ATTACHMENT 5

DATA REQUESTS AND RESPONSES

STATE OF CALIFORNIA GRAY DAVIS, Governor

PUBLIC UTILITIES COMMISSION
505 VAN NESS AVENUE
SAN FRANCISCO, CA 94102-3298

Insert Date

Jody W. Moore
President
Ecos Consulting
580 E Arrow Highway, Suite E
San Dimas, CA 91773
moore@ecosconsulting.com

This correspondence is with respect to the Ecos Consulting program proposal entitled, "Litevend." We are requesting the following additional information regarding your proposal:

A complete and itemized " Program Budget Summary" and "Program Budget Detail" with a one-to-one connection between the two. To be more specific please provide these two budget sheets where the various total lines from the "Budget Detail" sheet correspond with their associated budget lines in the "Budget Summary" sheet. (Eg Program Budget Detail, Total Labor amount = Program Budget Summary, Labor amount).

A response should be provided via e-mail, by noon on Monday, March 18, 2002. Please send your response to ru4@cpuc.ca.gov. If you wish to mail a hard copy as well, please use the address listed in the above letterhead, Attn: Ariana Merlino.

Thanking you in advance for your prompt response,

Energy Division Staff
CPUC

From: My Ton [mton@ecosconsulting.com]
Sent: Monday, March 25, 2002 11:49 AM
To: ru4@cpuc.ca.gov
Cc: srt@cpuc.ca.gov; pfreedman@ecosconsulting.com
Subject: Ecos' response on "LiteVend" budget for Ariana Merlino

Importance: High

Dear Ariana,

Thank you for the opportunity to clarify the budget for the LiteVend program. We appreciate your patience in this matter.

Attached is a spreadsheet that shows the connections between the Program Budget Summary and the Program Budget Details. This document includes the individual Utility Service Territory budgets from which the final "Program Budget Detail" spreadsheet was created.

Please note that some of the numbers differ slightly between the "Program Budget Summary and "Program Budget Detail" documents. This is due to rounding and working with percentages in the linked spreadsheets in the workbook. As you are aware, we consider the financial information contained within the workbook "business confidential" and are requesting you to treat it as such.

If you have any additional questions, please do not hesitate to contact me at 503-525-2700 ext. 104 or mton@ecosconsulting.com <mailto:mton@ecosconsulting.com>. If you would also use my name and contact information for any additional contact the CPUC may have with our office regarding this proposal as well as others submitted by Ecos Consulting, it will help to expedite matters while others in our office are on travel.

Thank you,

My K. Ton
Principal

My K. Ton
Ecos Consulting
208 SW Stark St. Suite 400
Portland, OR 97204
503.525.2700 x 104
503.525.4800 Fax
www.ecosconsulting.com

PUBLIC UTILITIES COMMISSION
505 VAN NESS AVENUE
SAN FRANCISCO, CA 94102-3298

Insert Date

Joy Yamagata
San Diego Gas and Electric Company
101 Ash Street
San Diego, CA 92101-3017
619-696-4325
jyamagata@sempra.com

Ms. Yamagata:

This correspondence is with respect to SDG&E's program proposal entitled, "Local Nonresidential Retrofit EZ Turnkey." Please provide the following information:
Itemization of projected financial incentives – listed as a line item in the amount of $517,830 in the Budget Summary

A response should be provided via e-mail, by noon on Monday, March 18, 2002. Please send your response to ru4@cpuc.ca.gov. If you wish to mail a hard copy as well, please use the address listed in the above letterhead, Attn: Ariana Merlino.

Thanking you in advance for your prompt response,

Energy Division Staff
CPUC

PUBLIC UTILITIES COMMISSION
505 VAN NESS AVENUE
SAN FRANCISCO, CA 94102-3298

Insert Date

Mark Gutheinz
Chief, Plant, Energy and Utilities
California State University – Long Beach
401 Golden Shore
Long Beach, CA 90802-4219
562-951-4122
mgutheinz@calstate.edu

Dear Mr. Gutheinz:

This correspondence is with respect to California State University Chancellor's Office Energy Efficiency Program. We are requesting the following additional information regarding your proposal:

Complete, itemized budget including all direct implementation costs. The budget should be separated by utility territory as well as by university within each territory. Please also include the expected contribution amount from the universities participating in the program.

A response should be provided via e-mail, by noon on Monday, March 18, 2002. Please send your response to ru4@cpuc.ca.gov. If you wish to mail a hard copy as well, please use the address listed in the above letterhead, Attn: Ariana Merlino.

Thanking you in advance for your prompt response,

Energy Division Staff
CPUC

March 18, 2002

Ariana Merlino
California Public Utilities Commission
Energy Division
505 Van Ness Avenue
San Francisco, CA 94102

Dear Ms. Merlino:

In response to your March 11, 2002 letter to Mark Gutheinz requesting additional information on California State University's ("CSU") energy efficiency program, Grueneich Resource Advocates, on behalf of CSU, submits the following documents, which we believe provide all the information you requested:

1. CSU Energy Efficiency Cost Proposal (Word table format)
2. CSU Cost Allocation by Utility and Campus (Excel spreadsheet)
3. CSU In-Kind Services Contribution (Excel spreadsheet)

The CSU Energy Efficiency Cost Proposal table contains program cost information corresponding to the amount of funding that CSU is requesting from the California Public Utilities Commission ("CPUC"), as well as the corresponding amount that would be applied in each UDC's territory. Additional program costs to be borne by CSU (and therefore not reflected in this table) include payment of the 5% Administration Fee to the UDCs[1] and in-kind services provided by the campuses and the CSU Chancellor's Office to cover site inspection, installation, and M&V services, as well as overall project and contract management. These costs are identified in the spreadsheet entitled CSU Cost Allocation by Utility and Campus. Campus costs are estimated to be 15% of the amount being requested from the CPUC. This spreadsheet table also contains the breakdown in direct implementation costs by campus as well as by UDC service territory. A third spreadsheet, called CSU In-Kind Services Contribution, contains the assumptions and calculations used to derive the value of CSU's in-kind services.

CSU appreciates the opportunity to provide this addendum to our energy efficiency proposal. If you have any questions please contact Mark Gutheinz or Clyde Murley.

Sincerely,

Clyde Murley

[1] This fee is reflected in CSU's TRC test.

PUBLIC UTILITIES COMMISSION
505 VAN NESS AVENUE
SAN FRANCISCO, CA 94102-3298

Insert Date

Kurt J Kammerer
Executive Director
San Diego Regional Energy Office
401 B Street, Suite 800
San Diego, CA 92101
kkam@sdenergy.org

Mr. Kammerer:

This request is with respect to the following program proposals submitted by The San Diego Regional Energy Office (SDREO):

1. San Diego Public Agency and Technical Support Program
2. San Diego Regional Energy Resource and Education Center
3. San Diego Region Cool Communities Shade Tree Program
4. Sand Diego Region Agriculture, Water, and Energy Program
5. San Diego K-12 Energy Education Program

Please provide the following information for the above programs:

1. San Diego Public Agency and Technical Support Program.
    - A complete and itemized budget for the program. Please be as specific as possible in your itemization of all budget areas including labor and subcontractor costs.
2. San Diego Regional Energy Resource and Education Center.
    - A complete and itemized budget for the program. Please be as specific as possible in your itemization of all budget areas including labor and subcontractor costs.
    - Please indicate how much joint funding would be provided by SDREO or any other agencies beyond the PGC funds for this program.
    - Please provide the details of the funding for the building that would be used for the San Diego Region Energy Resource and Education Center. Please include in this funding detail the nature of the building acquisition (lease/purchase), and the amount and source of funding for the SDREO offices that would possibly be housed in the building.
3. San Diego Region Cool Communities Shade Tree Program.
    - A complete and itemized budget for the program. Please be as specific as possible in your itemization of all budget areas including the material cost per tree. Please also break out the budget based on first year and second year expenses.
4. San Diego Region Agriculture, Water, and Energy Program.
    - A complete and itemized budget for the program. Please be as specific as possible in your itemization of all budget areas.
    - Please segregate the complete and itemized budget into the three program target areas (Agriculture, Water Agencies, High Water Volume Users).
5. San Diego K-12 Energy Education Program.
    - A complete and itemized budget for the program. Please be as specific as possible in your itemization of all budget areas including labor and subcontractor costs.

A response should be provided via e-mail, by noon on Monday, March 18, 2002. Please send your response to ru4@cpuc.ca.gov. If you wish to mail a hard copy as well, please use the address listed in the above letterhead, Attn: Ariana Merlino.

Thanking you in advance for your prompt response,

Energy Division Staff
CPUC

San Diego
REGIONAL
ENERGY
OFFICE

March 19, 2002

STATE OF CALIFORNIA
PUBLIC UTILITIES COMMISSION
505 VAN NESS AVENUE
SAN FRANCISCO, CA 94102-3298
Attn: Ariana Merlino
Email: ru4@cpuc.ca.gov

Dear Ms. Merlino:

This letter is in response to your data request dated March 11, 2002 regarding the program proposals submitted by The San Diego Regional Energy Office (SDREO).

Correction to SDREO Response dated March 18, 2002: General Changes to Each Budget

Year-one originally assumed a **9**-month program instead of **8** month (April – Dec 2002). This lowers labor cost and subcontract cost in year one.

San Diego Regional Energy Resource and Education Center (ERC)

SDREO appreciates this opportunity to clarify some of the costs estimated in our original submission. SDREO did not spend a lot of resources on planning the ERC, and subsequenbtly, as we looked closer at costs were able to improve our costs significantly. If selected, we belive there will be additional significant savings that can be achieved through a) integrating IOU and non-IOU information programs into a single program and b) considering commiting to a longer-term education program.

