' a' u' u' 1/2 + l' a' a' Y' a' B, a' i, z' '1u' a' Y' ; '1u' a' ' ' ; ' ; a' B a' i' z' 1/2 B e' : a' 2' e' B - u' N a' l' ^ N' ; a' B1 a' 2' e' B - u' a' i' u' '1- Y' a' ^ z' ' N' i
 - o' * B 1/2 ' N a' B, a' u' B' e' e' z' 1 u' + B1 N a' 1; a' i' z' 1/2 B e' : i% a' ; suz' e' '1- N a' B a' 1; a' e' B' e' a' 1; " z' N' a' u' z' N' + B e' ' e' N a' : ^ a' ; suz' e' '1- a' T' M' ' '1 a' 1; a' B T' M' a' : ' a' u' z' N' + B e' ' e' N a' e' ^ ; ' a' : ' e' a' ; ' u' N' B1 N a' e' a' e' z'
 - O' B a' u' '1- e' ^ a' u' a' i, z' '1u' a' e' ^+ ; a' u' e' : ' e' ^ a' : ^ a' ; B a' l' B : a' z' : ^ u' a' Y' N o' B a' l' z' N' : B1 N a' B e' a' u' B' e' e' z' 1 u' + B1 N' i

Successful Influence Includes

O' 'aY'; '1u' 'a1' 'i%Nz1/2^a'; 'a' 'Bz^a; 'a' 'BCE 'a' 'E^E^Za; 'E' 'E' 'a' 'a' '1; 'zN' 'auzN-BCE 'Ea' 'a; 'BuzCE '1+' 'a' 'u' 'BCE 'E' 'z1' 'u^+' 'B1N^M' '÷' 'a' 'uE' '1a' 'B-NB, 'a' 'E^' 'N' 'aE' '1+' '1%aE' '1z+' 'N' 'a' 'z; 'aE' '1/2' 'B-E-N' '1/2' 'u+' 'zE' 'N' 'a' 'u' 'B' '1' 'auzN-BCE 'Ea' 'N' 'Bz^a; 'a' 'NuE'1' }

- B, 'a' 'a' 'a' 'BCE 'N' 'B, 'a' 'E^' 'E^' 'a' '1a' ' 'a' 'B1a' ; 'e' 'a' 'B' 'N' 'a' ' 'a' 'N' 'a' 'B' 'Ea' 'NuE'1' 'aE' 'z' '1/2^a' 'a' 'BCE 'N' 'B, 'a' 'Y'; '1u' 'B, 'a' '1, 'z' '1u' 'a' 'B' 'a' 'a' 'a' 'E' 'aE' | 'z' 'E' ; '1'
- y'aE' 'Za; 'BCE 'N' 'B, 'a' 'Y'; '1u' 'B, 'a' '1, 'z' '1u' 'a' 'B' 'a' 'Nz1/2^B'E-a' 'Y' 'E' 'Za; 'E' 'B-u+'
 - 6 'B^M' 'a' 'a' '1' '÷' 'a' 'u' 'BCE 'E' 'z1' 'u^+' 'B1a^M' '÷' 'a' ' 'aE' '1/2^a' 'E' '1+' 'Ea^M' 'N' 'a' '1' '÷' '÷' ;
 - W ' ^-' 'a' ' 'a' 'zN-BCE 'Ea^M' 'N' 'a' 'B' '1%a' 'B' 'a' 'B' 'a' 'E' 'B' 'E' 'B' 'a' 'l' '1%a' '1, 'z' '1u' ; 'a' 'Za' ' 'aE' '1/2^a' 'E' '1+' 'E'
 - W ' ^-' 'a' ' 'a' 'zN-BCE 'Ea^M' 'N' 'aE' 'B' 'Y' ; 'a' 'B' 'a' 'B' 'a' ' '÷' 'Ea' '1%a' '1, 'z' '1u' ; 'a' 'Za' ' 'aE' '1/2^a' 'E' '1+' 'E'
 - W ' 'B' 'a' ' 'a' 'zN-BCE 'Ea' 'u' 'N' 'B1aE' 'E' 'E' 'N' 'a' 'E' 'E' ' 'a' 'B^M' 'a' ' 'a' ' 'u' 'N' 'B1a^M' 'N' 'aE' ' ^' ; 'a' '1; 'a^M' ' '1
 - O' ' 'a' ' 'a' 'zN' '1' 'N' 'aE' | 'z' 'E' 'E' '1+' 'N' 'a' ' 'a' ' ^' ; 'a' 'B' 'a' 'l' ' 'a' 'z^a, 'aaa' ; 'a' '1' 'B' 'E' ; 'Ea' 'B' 'Ea' ' 'a' 'zN-BCE 'Ea' 'B' 'aE' 'B' 'Y' 'a' 'B' 'E^M' ' ^' 'E' ; 'a^M' ' ÷' 'a' ' ÷' ' 'aE' ' ^' 'NzE' 'O' '1/2' 'E' 'B-u+'
 - O' ' 'a' ' 'a' '1' 'u' ' ^' 'aE' | 'z' 'E' 'E' '1+' 'N' 'a' ' 'a' ' ^' ; 'a' 'B' 'a' 'l' ' 'a' 'z^a, 'aaa' ; 'a' '1' 'B' 'E' ; 'Ea' 'B' 'Ea' ' 'a' 'zN-BCE 'Ea' 'B' 'aE' 'B' 'Y' 'a' 'B' 'E^M' ' ^' 'E' ; 'a^M' ' ÷' 'a' ' ÷' ' 'aE' ' ^' 'NzE' 'O' '1/2' 'E' 'B-u+'
 - 7, 'a' 'aE' ' ^' 'NzE' 'N' 'a' 'E' '1/2^a' '1/2^a' 'Zl' 'u' 'a' 'a' 'l' ' 'z' 'E' 'B' '1' 'a' 'l' 'Y' 'N' 'E' '1+' 'a' 'B' 'E' 'L' 'B' 'E' 'u' ' ; 'N' 'a' ' 'a' ' '1/2^u+' ; 'a' 'N' ' 'z' 'a' ' ; 'a' ' 'u' ' 'Q' ' > 'e' 'a' ' 'a' 'zN-BCE 'Ea' 'N' 'Bz^a; 'a' ' '1/2^a' '1a' ' 'aE' ' ^' 'N' 'B1a' ' '1; 'a' ' 'a' 'l' 'zN' '1' 'N' 'a' ' 'u' 'N' 'B1a' 'B' 'a' 'E' '1/2^a' 'E' '1+' 'a' ' 'a' ' 'E' ' ^' 'NzE' 'u' 'E'
 - 7, 'a' 'aE' ' ^' 'NzE' 'N' 'a' 'E' '1/2^a' '1/2^a' 'Zl' 'u' 'a' 'a' 'l' 'B' 'E' 'N' 'a' ' 'u' 'a' ' ' ^' 'E' 'N' 'a' ' '1' 'u' ' ^' 'a' 'N' 'Y' '1%N' 'Bz^a; 'a' 'B' 'a' 'l' ' 'a' 'N' ; 'a' 'N' 'a' ' 'a' 'E' 'E' 'E' 'Za' '1, 'z' '1u' 'a' 'E' 'Y' 'E'