Other programs that may provide synergistic staff and resource to the ERC are as follows:

Program	Annual Funding Level (estimated)	Current Staff	Anticipated Staff (2002-2003)
Regional Energy Planning and Policy Development (Local funding)	$150,000	0.5	1.5
Energy Efficiency Incentive Program Management: Cool Roofs (CEC)	($2,000,000)**	1.5	0.0
Self-Generation Incentive Program Management (CPUC)	$15,500,000	2.9	2.9
Demand Response Program Management (CPUC)	($2,000,000)**	2.7	1.0
Public Agency Technical Assistance (CPUC-Proposed)	$500,000	1.0	2.0
Water and Wastewater Technical Assistance (CPUC-Proposed)	$500,000	0.0	1.0
Renewable Energy Program Management (DOE/CEC)	$75,000	1.0	1.0

Other Energy Efficiency Programs (CPUC-Proposed)	$450,000	0.0	2.5
K-12 Energy Education (CPUC Proposed)	$220,000	0.0	0.8

If you have any questions, please feel free to call me at (619) 595-5630 or email kkam@sdenergy.org.

Regards,

Kurt J Kammerer
Executive Director
San Diego Regional Energy Office
401 B Street, Suite 800
San Diego, CA 92101
kkam@sdenergy.org

Attachment A: Detail Budget: San Diego Regional Energy Resource and Education Center (ERC)

LABOR DETAIL (For internal Planning Use)	2002	2003	Total	Notes
Program Director	$ 9,750.00	$ 13,000.00	$ 22,750.00	
Assistant Director	$ 42,120.00	$ 56,160.00	$ 98,280.00	
Senior Program Manager	$ -	$ -	$ -	
Program Manager	$ 46,800.00	$ 62,400.00	$ 109,200.00	
Project Manager	$ 46,800.00	$ 62,400.00	$ 109,200.00	
Senior Project Engineer	$ 10,920.00	$ 14,560.00	$ 25,480.00	
Project Engineer	$ 78,000.00	$ 104,000.00	$ 182,000.00	
Admin/ Project Assistant	$ 62,400.00	$ 83,200.00	$ 145,600.00	
Other	$ -	$ -	$ -	
Subtotal	**$ 296,790.00**	**$ 395,720.00**	**$ 692,510.00**	**3**
OTHER DIRECT COSTS				
Office Supplies	$ 5,000.00	$ 4,500.00	$ 9,500.00	
Facility	$ 38,500.00	$ 66,000.00	$ 104,500.00	4
Multimedia Equipment	$ 44,136.90	$ 1,000.00	$ 45,136.90	5
Office Equipment/ Furniture	$ 45,000.00	$ -	$ 45,000.00	6
Diagnostic Tools	$ 44,760.00	$ 2,500.00	$ 47,260.00	7
Education/ Library Materials	$ 65,000.00	$ 12,000.00	$ 77,000.00	8
Exhibits	$ 125,000.00	$ 25,000.00	$ 150,000.00	9
IT Support	$ 35,000.00	$ 6,500.00	$ 41,500.00	10
Other	$ -	$ -	$ -	
Subtotal	**$ 402,396.90**	**$ 117,500.00**	**$ 519,896.90**	
CONTRACT SERVICES				
Contractor - Facility Improvements	$ 87,500.00	$ -	$ 87,500.00	11
Contractor - Program Development	$ 125,000.00		$ 125,000.00	12
Contractor - Education Programs	$ 75,000.00	$ 65,000.00	$ 140,000.00	13
Subtotal	**$ 287,500.00**	**$ 65,000.00**	**$ 352,500.00**	

Program Budget for CPUC Proposal				
Item	**2002**	**2003**	**Total**	
Administrative Costs				
Labor	296,790	395,720	692,510	
Benefits	Note 1	Note 1	Note 1	
Overhead	Note 1	Note 1	Note 1	
Travel costs	2,400	1,800	4,200	
Reporting costs	Note 2	Note 2	Note 2	
Materials and Handling	402,397	117,500	519,897	
General and Administrative costs	Note 1	Note 1	Note 1	
Subcontractor costs	287,500	65,000	352,500	
Subtotal	**989,087**	**580,020**	**1,569,107**	
Marketing/Advertising/Outreach costs				
Workshops	-	-	-	
Brochures	35,000	35,000	70,000	
Advertising	65,000	12,000	77,000	
Web site	6,500	2,500	9,000	
Subtotal	**106,500**	**49,500**	**156,000**	
Direct Implementation Costs				
Financial Incentives	-	-	-	
Installation costs	-	-	-	

Activity costs	-	-	-	
Subtotal	**-**	**-**	**-**	
Evaluation Measurement and Verification Costs	**50,000**	**30,000**	**80,000**	
Total SDREO Budget	1,145,587	659,520	1,805,107	
IOU Administration Fee (assumes 5%)	57,279	32,976	90,255	
Total Program Budget	**1,202,866**	**692,496**	**1,895,362**	

Additional Notes:

3. Labor costs assume this program funded independent of other proposed PGC-EE programs. If other are funded, these costs will likely be reduce by 10-25%.

4. First year facility costs (lease or sub-lease payments) are estimated lower since estimated for 7 months assuming contract awarded 4/1/02 and occupy space 6/1/02. Size increased slightly to 2,500 sq-ft.

5. Mulitmedia Equipment to support ERC operations as follows:

ERC EQUIPMENT	Qty	Estimated Costs	Total
Powerpoint/Video Projector	2	$ 4,379.00	$ 9,633.80
Screen (Projector)		$ 250.00	$ -
Electronic Whiteboard	2	$ 599.00	$ 1,317.80
Overhead projector (Transparencies)	1	$ 300.00	$ 330.00
Projector Stand	2	$ 169.00	$ 371.80
3 in 1 Stand	1	$ 189.00	$ 207.90
3 in 1 Printer/Fax/Scanner	2	$ 799.00	$ 1,757.80
Printer	2	$ 599.00	$ 1,317.80
Copier	1	$ 400.00	$ 440.00
Computer Workstations	12	$ 1,800.00	$23,760.00
Miscellaneous/Contingency			5000
Total			$44,136.90

6. Estimated furniture costs are as follows (Second year costs are estimates are for repairs, replacements):

ERC FURNITURE	Qty	Estimated Costs
Telecommunications wiring	1	$ 7,500.00
Telecommunications Equipment	1	$ 18,000
Workstation	6	$ 3,500
Office	2	$ 5,500
Lobby/ Info area		$ 5,000
Library		$ 5,500
Total		$ 45,000

7. Diagnostic tools costs are for tool loan program. See Attachment B for listing of tools that we anticipate having on stock and available.

8. Library materials are various books, CDs, interactive training, periodicals. Detail list not available. This is an estimate and not to exceed figure only.

9. Exhibits- Assumes initially 15 exhibits at approximately average $8,000 per exhibit. Subsequent year would upgrade or replace 3-4 exhibits with new technologies.

10. IT Support – Costs are for wiring Computer-based Training Workstations 300 hours at $100 per hour plus miscellaneous interconnection equipment costs. Second year costs are for maintenance and improvements. Ongoing costs will likely be lower once system operational.

11. Facility Improvements- Initial estimate was too conservative. Revised estimate is at $35 psf, for 2500 sq-ft. Actual costs are likely to be much lower depending on whether facility has pre-existing improvements. Improvement costs may be avoided altogether with longer-term lease, which is not possible due to term of contract (18 months). This is a not to exceed figure.

12. Program Development- Cost estimate is for consultant to assist with planning, designing and implementing ERC. Initial estimate was overly conservative. New estimate based on 1000 hours at $125 per hour and SDREO staff assuming some of the anticipated workload.

13. Education Programs- Initial estimates were too conservative. New estimates based on developing 15 online, flash-based educational programs at an average of $4000 per program. Once developed, standard educational programs can be made available statewide with slight modifications for local regions. Additional costs for support of 10 imported training sessions at estimate $1500 per session. Second year costs continue imported training and expand/improve online training.

Attachment B: ERC Tool Lending Service Inventory

Occupancy Sensor
Model No. 49-425
2.5 volt output occupancy sensor. Sensor uses infrared detection and the LED indicates activation of sensor. Capacitor allows voltage to degrade slowly over time indicating exact time of occupancy. Operates with 2.5 volt DC output in chime mode.
$30-$200

Minolta Illuminance Meter
Model No. T-1H
Measures: Illuminance/Light
Hand-held illuminance meter with LCD display and detachable sensor. Cosine-corrected sensor with output in lux or footcandles. Meter self calibrates before use and a hold button freezes the displayed illuminance value. Range: 0.1 to 999,000 lux
$120

LeakMaster Ultrasound Detector
Model No. 101
Measures: Flow
Ultrasound detector for leaks, friction and electrical discharge. For use with compressed air, steam, vacuum, process gasses and refrigeration gasses.
$200-$1000

E. Vernon Hill Borozin Smoke Gun or smoke generators or fog machine
Model No. 17-023
Measures: Air movement
Hand-held powder gun for studying air movement. Device can be used to analyze diffusers in mechanical systems and slow-moving air currents.
$3 for smoke generators, $150 for smoke gun and $500 for fog machine.

Raytek Raynger Infrared Thermometer
Model No. MX4
Measures: Temperature
Infrared thermometer measures temperatures from -30°C to 900°C. Accuracy is +/- 1%. Digital display, laser target, data logging capability.
$300 - $1000

Flue gas analyzer
Model No. PCO2500/3500
Measures: O2, CO, NO, Gas & Ambient Temps, Stack Draft
The GA-20 is a multifunctional gas analyzer used in measuring boiler combustion gases
$1000-$7000

Pressure Meter
Model No. PDM204
Measures: Differential, static and gauge pressure.
Pressure meter with zeroing function, fast or slow response and output in inches of water or kilaPascal. Maximum pressure for meter is 7 kPa (19.99 in H_2O).
$450

Electronic Balometer
Model No. amp150
Measures: Air flow
The Alnor balometer is designed to measure supply or exhaust airflow from HVAC diffusers and grilles. The hood can be reconfigured for several standard size diffusers: 2'x2', 1'x4', 2'x4' and 4'x4'. The meter has an LCD readout and a range from 50 to 2000 cfm
$1900-$2100

Hand Tachometer
Model No. 82682-G

Measures: RPM
Dial-face tachometer that reads revolutions per minute. Operates in a clockwise or counterclockwise mode.
$300-$750

Temp/RH/Air Velocity Meter
Model No. 637-0000
Measures: Temperature, relative humidity, air velocity.
The Barnant Tri-Sense is a hand-held instrument, which provides accurate measurements of temperature, air velocity, and relative humidity. It is used with either the temp/RH probe (model 637-0050) or the air velocity/temp probe (model 637-0062).
$300-$600

Inframetrics Infrared Camera
Model No. 760
Measures: Surface temperature/long wave infrared radiation
Infrared camera produces a high resolution LCD thermal image of the long wave radiation emitted from objects between -20 and 400o C (-4 to 752o F). Temperature scale can be adjusted to one of six ranges. Images can be routed to a VCR or saved to a disk.
$15,000

Environmental Instrument
Model No. mpm500e
Measures: Flow/Humidity/Indoor Air Quality/Pressure/Temperature
This kit includes a variety of sensors that are compatible with a single meter. The sensors include a hot-wire anemometer, a vane anemometer, a fast-response relative humidity probe, an immersion temperature probe, a surface temperature probe, a tachometer and a differential pressure probe. Average, minimum and maximum values are reported and a continuous output signal can be sent to data loggers.
$450

Ultrasonic flowmeter
Measures fluid velocities without ever touching the fluid.
$800

Fluke True RMS Clamp Meter
Model No. 33
Measures: Current/Frequency
True RMS current meter with a maximum range of 700 amps. Model has a min/max feature, measures crest factor and frequency and has a LCD display.
$200

Powersight Energy Analyzer
Model No. PS-3000
Measures:Voltage, current, power, energy, PF, harmonics.
True RMS energy analyzer with 1000 amp current probes and voltage references for 3 phase loads. Default setup collects data on 59 measurement parameters with storage capacity for 946 readings. Reading verification with LCD display and button interface.
$500-$1500

Hobo RH/Temp/Light/External
Model No. H08-004-02
Measures:Relative Humidity, temperature, light level & external voltage
This multichannel logger can simultaneously record temperature, relative humidity, light levels and a 2.5VDC input signal. The logger can record 7943 readings, uses the standard Boxcar software, has a programmable launch feature and a blinking LED when logging.
$200

Hobo Volt W/ Phono Jack
Model No. hobo volt (HV)
Measures:2.5 VDC input signal
Logger receives a 2.5 volt DC input signal from independent sensors and transducers. This signal is accurate to +-10mV. The logger can store 1800 readings in its nonvolatile memory. Blinking led confirms operation.
$200

Hobo Motor On/Off Logger
Model No. H06-003-02 & H06-004-02
Measures: Motor status
Stand-alone logger detects vibration or AC-field to determine the ON or OFF status of motorized equipment. Can record 2000 state changes with a time resolution of 0.5 seconds. Blinking led confirms operation. Programmable launch time.
$200

Elite Pro Logger
Model No. Elite Pro
Measures: Power/Energy/Data logger
Recording poly phase power meter with 4 integrated voltage references. 30K memory. Uses 333mV CTs.
$500

Attachment A: Detail Budget: San Diego Direct Install Commercial Program (SD-DISC)

Year 1		Program Set-up		Marketing & Outreach		Proposal Development		Contractor Coord. And Inspections		Mgmt and Tracking		Evaluation		Total	
Personnel	Rate	Hours	Dollars	Hours	Dollars	Hours	Dollars	Hours	Dollars	Hours	Dollars	Hours	Dollars	Hours	Dollars
SDREO															
Executive Director	$135	21	$2,873	8	$1,080	0	$0	0	$0	48	$6,480	0	$0	77	$10,433
Program Manager	$90	26	$2,370	39.6	$3,564	39.6	$3,564	39.6	$3,564	59.4	$5,346	0	$0	204.534	$18,408
Field Coordinator/Engineer	$70	32	$2,234	117	$8,190	144	$10,080	102	$7,140	72	$5,040	0	$0	466.92	$32,684
SDREO Labor		80	$7,477	164.6	$12,834	183.6	$13,644	141.6	$10,704	179.4	$16,866	0	$0	748.734	$61,525
XENERGY															
Principal	$175	21	$3,724	8	$1,400	0	$0	0	$0	48		0	$0	77	$5,124
Project Manager	$135	53	$7,218	80.4	$10,854	80.4	$10,854	80.4	$10,854	120.6	$16,281	0	$0	415.266	$56,061
Engineer	$100	37	$3,724	0	$0	126	$12,600	126	$12,600	0	$0	0	$0	289.24	$28,924
Analyst	$80	37	$2,979	63	$5,040	0	$0	0	$0	168	$13,440	0	$0	268.24	$21,459
Field staff	$50	0	$0	810	$40,500	810	$40,500	432	$21,600	0	$0	0	$0	2052	$102,600
Tech Support	$50	53	$2,660	120	$6,000	0	$0	0	$0	0	$0	0	$0	173.2	$8,660
Support	$30	53	$1,596	80	$2,400	80	$2,400	80	$2,400	80	$2,400	0	$0	373.2	$11,196
XENERGY Labor		255.6	$21,901	1161.4	$66,194	1096.4	$66,354	718.4	$47,454	416.6	$32,121	0	$0	3648.426	$234,024
Travel			$200		$1,800		$1,200		$600		$0				$3,800
Material			$0		$5,000		$0		$0		$0				$5,000
Misc.			$500		$300		$300		$300		$300				$1,700
Total Cost Y1			$30,078		$86,128		$81,498		$59,058		$49,287		$0		$306,049

Year 2		Program Set-up		Marketing & Outreach		Proposal Development		Contractor Coord. And Inspections		Mgmt and Tracking		Evaluation		Total	
Personnel	Rate	Hours	Dollars	Hours	Dollars	Hours	Dollars	Hours	Dollars	Hours	Dollars	Hours	Dollars	Hours	Dollars
SDREO															
Executive Director	$135	0	$0	12	$1,620	0	$0	0	$0	60	$8,100	24	$3,240	96	$12,960
Program Manager	$90	0	$0	52.8	$4,752	52.8	$4,752	26.4	$2,376	79.2	$7,128	0	$0	211.2	$19,008
Field Coordinator/Engineer	$70	0	$0	156	$10,920	192	$13,440	136	$9,520	96	$6,720	0	$0	580	$40,600
SDREO Labor		0	$0	220.8	$17,292	244.8	$18,192	162.4	$11,896	235.2	$21,948	24	$3,240	887.2	$72,568
XENERGY															
Principal	$175	0	$0	12	$2,100	0	$0	0	$0	60	$10,500	48	$8,400	120	$21,000
Project Manager	$135	0	$0	107.2	$14,472	107.2	$14,472	53.6	$7,236	160.8	$21,708	160	$21,600	588.8	$79,488
Engineer	$100	0	$0	0	$0	168	$16,800	168	$16,800	0	$0	200	$20,000	536	$53,600
Analyst	$80	0	$0	84	$6,720	0	$0	0	$0	224	$17,920	180	$14,400	488	$39,040
Field staff	$50	0	$0	1080	$54,000	1080	$54,000	576	$28,800	0	$0	300	$15,000	3036	$151,800
Tech Support	$50	0	$0	160	$8,000	0	$0	0	$0	0	$0	0	$0	160	$8,000
Support	$30	0	$0	80	$2,400	0	$0	0	$0	120	$3,600	79	$2,360	278.65	$8,360
XENERGY Labor		0	$0	1523.2	$87,692	1355.2	$85,272	797.6	$52,836	564.8	$53,728	966.65	$81,760	5207.45	$361,288
Travel					$2,400		$1,600		$800		$0		$800		$5,600
Materials					$5,000		$0		$0		$0		$0		$5,000
Misc.					$400		$400		$400		$400		$400		$2,000
Total Cost Y2			$0		$112,784		$105,464		$65,932		$76,076		$86,200		$446,456

Total Cost			$30,078		$198,912		$186,962		$124,990		$125,363		$86,200		$752,505

Attachment B: Revised Summary Budget: San Diego Direct Install Commercial Program (SD-DISC)

Item	First Year Cost	Second Year Cost	Total Cost
Administrative Costs			
Labor	$136,523	$140,408	$276,931
Travel costs	$800	$800	$1,600
Materials and Handling	$0	$0	$0
Miscellaneous	$1,100	$800	$1,900
Marketing and Outreach Cost			
Labor	$159,026	$208,448	$367,474
Travel costs	$3,000	$4,000	$7,000
Materials and Handling	$5,000	$5,000	$10,000
Miscellaneous	$600	$800	$1,400
Direct Implementation Costs			
Incentives			
6,400 CFL @ $15	$38,400	$57,600	$96,000
32,000 Light Fixture Upgrades @ $30	$384,000	$576,000	$960,000
640 Light Controls @ 37.50	$9,600	$14,400	$24,000
32 Economizer Controls @ $900	$11,520	$17,280	$28,800
32 Window Film Projects @ $563	$7,206	$10,810	$18,016
32 Prog. Thermostats @ $75	$960	$1,440	$2,400
200,000 Annual kWh of Custom Savings @ $0.225	$18,000	$27,000	$45,000
20,000 Annual Therms of Custom Savings @1.125	$9,000	$13,500	$22,500
Evaluation, Measurement and Verification Costs			
Labor	$0	$85,000	$85,000
Travel costs	$0	$800	$800
Materials and Handling	$0	$0	$0
Miscellaneous	$0	$400	$400
Other Costs			
	$0	$0	$0
TOTAL BUDGET	**$784,736**	**$1,164,485**	**$1,949,221**

Utility Administrative Fee @ 5%			**$97,461**

Total Amount Including Fee			**$2,046,682**

San Diego
REGIONAL
ENERGY
OFFICE

April 2, 2002

STATE OF CALIFORNIA
PUBLIC UTILITIES COMMISSION
505 VAN NESS AVENUE
SAN FRANCISCO, CA 94102-3298
Attn: Ariana Merlino
Email: ru4@cpuc.ca.gov

Dear Ms. Merlino:

This letter is in response to your data request dated March 29, 2002 regarding the San Diego Direct Install Commercial Program proposal submitted by The San Diego Regional Energy Office (SDREO).