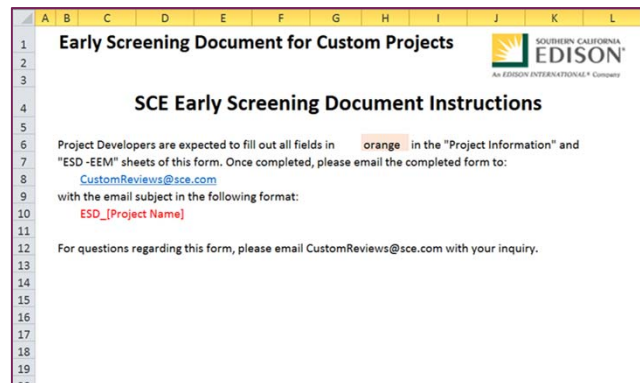
Early Screening Document

M* -â ' % ^ 1 1/2 ESÝ ; i % â ^ È Ž â u È ' 1 i % â Ñ ' È Ÿ u ' Ñ : B â Ñ Ñ Ñ : 1/2 È S - u : â ' Ý ' 1 3/2 ' È Ñ B 1 â ^ a a ^ u z ^ ÷ ; â r * ž Ñ : S C E | â L * 3 0) L B | â ^ È : 1 ' È Ñ ' 1/2 | â ' È ; â ^ È : Ž 1/2 È S - u : â Ñ Ž L C Ñ Ñ B 1 Ñ Ñ

- ,, ' u : Ý ' â 1/2 È ^ a u | a u + ç i | â 1 â ^ È Ž â u È ' 1 i % â , B u Ž C ' 1 - â - M , a a ^ 1/2 È S Ý ^ a C ^ a , È S C E M * - â Ñ È ' | ž È ' ; â , B È â ^ a ^ u z ^ ÷ ; 1/2 È S - u : â Ñ Ž L C Ñ Ñ B 1 Ñ Ñ
- O ' â M , â , B u Ž C ' 1 - â 1 ; â M , â B 1 â ' ; â È ' 1/2 B Ñ : ' ; B 1 â ' ' a * ž Ñ : S C E ü ' ; | â ' - È B u S C E C Ñ Ñ B 1 i % ^ 1 ; â [4 B S C E Ñ Ñ â ^ 1 Ñ B 1 â ' ' B 1 a 1 ' â 1/2 a u ^ ÷ B 1 B B S 1](#)
- ! 1 â M , â È ^ 1 i % â Ÿ ; ' B â Ñ â Ñ B â Ý ^ a 1 a ^ a B â Ñ Ñ Ñ - â u z Ñ : S C E ' È Ñ a 1 ; â È ^ ; ' â u È S , ' Ñ Ñ B 1 ^ Ñ Ñ M ' ÷ : â Ñ ž u u ' Ñ Ñ , ž a Ñ Ž L C Ñ Ñ B 1 Ñ Ñ