The revised budget consistent with the re-submitted budgets provided in response to your Data Request dated March 11, 2002 is found as Attachment A.

With regard to the second question: SDREO apologizes for the problem with formatting of Section 9: Budget Detail. The 7th line should read "200,000 Annual kWh of Custom Savings @ $0.225" and the next line should read "20,000 Annual Therms of Custom Savings @$1.125." These are the same items listed in the bottom two rows in the cost-effectiveness spreadsheet.

A revised Summary Budget can be found as Attachment B. A small error was found I the Miscellaneous M&V costs that reduced the line item from $1,179 to $400.

If you have any questions, please feel free to call me at (619) 595-5630 or email kkam@sdenergy.org.

Regards,

Kurt J Kammerer
Executive Director
San Diego Regional Energy Office
401 B Street, Suite 800
San Diego, CA 92101
kkam@sdenergy.org

PUBLIC UTILITIES COMMISSION
505 VAN NESS AVENUE
SAN FRANCISCO, CA 94102-3298

March 11, 2002

Merrilee Harrigan
Senior Program Manger
1200 18th ST, NW
Washington DC 20036

Re: Data Request on Proposal dated January 15, 2002

Dear Ms. Harrigan:

Thank you for submitting your proposal to CPUC dated January 15, 2002 (Green Schools, Green Communities). In reviewing your proposal, we have the following questions:

1. Please confirm that on page 20 of your proposal, the Total of the table should be $1.38 million and not $3.38 million.

2. For the total proposal expenditures of the program of $1.38 million, what is the breakdown for SCE and PGE territories?

Please respond ASAP to this informational data request. Thanks

Very truly yours,

Sarv Randhawa
Energy Division

Thank you for the opportunity to respond to your inquiry.

Question 1: Yes, the correct total amount requested in the proposal is $1,380,000. I apologize for the typographical error on page 20.

Question 2: The funds would be split approximately one third/two-thirds between the Green Schools Programs in the two areas, with approximately two-thirds of the funds ($920,000) going to the two Green Schools clusters in the SCE territory, and approximately one-third ($460,000) on the Green Schools cluster in the PG&E territory.

If you would like more details on exactly how the funds will be spent in each area, I would be happy to provide them.

Merrilee Harrigan

-----Original Message-----
From: Randhawa, Sarvjit S. [mailto:ssr@cpuc.ca.gov]
Sent: Monday, March 11, 2002 6:28 PM
To: mharrigan@ase.org
Cc: Drew, Tim
Subject: Alliance to Save Energy Proposal to the CPUC

Please provide response to the attached data request asap. Thanks <<EE - Alliance to Save Energy(Green Schools,Green Communities).doc

PUBLIC UTILITIES COMMISSION
505 VAN NESS AVENUE
SAN FRANCISCO, CA 94102-3298

March 12, 2002

G. Patrick Stoner
Program Director
Local Government Commission
1414 K Street, Ste 600
Sacramento CA 95814

Dear Mr. Stoner:

This correspondence is with respect to the LGC program proposal for Regional Energy Authorities in Humboldt, Marin and Ventura Counties sent to the Commission on January 15, 2002. We are requesting the following additional information regarding your proposal:

1. Please provide separate budgets for the LGC proposed programs in Humboldt and Marin Counties. Please follow the same format used in your original proposal.

2. Please describe any other sources of funding the LGC has secured or may secure for this program.

A response should be provided via e-mail, by noon on Monday, March 18, 2002. Please send your response to zap@cpuc.ca.gov. If you wish to mail a hard copy as well, please use the address listed in the above letterhead, Attn: Tim Drew.

Thanking you in advance for your prompt response,

Energy Division Staff
CPUC

From: Pat Stoner [pstoner@lgc.org]
Sent: Monday, March 18, 2002 10:01 AM
To: Drew, Tim
Cc: John Nimmons; Tim Rosenfeld; Ron Ishii
Subject: RE: Local Government Commission Energy Efficiency Proposal to the CPUC

Importance: High

Reply to CPUC staff request for information regarding the LGC program proposal for Regional Energy Authorities in Humboldt, Marin and Ventura Counties sent to the Commission on January 15, 2002 for:

1. Separate budgets for the LGC proposed programs in Humboldt and Marin Counties.

Please see the attached file that breaks down the budget for Humboldt and Marin Counties for the LGC and each of its subcontractors. Please note that the overall budget for the REA proposal assumed some economies of scale involving the development of the REA structures and some of the later-stage activities. If fewer than three REAs are funded, some of these economies may not be achievable, and some costs may be higher for each REA that is funded.

2. A description of any other sources of funding the LGC has secured or may secure for this program.

If this project is selected for CPUC funding, every participating community will be contributing staff and elected official time to the development and startup of their REA structures during Phase I. For example, a task force will be convened in each

community to prepare a written REA agreement describing the powers and authorities of the REA, its roles, responsibilities, and area of service, and other essential matters. In addition, project team staff will be meeting with local government staff and elected officials throughout Phase I.

Beyond Phase I, this project proposes to develop mechanisms whereby each of the REAs will become self-sufficient after their initial start-up financial assistance during Phase II. These mechanisms may vary by community, but are expected to include reinvestment of energy dollars saved; grant funding from other government entities (such as the CEC, other State agencies , and the U.S. DOE) , and private sources identified by each REA; charges for services; and contributions from participating communities. As an example of the latter, we note that the Marin County Board of Supervisors has now moved to initiate the process to create an REA. A vote is expected in the next several weeks, and may include some seed funding from the County's own budget.

Respond via e-mail, by noon on Monday, March 18, 2002 to zap@cpuc.ca.gov.

Please let me know if you need anything else.

G.Patrick Stoner

Program Director

Local Government Commission

1414 K Street, Suite 600

Sacramento, CA 95814

916/448-1198, ext 309

916/448-8246 fax

pstoner@lgc.org

www.lgc.org

Reply to CPUC staff request for information regarding the LGC program proposal for Regional Energy Authorities in Humboldt, Marin and Ventura Counties sent to the Commission on January 15, 2002 for:

1. Separate budgets for the LGC proposed programs in Humboldt and Marin Counties.

Please see the attached file that breaks down the budget for Humboldt and Marin Counties for the LGC and each of its subcontractors. Please note that the overall budget for the REA proposal assumed some economies of scale involving the development of the REA structures and some of the later-stage activities. If fewer than three REAs are funded, some of these economies may not be achievable, and some costs may be higher for each REA that is funded.

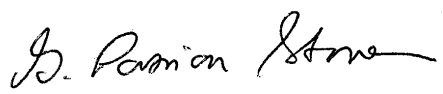
2. A description of any other sources of funding the LGC has secured or may secure for this program.

If this project is selected for CPUC funding, every participating community will be contributing staff and elected official time to the development and startup of their REA structures during Phase I. For example, a task force will be convened in each community to prepare a written REA agreement describing the powers and authorities of the REA, its roles, responsibilities, and area of service, and other essential matters. In addition, project team staff will be meeting with local government staff and elected officials throughout Phase I.

Beyond Phase I, this project proposes to develop mechanisms whereby each of the REAs will become self-sufficient after their initial start-up financial assistance during Phase II. These mechanisms may vary by community, but are expected to include reinvestment of energy dollars saved; grant funding from other government entities (such as the CEC, other State agencies , and the U.S. DOE) , and private sources identified by each REA; charges for services; and contributions from participating communities. As an example of the latter, we note that the Marin County Board of Supervisors has now moved to initiate the process to create an REA. A vote is expected in the next several weeks, and may include some seed funding from the County's own budget.

Respond via e-mail, by noon on Monday, March 18, 2002 to zap@cpuc.ca.gov.

Please let me know if you need anything else.



G. Patrick Stoner
Program Director
Local Government Commission

Local Government Commission Cost Proposal

PG&E – HUMBOLDT COUNTY

Item	First Year Cost	Second Year Cost	Total Cost
Administrative Costs			
Labor	$ 19,750	$ 18,750	$ 38,500
Benefits			
Overhead			
Travel costs	$ 2,800	$ 2,800	$ 5,600
Reporting costs			
Materials & Handling			
General and Administrative costs	$ 300	$ 500	$ 800
Subcontractor costs (include same line items)	$ 74,304	$ 23,550	$ 97,854
Marketing/Advertising/Outreach Costs			
Itemized (may be estimated)			
Direct Implementation Costs			
Core Funding	$100,000	$200,000	$300,000
UMS Software	$ 15,000		$ 15,000
Evaluation, Measurement and Verification Costs			
See Subcontractor AESC Budget			
Other Costs			
Program Subtotal	$212,154	$245,600	$457,754
IUO 5% Administrative Fee	$ 10,608	$ 12,280	$ 22,888
TOTAL BUDGET	$222,762	$ 257,880	**$480,642**

Local Government Commission Cost Proposal
PG&E – MARIN COUNTY

Item	First Year Cost	Second Year Cost	Total Cost
Administrative Costs			
Labor	$ 17,250	$ 16,250	$ 33,500
Benefits			
Overhead			
Travel costs	$ 900	$ 900	$ 1,800
Reporting costs			
Materials & Handling			
General and Administrative costs	$ 300	$ 500	$ 800
Subcontractor costs (include same line items)	$ 67,326	$ 31,824	$ 99,150
Marketing/Advertising/Outreach Costs			
Itemized (may be estimated)			
Direct Implementation Costs			
Core Funding	$100,000	$200,000	$300,000
UMS Software	$ 15,000		$ 15,000
Evaluation, Measurement and Verification Costs			
See Subcontractor AESC Budget			
Other Costs			
Program Subtotal	$200,776	$249,474	$450,250
IUO 5% Administrative Fee	$ 10,039	$ 12,474	$ 22,513
TOTAL BUDGET	$210,815	$ 261,948	**$472,763**

AESC, Inc., Subcontract Cost Proposal

PG&E – HUMBOLDT COUNTY

Item	First Year Cost	Second Year Cost	Total Cost
Administrative Costs			
Labor			
Benefits			
Overhead			
Travel costs			
Reporting costs			
Materials & Handling			
General and Administrative costs			
Subcontractor costs (include same line items)			
IOU Administrative Fee (only for non-IOU programs)			
Marketing/Advertising/Outreach Costs			
Itemized (may be estimated)			
Direct Implementation Costs			
Labor (fully loaded)			
Task 1 – Energy Management Eval.[2]	$9,054	$9,054	$18,108
Task 2 – REA Technical Support.[3]	$3,600	$3,600	$ 7,200
Travel costs			
Task 1 – Energy Management Eval.	$1,695	$1,696	$ 3,391
Task 2 – REA Technical Support	$ 661	$ 661	$ 1,322
Evaluation, Measurement and Verification Costs			
Labor (fully loaded)			
Task 3 – Eval. / M&V.[4]	$ 900	$ 900	$ 1,800
Travel costs			
Task 3 – Eval. / M&V	$ 0	$ 0	$ 0
Other Costs			
Materials & Software	$ 68	$ 68	$ 136
TOTAL BUDGET	$15,978	$15,979	**$31,957**

[2] Labor break-out: Principal Engr. 84 hrs @ $110/hr; Sr. Engr. 72 hrs @ $95/hr, Engr; 18 hrs @ $80/hr; Clerical/Admin. 18 hrs @ $40/hr.

[3] Labor break-out: Principal Engr. 13.5 hrs @ $110/hr; Sr. Engr. 27 hrs @ $95/hr, Engr; 27 hrs @ $80/hr; Clerical/Admin. 13.5 hrs @ $40/hr.

[4] Labor break-out: Principal Engr. 10 hrs @ $110/hr; Sr. Engr. 9 hrs @ $95/hr, Engr; 9 hrs @ $80/hr; Clerical/Admin. 4.5 hrs @ $40/hr.

AESC, Inc., Subcontract Cost Proposal
PG&E – MARIN COUNTY

Item	First Year Cost	Second Year Cost	Total Cost
Administrative Costs			
Labor			
Benefits			
Overhead			
Travel costs			
Reporting costs			
Materials & Handling			
General and Administrative costs			
Subcontractor costs (include same line items)			
IOU Administrative Fee (only for non-IOU programs)			
Marketing/Advertising/Outreach Costs			
Itemized (may be estimated)			
Direct Implementation Costs			
Labor (fully loaded)			
Task 1 – Energy Management Eval.[5]	$11,066	$11,066	$22,132
Task 2 – REA Technical Support.[6]	$ 4,400	$ 4,400	$ 8,800
Travel costs			
Task 1 – Energy Management Eval.	$ 2,073	$ 2,073	$ 4,148
Task 2 – REA Technical Support	$ 808	$ 808	$ 1,616
Evaluation, Measurement and Verification Costs			
Labor (fully loaded)			
Task 3 – Eval. / M&V.[7]	$ 1,100	$ 1,100	$ 2,200
Travel costs			
Task 3 – Eval. / M&V	$ 0	$ 0	$ 0
Other Costs			
Materials & Software	$ 82	$ 82	$ 164
TOTAL BUDGET	$19,530	$19,530	**$ 39,060**

[5] Labor break-out: Principal Engr. 100 hrs @ $110/hr; Sr. Engr. 88 hrs @ $95/hr, Engr; 22 hrs @ $80/hr; Clerical/Admin. 22 hrs @ $40/hr.
[6] Labor break-out: Principal Engr. 16.5 hrs @ $110/hr; Sr. Engr. 33 hrs @ $95/hr, Engr; 33 hrs @ $80/hr; Clerical/Admin. 16.5 hrs @ $40/hr.
[7] Labor break-out: Principal Engr. 5.5 hrs @ $110/hr; Sr. Engr. 11 hrs @ $95/hr, Engr; 11 hrs @ $80/hr; Clerical/Admin. 5.5 hrs @ $40/hr.

JNA, Subcontract Cost Proposal

PG&E –HUMBOLDT COUNTY

Item	First Year Cost	Second Year Cost	Total Cost
Administrative Costs			
Labor (fully loaded)	$29,475	$ 5,850	$35,325
Benefits	– –	– –	– –
Overhead	– –	– –	– –
Travel costs	$ 4,833	– –	$ 4,833
Reporting costs	– –	– –	– –
Materials & Handling	– –	– –	– –
General and Administrative costs	$ 230	$ 55	$ 285
Subcontractor costs	– –	– –	– –
Marketing/Advertising/Outreach Costs			
– –	– –	– –	– –
Direct Implementation Costs			
– –	– –	– –	– –
– –	– –	– –	– –
Evaluation, Measurement and Verification Costs			
– –	– –	– –	– –
Other Costs			
– –	– –	– –	– –
– –	– –	– –	– –
TOTAL BUDGET	$34,538	$5,905	**$40,443**

JNA, Subcontract Cost Proposal

PG&E – MARIN COUNTY

Item	First Year Cost	Second Year Cost	Total Cost
Administrative Costs			
Labor (fully loaded)	$27,225	$10,350	$37,575
Benefits	– –	– –	– –
Overhead	– –	– –	– –
Travel costs	– –	– –	– –
Reporting costs	– –	– –	– –
Materials & Handling	– –	– –	– –
General and Administrative costs	$ 100	$ 25	$ 125
Subcontractor costs	– –	– –	– –
Marketing/Advertising/Outreach Costs			
– –	– –	– –	– –
Direct Implementation Costs			
– –	– –	– –	– –
– –	– –	– –	– –
Evaluation, Measurement and Verification Costs			
– –	– –	– –	– –
Other Costs			
– –	– –	– –	– –
– –	– –	– –	– –
TOTAL BUDGET	$27,325	$10,375	**$37,700**

HMW International, Inc., Subcontract Cost Proposal

PG&E – HUMBOLDT COUNTY

Item	First Year Cost	Second Year Cost	Total Cost
Administrative Costs			
Labor (fully loaded)	$17,264	$1,611	$18,875
Benefits	– –	– –	– –
Overhead	– –	– –	– –
Travel costs	$6,124	– –	$6,124
Reporting costs	– –	– –	– –
Materials & Handling	– –	– –	– –
General and Administrative costs	$ 400	$ 55	$ 455
Subcontractor costs	– –	– –	– –
Marketing/Advertising/Outreach Costs			
– –	– –	– –	– –
Direct Implementation Costs			
– –	– –	– –	– –
– –	– –	– –	– –
Evaluation, Measurement and Verification Costs			
– –	– –	– –	– –
Other Costs			
– –	– –	– –	– –
– –	– –	– –	– –
TOTAL BUDGET	$23,788	$1,666	**$25,454**

HMW International, Inc., Subcontract Cost Proposal

PG&E – MARIN COUNTY

Item	First Year Cost	Second Year Cost	Total Cost
Administrative Costs			
Labor (fully loaded)	$20,236	$1,889	$22,125
Benefits	– –	– –	– –
Overhead	– –	– –	– –
Travel costs	– –	– –	– –
Reporting costs	– –	– –	– –
Materials & Handling	– –	– –	– –
General and Administrative costs	$ 235	$ 30	$ 265
Subcontractor costs	– –	– –	– –
Marketing/Advertising/Outreach Costs			
– –	– –	– –	– –
Direct Implementation Costs			
– –	– –	– –	– –
– –	– –	– –	– –
Evaluation, Measurement and Verification Costs			
– –	– –	– –	– –
Other Costs			
– –	– –	– –	– –
– –	– –	– –	– –
TOTAL BUDGET	$20,471	$1,919	**$22,390**

PUBLIC UTILITIES COMMISSION
505 VAN NESS AVENUE
SAN FRANCISCO, CA 94102-3298

Thursday, March 14, 2002

Karen Hamilton
701 Pennsylvania Avenue, NW
Washington, DC 20004-2696

Dear Ms. Hamilton:

This correspondence is with respect to GHPC program proposals to promote Geoexchange to PG&E and SCE Commercial and Educational Customers. We are requesting the following additional information regarding your proposal:

1. The GHPC proposal for PG&E territory briefly cites earlier involvement in implementing a geoexchange demonstration project with PG&E from 1997 to 2000. Please describe the results of this project, including total expenditures.

2. There is an error in the GHPC cost-effectiveness spreadsheets - you have omitted incremental measure cost per unit of geoexchange (measured in tons). Please revise your spreadsheet to include incremental measure cost per ton of installed geoexchange.

A response should be provided via e-mail, by noon on Monday, March 18, 2002. Please send your response to zap@cpuc.ca.gov. If you wish to mail a hard copy as well, please use the address listed in the above letterhead, Attn: Tim Drew.

Thanking you in advance for your prompt response,

Energy Division
CPUC

Geothermal Heat Pump Consortium

701 Pennsylvania Avenue, NW
Washington, DC 20004-2696

March 18, 2002

Mr. Timothy Drew
Energy Division
California Public Utilities Commission
505 Van Ness Avenue
San Francisco, CA 94102-3298

Dear Mr. Drew:

This correspondence is in response to the California Public Utilities Commission's request for clarification of portions of the GHPC's proposals to promote geoexchange to SCE and PGE customers. These proposals were submitted by the GHPC on January 15, 2002 in response to the Commission's "2002-03 Energy Efficiency Program Selection R.01-08-028". The Commission has requested additional information in two areas. Our response follows, along with the Commission's verbatim questions.