O ' â ^ È Ž â u È ' 1 i % â , B u Ž C ' 1 - â M ^ Ñ a ' Ý ' 1 3/2 ; â B {

- 1/2 È S Ý ' â u z Ñ : S C E ' È Ñ ^ ÷ Ñ , ^ u : B 1 â 1 ; â È ÷ % ^ ÷ : â ' a È Ñ E a S , a Ñ ' ÷ : i % a 1 È ' ^ a Ñ : u â u z Ñ : S C E ' È a 3/2 u ^ ÷ B 1 Ñ Ñ
- Ñ : ^ 1 a Ñ ' a a 1 , B S C E a 1 ; a M ' a a ž 1 ; ' È Ñ : S B ; a 1/2 È S ^ u ' â , B È a ; ' 1 ÷ , ž i % a 1/2 È S - u : â | ž ^ a : ž a Ñ Ñ ž ' Ñ a 1/2 , È B 1 - ÷
- L ; ž u ' â i u B 1 Ñ Ñ Ñ : 1 - â | ž ^ a : ž a 1 ; a 1 ^ u u ' 1/2 ÷ 1 a 1 â a 1 Ý ' 0 : ž 1/2 a , â 1 ; i % Ñ a : a ' ' â 3 a 1 ÷ : a 1 ' Ý ' M a Ñ : ^ % ' í
- L ' Ý ' M a 1 ; a È ' u B C E C ' 1 ; a È ' ^ Ñ ž È a ' Ý ' a 1 , ž ' 1 u ' â È ' | ž È ' C ' 1 - Ñ Ñ

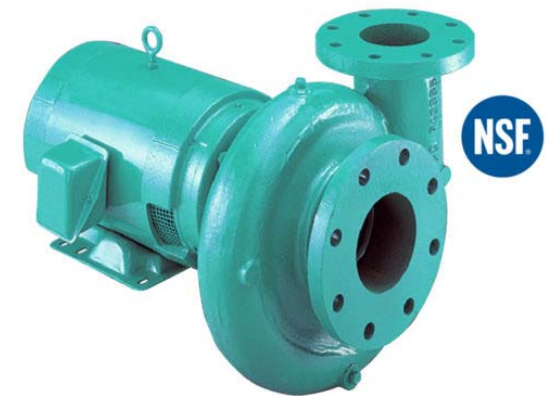


EE Sample Project, Pool Pump VFD

- **Customer Engagement/Audit:** Maintain written email records of meetings and audit findings. This will become the backbone for influence.
- A benchmarking effort reveals that a public pool facility has a high energy intensity for gas and electricity.



Identification!
Financial Assistance!



Southern California
REGIONAL ENERGY NETWORK 

EE Sample Project, Pool Pump VFD

- **Customer Acceptance/PFS Development:** Based on the audit findings, the Customer requests that the project proceed and would like to see what incentives can be secured!

PFS Development:

- In-depth calculations (M&V)
- Package influence documentation
- Economic analysis

Technical Assistance!

	Existing Pump	Proposed VFD Upgrade	
BHP (from nameplate)	4.00	4.00	
Motor Efficiency	0.85	0.85	
Maximum Flow (GPM)	208	188	
Minimum Reduced Flow (GPM)	208	135	
Head (ft)	60.00	60.00	
Specific gravity	1.00	1.00	
Pump Efficiency	65%	65%	
Calculated BHP	4.86	4.38	
VFD Efficiency	N/A	98%	
Affinity Law Exponent	N/A	2.2	
Full Flow (kW)	4.3	3.9	
Minimum Flow (kW)	4.3	1.7	
Hours Full Flow	24.00	3.0	
Hours Reduced Flow	0.00	21.0	
Energy full flow (kWh/day)	102.24	11.8	
Energy Reduced Flow (kWh/day)	0.00	36.3	
Energy per Day (kWh/day)	102.24	48.1	
Days/Year	365	365	
Total Energy Consumption (kWh/Year)	37,318	17,557	
DEER Peak Demand Savings (kW)	0.34		
Energy Savings - kWh	19,761		
			Open Hours
			Monday 11.5
			Tue-Fri 46.0
			Sat 11.5
			Sun 11.5
			Total Weeks Per Year 14
			Total Hours Per Year 1,127
			Average Hours Per Day on Annual Basis 3.0
Operation Notes:			
1. Pool is only open between Memorial Day and Labor Day weekends, a total of (14) weeks.			
2. VFD is programmed to ramp up 1 hour before pool open, during the weeks above, ramp up time=9AM, Pool close=8:30PM, 7 days.			
3. Since inspection was performed in January, both preset references (speeds) are currently at the minimum.			