1. **The GHPC proposal for PG&E territory briefly cites earlier involvement in implementing a geoexchange demonstration project with PG&E from 1997 to 2000. Please describe the results of this project, including total expenditures.**

The GHPC collaboration with the PG&E was known as the "Northern California Geoexchange Commercialization/Model Utility Program Demonstration". The project was also supported by the California Energy Commission and the EPA/DOE Energy Star Program. The goals of the demonstration project were to:

- Conduct public education to raise awareness and acceptance among residential and commercial customers;
- Identify geoexchange system and loop configurations that optimize cost-effectiveness in California's climatic and soil conditions; and
- Remove cost and infrastructure barriers to commercialization. This was accomplished through the use of then GHPC funded West Coast regional training center in Davis, California.

Over the course of the demonstration project, geoexchange systems were installed in 326 residential properties (in a few cases completion was pending). In addition, 198 tons of geoexchange were installed in commercial buildings as a result of this program. Targeted outreach successfully educated consumers in the region, as demonstrated by an awareness survey conducted in 2000. Demonstration of this technology in the PG&E service territory led the company to include geoexchange in its Residential Air Conditioning System Distributor Incentive Program launched in 2000.

Total project funding was $2,084,000, with PG&E contributing $1,560,000 and GHPC co-funding of $524,000. Final PG&E budget numbers were unavailable as a result of PG&E's bankruptcy, although the budgeted utility funding level represents a good approximation for expenditures. As of June 1999, program expenditures were: PG&E – $1,208,813, CEC – $376,512, and GHPC – $348,677. A second phase of the project was launched in 2000 with a budget of ~$728,000 of which GHPC share is ~$175,323. This phase involved a marketing campaign targeting the Sierra Foothills region, contractor & trade ally training, trade ally & consumer outreach, technical support, and a financial assistance program. Due to PG&E's bankruptcy filing, GHPC has not yet received the deliverables for this phase of the project.

An Adobe PDF copy of the executive summaries of the phase one final report and a comfort & satisfaction survey report are enclosed for your review.

2. There is an error in the GHPC cost-effectiveness spreadsheets – you have omitted incremental measure cost per unit of geoexchange (measured in tons). Please revise your spreadsheet to include incremental measure cost per ton of installed geoexchange.

GHPC prepared a revised cost effectiveness spreadsheet for PG&E and SCE with values inserted for the incremental cost per ton of geoexchange. These are provided as an attachment for your review. Both programs are still cost effective at the $1,500 per ton estimate that is used. Please bear in mind that this estimate is conservative for planning purposes. The real incremental cost may turns out to be considerably lower, particularly in commercial buildings. The GHPC has found many cases in which the incremental cost is as low as $300 per ton in cases where geoexchange is selected over HVAC systems that are more advanced than the minimum allowed by building code (e.g. comparing geoexchange to a 4-pipe or a VAV system vs. 2-pipe). Also, please keep in mind that the cost effectiveness sheets assume a 15 year life for geoexchange (ground source heat pumps). This underestimates the life for geoexchange. The American Society of Heating Refrigeration & Air-Conditioning Engineers (ASHRAE) estimates the life of geoexchange at 19.8 years which is still a conservative estimate since replacement reports from the field show service life exceeding 22-23 years.

Thank you for your consideration.

Sincerely,

Wael El-Sharif
Business Development Director

PUBLIC UTILITIES COMMISSION
505 VAN NESS AVENUE
SAN FRANCISCO, CA 94102-3298

March 13, 2002

Douglas Mahone, Partner
Heschong Mahone Group
11626 Fair Oaks Blvd, # 302
Fair Oaks, CA 95628,

Re: Data Request on Proposal p01-21

Dear Mr. Mahone:

Thank you for submitting your proposal (Proposal for an efficient affordable housing program, Number 01-21) to the California Public Utilities Commission. In reviewing your proposal, we have several questions. Please provide the following additional information by noon on Monday, March 18, 2002 to smo@cpuc.ca.gov.

3. Please explain how the financial incentives in the budget will be allocated among participants?

4. What steps will you take to avoid double counting of savings in the event the property owner takes part in other rebate or incentives programs, which will also claim savings, to achieve qualification in your program?

5. Please provide additional detail for the elements contained in the budget items for labor. Also please identify or give examples of activity costs.

6. For areas outside of San Diego, will San Diego Regional Energy Office be a subcontractor? Would your proposal be viable in any other utility territory were the SDG&E portion not selected?

If you wish to mail a hard copy of the requested information, please use the address listed in the above letterhead, Attn: Sheila Otteson If you have questions, you may contact me by e-mail at smo@cpuc.ca.gov or by telephone at 415-703-2010.

Sincerely,

Sheila Otteson
Energy Division

-----Original Message-----
From: Douglas Mahone [mailto:dmahone@h-m-g.com]
Sent: Friday, March 15, 2002 11:40 AM
To: Otteson, Sheila M.
Cc: Nehemiah Stone
Subject: RE: Data Request

Ms. Otteson -

Attached please find our response to your questions. Thanks for your interest. Please let me know if you need further clarification.
The file is a Adobe Acrobat PDF file. Call or e-mail if you have any problems opening it.

Doug.

Douglas Mahone, Partner
Heschong Mahone Group
11626 Fair Oaks Blvd. #302
Fair Oaks, CA 95628

(916) 962-7001
fax (916) 962-0101
dmahone@h-m-g.com
web site: www.h-m-g.com
<<Data Request Response.pdf>>

> -----Original Message-----
> From: Otteson, Sheila M. [mailto:smo@cpuc.ca.gov]
> Sent: Thursday, March 14, 2002 8:00 AM
> To: Douglas Mahone
> Subject: Data Request
>
> << File: DR to heschong reference No 255.doc >>
>

Re: Data Request on Proposal p01-21

Dear Mr. Mahone:

Thank you for submitting your proposal (Proposal for an efficient affordable housing program, Number 01-21) to the California Public Utilities Commission. In reviewing your proposal, we have several questions. Please provide the following additional information by noon on Monday, March 18, 2002 to smo@cpuc.ca.gov.

1. Please explain how the financial incentives in the budget will be allocated among participants?

2. What steps will you take to avoid double counting of savings in the event the property owner takes part in other rebate or incentives programs, which will also claim savings, to achieve qualification in your program?

3. Please provide additional detail for the elements contained in the budget items for labor. Also please identify or give examples of activity costs.

4. For areas outside of San Diego, will San Diego Regional Energy Office be a subcontractor? Would your proposal be viable in any other utility territory were the SDG&E portion not selected?

If you wish to mail a hard copy of the requested information, please use the address listed in the above letterhead, Attn: Sheila Otteson If you have questions, you may contact me by e-mail at smo@cpuc.ca.gov <mailto:smo@cpuc.ca.gov> or by telephone at 415-703-2010.

Sincerely,

Sheila Otteson
Energy Division

May 6, 2002

Sheila Otteson
Energy Division
Public Utilities Commission
505 Van Ness Avenue
San Francisco, CA 94102-3298

Dear Ms. Otteson,

We appreciate your effort to better understand our proposal for an innovative Efficient Affordable Housing (EAH) program. Please review our responses below and in the attached documents, and let us know if you need any additional information.

1. The incentives will be paid to property owners for achieving either an improvement of 20% in the energy performance of their rental units or for making the units at least 10% better than current Title 24. Incentives will be paid at the rate of $800 per unit so improved. We estimate that this will cover roughly two thirds of the average cost to make those improvements – a little more than 2/3 for multifamily units and a little less than 2/3 for single family units. Since this program is targeted at properties seeking a Section 8 voucher, most of the units will be multifamily.

We have attached a sheet that shows the derivation of our estimates. On the sheet, the table in the upper right shows how we estimated the cost of a set of improvements needed to achieve the increase in efficiency ($1121). There are other ways that one could get there, but this is a reasonable combination of measures.

The columns in the table in the middle of the page represent the four climate zones on which we intend to concentrate for the first two years (CZs 7, 10, 11 and 12). Directly below the CZ label is the number of properties (one property can have many residential units) we believe we will affect in each of the two years, and the next three rows (yellow) show the estimated (using MICROPAS) energy budgets for one base case residential unit. The next three rows (grey) provide the estimated energy savings by climate zone. These estimates are based on the assumptions listed below the tables. The summary in the bottom left shows the number of participant properties, the number of units, the incentive totals and the average per unit savings.

2. The EAH program will focus on improvements that affect energy use specifically accounted for in Title 24 computer analysis of residential buildings. This includes heating, cooling and water heating energy. The other programs with which we will coordinate could focus on these or appliance efficiency gains. There is no overlap or potential for double counting with programs that help tenants or landlords replace washers, dryers, dishwashers, refrigerators or other home appliances.

We will however, coordinate with other programs that might focus on improvements in the same measures we will target. In those cases, the nature of the coordination itself may obviate the

potential for double counting. For example, if there is a program that associates HERS raters with an administrator that offers rebates for making a percentage improvement in existing residences, our part in those projects might only be to assist the housing authority to develop a two tiered utility allowance that fosters investments in efficiency. We would not offer an incentive to anyone to do something for which they are receiving an incentive from some other program. Likewise, if we developed a lead, and had a signed application before the HERS rater becomes involved (to verify the potential, then the actual savings), then we would claim the impacts come from EAH. We will make every effort to achieve the maximum energy efficiency gain with the minimum in total administrative costs for multiple programs.

Our primary effort, and the thing that makes this program unique, will be our efforts to change the housing authorities' approach to setting maximum rents – so that energy efficiency investments are advantaged, not disadvantaged. When we have a chance to effect that change, even if another program gets the credit for the energy savings on the specific project involved, we will do so. Changing the housing authorities' calculations will help to bring about much greater gains in efficiency, for a much broader population of buildings, than the potential savings from any one individual project.

3. For greater detail on the labor budget item, please see the attached budget sheet. As you can see, about one third of the labor budget will be dedicated to assisting the housing authorities in developing, adopting and implementing a utility allowance schedule that fosters energy efficiency investments. About two thirds of our labor will be applied to marketing the program to landlords, assisting them to identify and commit to cost effective efficiency improvements, and verifying installations.

There are two ways that participants can qualify: improve the property to 20% better than it currently is, or improve the property to 10% better than the current Title 24 standards. A portion of our direct labor budget is for verifying the installations (when the path of "10% better than current Title 24 standards" is chosen). before giving them their incentive checks. The line item "Activity Costs" on the Program Cost Proposal (Section 9) is the estimated cost for HERS verification of those installations where "20% better than existing" is the qualification path chosen. This program has the added advantage of fostering the growth of the HERS industry in California.

4. SDREO is only intended to be a subcontractor in the San Diego region. We are proposing this partnership to reduce travel costs and increase the direct presence in the region. We can cost effectively access other area of the state.

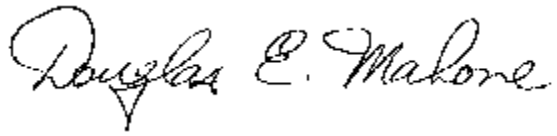
You asked whether our proposal would still be "viable in any other service territory were the SDG&E portion not selected." First, the simple answer is yes. However, a more comprehensive answer is in order.

There are two elements to the EAH program: the housing authority element and the property owner element. Although both elements could be pulled from the SDG&E territory, we believe that the San Diego Housing Commission is very close to understanding and adopting a two tiered utility allowance schedule. There would be no effort and no expertise to assist them without EAH. Even if the property owner element of EAH were not offered in San Diego (e.g., because of a duplication with an SDG&E or other third party program), we believe that the housing

authority element would be extremely valuable in getting SDHC through the last phase of adopting a new utility allowance schedule. Is it necessary to the success of EAH? No. Is it important to the advancement of energy efficiency in San Diego? Yes!

I hope that this answers all of your questions, but if there is any further clarification that I can help you with, please give me a call.

Sincerely,



Douglas E. Mahone
Partner

CPUC RFP - Efficient Affordable Housing

Heschong Mahone Group Task Estimates 1/3/2002 NIS

PY2002 (5/01/02 - 12/31/02) YR1

Hours by Task	Mahone	Stone	Benningfield	Ehrlich	Denniston	Pande	Herrmann	*Housing Ath.*	Totals
1. Project Initiation Meeting	10	24	14	14	14		10	10	96
2. Housing Authority Assistance	35	467	257	117	117		58	117	1,168
2.1 Develop E Eff Utility Allowance Schedules									-
2.2 Asist w/ Adoption									-
2.3 Training									-
2.4 Implementation Evaluation									-
3. Section 8 Efficiency Element	46	350	653	350	467	233	117	117	2,333
3.1 Marketing									-
3.2 Initial Property Analyses									-
3.3 Installation Verification									-
4. Project Management	12	51	51	-	-	-	13		127
Totals	103	892	975	481	598	233	198	244	3,724

Labor Costs by Task	Mahone	Stone	Benningfield	Ehrlich	Denniston	Pande	Herrmann	*Housing*	
Rate $/hr	$140	$110	$110	$90	$60	$75	$45	*$100*	Totals
1. Project Initiation Meeting	1,400	2,640	1,540	1,260	840	-	450	1,000	9,130
2. Housing Authority Assistance	4,900	51,370	28,270	10,530	7,020	-	2,610	11,700	116,400
2.1 Develop E Eff Utility Allowance Schedules	-	-	-	-	-	-	-	-	-
2.2 Asist w/ Adoption	-	-	-	-	-	-	-	-	-
2.3 Training	-	-	-	-	-	-	-	-	-
2.4 Implementation Evaluation	-	-	-	-	-	-	-	-	-
3. Section 8 Efficiency Element	6,440	38,500	71,830	31,500	28,020	17,475	5,265	11,700	210,730
3.1 Marketing	-	-	-	-	-	-	-	-	-
3.2 Initial Property Analyses	-	-	-	-	-	-	-	-	-
3.3 Installation Verification	-	-	-	-	-	-	-	-	-
4. Project Management	1,680	5,610	5,610	-	-	-	585	-	13,485
Totals	$14,420	$98,120	$107,250	$43,290	$35,880	$17,475	$8,910	$24,400	$349,745

	Year 1	Year 2	Total	Travel	Prntg/Cpyng	MKTG
Energy kWh	236,061	2,204,092	2,440,153	$1,000	2,050	95,000
Therms	14,622	109,500	124,122			
Demand kW	354	3,306	3,660			

Participants' Costs

	MEASURE	Units (SF, MF etc.)	Cost Per Unit	**Full Cost**
A	New E Eff DHW (50 Gal, .60EF)	1	$ 617.00	$ 279.00
B	New E Eff DHW (50 Gal, .63EF)	1	$ 350.00	$ 350.00
C	Attic insulation (add R-19)	1761	$ 0.31	$ 545.91
D	Floor insulation (add R-29)	1761	$ 1.01	$ 1,778.61
E	Duct Tightening	1	$ 540.00	$ 540.00
F	TXV and Rfrg. Charge	1	$ 225.00	$ 225.00
			B+C+F	**$ 1,120.91**

HMG Summary

Labor Costs	$349,745
Direct Costs	$203,770
Program Total	**$553,515**
EM&V	$ 50,000
Subtotal	$ 603,515
IOU Admin	$ 30,176
Total	**$ 633,691**
FINANCING	$ 5,812
GRAND TOTAL	$ 639,503

Year One

CZ		7	10	11	12	Total
	# Projects	4	0	0	1	5
Exstg. Bgt	Heat	15.02	33.58	59.65	61.62	
	Cool	16.92	59.29	60.48	43.20	
	DHW	15.88	15.88	15.88	15.88	
Savings	Heat	436848.4	0	0	448046	884894 kBtu
	Cool	492108.8	0	0	314112	806221 kBtu
	DHW	461861.0	0	0	115465	577326 kBtu
						236061 kWh
						14622 Therms

Year Two

CZ		7	10	11	12	Total
	# Projects	15	4	4	7	30
Exstg. Bgt	Heat	15.02	33.58	59.65	61.62	
	Cool	16.92	59.29	60.48	43.2	
	DHW	15.88	15.88	15.88	15.88	
Savings	Heat	1638181	976656	1734887	3136321	7486045 kBtu
	Cool	1845408	1724417	1759027	2198784	7527636 kBtu
	DHW	1731979	461861	461861	808257	3463957 kBtu
						2204092 kWh
						109500 Therms

Assumptions in calculating totals in grey cells:
1/2 of participants = single family 1600sf homes
1/2 of participants = avg. 25 unit apt bldgs @ 900sf/apt
20% energy use reduction for each residence

Cells highlighted in yellow list the kBtu/sf energy use estimates calculated using MICROPAS and baseline assumptions from the Jan. 7, 2002 Existing Residential Baseline Report as much as possible.

CPUC RFP - Efficient Affordable Housing
Heschong Mahone Group Task Estimates

PY2003 (01/01/02 - 12/31/03) YR2

Hours by Task	Mahone	Stone	Benningfield	Ehrlich	Denniston	Pande	Herrmann	*Housing Ath.*	Totals
1. Project Initiation Meeting	2	4	6	4	4	-	2	2	24
2. Housing Authority Assistance	54	540	270	180	540	-	36	180	1,800
2.1 Develop E Eff Utility Allowance Schedules	-	-	-	-	-		-		-
2.2 Asist w/ Adoption	-	-	-	-	-		-		-
2.3 Training	-	-	-	-	-		-		-
2.4 Implementation Evaluation	-	-	-	-	-		-		-
3. Section 8 Efficiency Element	72	180	1,008	360	1,260	360	180	180	3,600
3.1 Marketing	-	-	-	-	-		-		-
3.2 Initial Property Analyses	-	-	-	-	-		-		-
3.3 Installation Verification	-	-	-	-	-		-		-
4. Project Management	24	96	96	-	-		24		240
Totals	152	820	1,380	544	1,804	360	242	362	5,664

Labor Costs by Task	Mahone	Stone	Benningfield	Ehrlich	Denniston	Pande	Herrmann	*Housing*	
Rate $/hr	$155	$120	$120	$100	$65	$80	$50	$110	Totals
1. Project Initiation Meeting	310	480	720	400	260	-	100	220	$2,270
2. Housing Authority Assistance	8,370	64,800	32,400	18,000	35,100	-	1,800	19,800	$160,470
2.1 Develop E Eff Utility Allowance Schedules	-	-	-	-	-	-	-	-	$0
2.2 Asist w/ Adoption	-	-	-	-	-	-	-	-	$0
2.3 Training	-	-	-	-	-	-	-	-	$0
2.4 Implementation Evaluation	-	-	-	-	-	-	-	-	$0
3. Section 8 Efficiency Element	11,160	21,600	120,960	36,000	81,900	28,800	9,000	19,800	$309,420
3.1 Marketing	-	-	-	-	-	-	-	-	$0
3.2 Initial Property Analyses									
3.3 Installation Verification	-	-	-	-	-	-	-	-	$0
4. Project Management	3,720	11,520	11,520	-	-	-	1,200	-	$27,960
Totals	$23,560	$98,400	$165,600	$54,400	$117,260	$28,800	$12,100	$39,820	$500,120

	Travel	Prntg/Cpyng	MKTG	HERS	Phone	Incentives	Totals
Direct Costs	18,000	1,550	85,000	$77,000	$720	$260,000	$ 442,270