EE Sample Project, Pool Pump VFD

- **Early Screening Document:** Projects need to have ESD approval before the application and supporting documentation can be submitted!
- **Submit Incentive Application:** After receiving ESD approval, move forward with submitting full package through online application tool.



EE Sample Project, Pool Pump VFD

- **Technical Review and Approval:** Respond to any 3rd Party Technical Reviewer questions. Review may include an inspection.

The goal of technical review is to confirm the savings claim. Questions are normal, all custom projects are different.



- **Project Approval Letter:** Once project approval letter is received, project can proceed to scope of work development and city procurement, as needed.

EE Sample Project, Pool Pump VFD

SAMPLE INVOICE					
Jane Doe, LLC "We fix things" 6042 Irwindale Ave. Irwindale, CA 91702 Phone (999) 999-8888 Fax (999) 999-8887			INVOICE # 101 DATE: MARCH 26, 2012		
TO: XYZ, Inc. ATTN: John Smith 123 First St. Santa Monica, CA 90401		INSTALLED AT: Corporate Office- Building 1 XYZ, Inc. 124 First St. Santa Monica, CA 90401			
INSTALLATION DATE	PAYMENT TERMS	DUE DATE			
3/10/2012	NET 30	4/25/2012			
QTY	MAKE	MODEL	DESCRIPTION	UNIT PRICE	LINE TOTAL
29	On Time Lighting	ON-T5-446	High Bay 4-lamp TSHO Fluorescent Fixture	\$100.00	\$2,900.00
29	Phillips	ICN485490C21LSG	Phillips Advance ballast for high bay fixtures	\$25.00	\$725.00
116	Phillips	F54T5/850/H0	54W TSHO Long Life Lamps	\$10.78	\$1,250.48
Removed (29) 400W Probe-Start Metal Halide Fixtures and replaced with equipment above. Installation qualified for 29 units of Solution Code LT-26100.					
		 *			
				SUBTOTAL	\$4,875.48
				SALES TAX @ SHIPPING	\$282.75
				SCE REBATE APPLIED	\$2,900.00
				TOTAL	\$2,258.23

* Only when part of an OBF application
 ** Only when CAA is receiving incentive

- Procurement and Construction:** Once project is installed and successfully commissioned, the contractor (or whoever completes the work) must provide a detailed invoice.

EE Sample Project, Pool Pump VFD

- **Installation Report (IR) and Installation Tech Review:** Package the installation files, with a focus on invoice, and submit IR package. May also include post-case M&V. Finally, the project goes through installation tech review.



EE Sample Project, Pool Pump VFD

- **Incentive and/or Finance Check:** Incentives and any finance checks are sent to the customer/trade-pro based on the final confirmed project savings.



Supporting Documents for Custom Projects

! 33, 36' 'N' 3i 3u3E ' 1-3N^E' 3Y^ 3^1 3i 33' ' 3
 * 3N-3E 'u' ; 3M3 3-3i 3N^ 3^1 33, 3M* - 33 1 3^1 ' 3i 1/2 3^u^ 3-3i 3a
 O333 31

- M3 3-3i 3N^, E' u-3E3
- M-3^ 3^1 TM 3^ ; 3 3N-3E 'u' ; 3 3^ 3u3 3^ 3^ ; 3M^Y 1 3% 3N^ 3 3 3^ ; 3^ 3^1 N^
- M-3^ 1 ; 3^ E; 3N^, 3E3 3 3N-3E 3u3 3-3u-3i, 'Y' 3 3^ 3E ' 1-3
- J3E', 'E3E' ; 3 3^ 3u3 3^ 3-3i 3O33 3N^ 3E' 3N^ 3i 3u3 3^
- - 3^ E3 3a 3^ 3^ E' 3E ' 1-3 3 3^ ; 3^ 1u' 3i 3u3E ' 1-3
- * 3^ 3u3 3^ 3^ ; 3u3 3-3u-3i 3^ E3 3a 3^ 3^ E' 3E ' 1-3 3 3i 3N^ ; 3E^ 3-3i 3a
 * ' 3u3 3N^
- - 3^ E3 3a 3u3 3E' ' 1 3^ 3i 3u3E ' 1-3
- J3E3-3u-3i ' 3N^ 1 3^ 3-3i 3M-3^ ; 3 3
- 3i, 3^ 3^ 1u' 3i 3i 3a 3^ ;