HMG Summary	
Labor Costs	$500,120
Direct Costs	$ 442,270
Program Total	**$942,390**
EM&V	$ 150,000
Subtotal	$ 1,092,390
IOU Admin	$ 54,620
Total	$ 1,147,010
FINANCING	$ 9,895
GRAND TOTAL	$ 1,156,905

PUBLIC UTILITIES COMMISSION
505 VAN NESS AVENUE
SAN FRANCISCO, CA 94102-3298

March 13, 2002

John McLain **Sent via email: john_mclain@pgn.com**

Efficiency Services Group
16280 SW Boones Ferry Road
Portland, Oregon 97224
john_mclain@pgn.com

This correspondence is written regarding the Efficiency Services Group program proposal entitled "Energy and Water Saving Program for Residential Rental Properties in Targeted Local Communities in PG&E Area." We request the following additional information regarding your proposal:

- What measures will be provided to the typical mobile home? Please include the number of units installed on a per-measure basis. (e.g. X # compact fluorescent lightbulbs.)
- Will the services provided to mobile home residents include the conduction of Combustion Appliance Safety testing? If so, please provide the budget details associated with this work, on a per-test basis.
- Does the program intend to include safeguards to ensure that, on the whole, a comprehensive package of energy efficiency measures will be delivered to mobile home residents? If so, please provide details of these safeguards.
- Please provide details on hot water heater timers (p. 11 of proposal), including the process for enrolling residents on time-of-use rates. These details should include full and incremental cost per hot water heater timer.
- Please provide details on how proposed program will change the process a tenant would take for participating in local water company programs. (p. 11 of proposal). If program funds will be used to augment incentives local water utilities are offering for water-saving devices, please provide details on proposed augmentation. These details should be outlined on both a per-measure basis, and include the number of estimated units rebated per measure. Finally, please provide details on the installation costs the customer would pay, per measure.
- Does the program intend to include safeguards to ensure that contractors do not use public purpose funds to promote services not included under this program? (i.e. Contractor promotes own services to residents when conducting program work.) If so, please provide details of these safeguards.
- The program proposed to target the greater Bay Area counties (p. 14 of proposal), and the Fresno-King-Kern area. Please segment the budget according to these two territories, and section costs on a per-apartment basis.

A response should be provided via e-mail, by noon on Tuesday, March 19, 2002. Please send your response to tdh@cpuc.ca.gov. If you wish to mail a hard copy as well, please use the address listed in the above letterhead, Attn: Tuukka Hess, Energy Division.

Thanking you in advance for your prompt response,

Energy Division Staff
CPUC

BEFORE THE PUBLIC UTILITIES COMMISSION

OF THE STATE OF CALIFORNIA

Order Instituting Rulemaking to Examine the Commission's Future Energy Efficiency Policies, Administration and Programs.	R.01-08-028 (Filed August 23, 2001)

REPLY TO REQUESTS FOR ADDITIONAL INFORMATION ABOUT EFFICIENCY SERVICES GROUP'S PROGRAM PROPOSAL ENTITLED "ENERGY AND WATER SAVING PROGRAM FOR RESIDENTIAL RENTAL PROPERTIES IN TARGETED LOCAL COMMUNITIES IN PG&E AREA**"**

Efficiency Services Group Inc., a wholly owned subsidiary of Portland General Electric, and the RES-Team contractors (consisting of American Synergy, Cal-UCONS, Quality Conservation Services and Winegard Energy) respectfully submit the following information in response to questions received March 14, 2002. The questions were directed at the Energy and Water Saving Program For Residential Rental Properties In Targeted Local Communities in Pacific Gas & Electric (PG&E) Area proposal.

The following responses are organized to first state each **QUESTION**, immediately followed by an **ANSWER** to that question. Efficiency Services Group Inc. and members of the RES-Team representing American Synergy, Cal-UCONS, Quality Conservation Services and Winegard Energy have reviewed each question and answer.

QUESTION (1): "What measures will be provided to the typical multifamily unit? Please include the number of units installed on a per-measure basis. (e.g. X # compact fluorescent lightbulbs.) "

ANSWER (1): The program has two primary elements. The first element provides multifamily tenants, with the approval of the property manager, a comprehensive set of free energy efficiency measures suitable and targeted to benefit the HTR multifamily market. The second element offers property owners a set of options that they may contribute toward to achieve additional energy and/or water savings. Attachment A (Measures) groups the measures into "Free" and "Co-payment" and provides estimated installation rates on a per measure basis.

QUESTION (2): "Will the services provided include the conduction of Combustion Appliance Safety testing? If so, please provide the budget details associated with this work, on a per-test basis."

ANSWER (2): If the Commission requires that the program sponsors conduct Combustion Appliance Safety (CAS) testing as part of the procedures related to the installation of certain energy efficiency measures, then we will include them in the procedures for installation.

To date, neither the Commission nor the Contractors State Licensing Board, nor any other standards setting agency nationally or in California have required combustion appliance testing to be done for any of the measures we have proposed for the programs. Moreover, we note that a requirement for such CAS tests has not been included in any 2002 energy efficiency program proposed by PG&E or by any other IOU or by any third party for measures that affect infiltration or combustion appliances.

Because we did not (and do not) foresee the need for such a procedure, it was not included in our budget, either in total or on a per-test basis. Moreover, the costs for these types of tests vary greatly, depending upon their comprehensiveness or goals. For example, there are very significant differences between those tests conducted by PG&E and those conducted by SoCalGas and by SDG&E. Details on their costs could be secured from each of those IOUs, if desired.

Each of the gas IOUs (including PG&E) have funds included in their budgets to cover CAS tests requested by their customers or required to be completed by the respective IOUs. The Commission has repeatedly found that, when a utility requires that CAS tests be used either prior to installation (as PG&E has sometimes required in the past) or, if desired, following installation, the costs of those tests are to be born by utility O&M budgets, and definitely should not be charged to any public purpose programs. This Commission policy was made and/or confirmed in at least the following instances: D.98-06-063; Res E3515; D.01-03-028 (p.35); and D.01-03-028 (p. 108). The most recent of these clearly states that the costs of such tests shall not be billed to public purpose programs:

> The Commission has determined that natural gas appliance safety/CAS testing will not be billed to LIEE **or any other public purpose program** and this issue should not be relitigated during the PY 2002 program planning cycle. Whether and how the utilities can increase distribution rates to recover the costs of natural gas appliance safety/CAS is an issue to be determined in pending or future cost of service ratemaking proceedings, and not the PY 2002 program planning cycle. [D.01-03-028, Conclusion of Law No. 20, Emphasis added]

If the CPUC elects (a) to mandate CAS test for all measures which may affect infiltration and (b) to require that CAS testing be funded from PGC funds, the Energy Services Group Inc. and the RES-Team

agrees to incorporate or provide this service, but we will need to reduce the total number of units and resultant savings that can be achieved from the remaining funds requested.

QUESTION (3): "Does the program intend to include safeguards to ensure that, on the whole, a comprehensive package of energy efficiency measures will be delivered to program participants? If so, please provide details of these safeguards."

ANSWER (3): The Safeguards to achieve comprehensiveness are in having the Energy Efficiency Group administer this program. As administrators for the program and with no installation role (measure installation will be completed by the RES-Team contractors), Energy Services Group has no incentive to do anything BUT deliver the expected quality and comprehensiveness. Since 1995, Portland General Electric (and the Energy Services Group) has provided successful, comprehensive, Oregon PUC approved, direct install multi-family programs to nearly 30,000 tenants.

Section 1.1.3. "The Program" summarizes the program, describing it as a two-part offer. The Basic, "free" package includes insulation, water, heating, lighting, and weatherization, and infiltration measures. The "Options" (Co-Payment required) package includes additional energy and water saving measures that can be purchased using economies of scale and partial funding from either PGC or water utility contributions to reduce costs and encourage installation. These installations are primarily the responsibility of the individual contractors.

Section 2.5 "INSPECTION AND QUALITY ASSURANCE indicates that inspections of completed work will be performed. The inspections will include (1) quality verifications of completed work for both "Free" and "Co-Payment" measures to predetermined California and IOU standards and (2) inspections for missed opportunities. "Missed opportunities" are opportunities where energy efficiency measures could have been installed and were not. These inspections for quality and for comprehensiveness are primarily the responsibility of the Efficiency Services Group.

Performance expectations will be established by contract to ensure the RES-Team contractors will be required to address both quality and missed opportunity issues.

QUESTION (4): "Please provide details on hot water heater timers (p. 11 of proposal), including the process for enrolling residents on time-of-use rates. These details should include full and incremental cost per hot water heater timer."

ANSWER (4): Hot water heater timers were initially proposed under the 2000 Summer Initiative Program and were approved by the Commission for multi-family facilities with electric water heat,

although they did not generally have time of use (TOU) rates available. Nationally, water heater timers are often employed in regions where "time of use rates" are not yet in place for residential tenants (as is the case for most PG&E tenants). In regions having limited time of use rates, timers still provide a strong regional benefit by reducing peak demand, but the benefits to participating customers are not as great as they could be when tariffs are employed to send appropriate price signals to users.

We do not propose to "enroll tenants in existing PG&E tariffs" as PG&E has already taken this action. Rather, we offer timers to property managers and tenants in order to maximize system peak demand benefits when they are available and the benefits of the energy savings available immediately. When (and where) time of use rates have been approved, we can provide tenants and property managers with utility approved information about how to subscribe so they can achieve their greatest savings for using energy most efficiently.

We have worked in a collaborative manner with regulatory agencies, customers and utilities in those regions that desire to have a greater impact on residential customer peak demand usage. Should the CPUC wish to achieve a residential contribution to reducing peak demand, the installation of water heater timers could help accomplish that objective.

There are two (2) primary applications we contemplate water heat timers to be utilized for our multi-family program:

1. For individual units with electric hot water heaters, and
2. For water heaters supplying washing machines in common areas.

Our experience is that the "Full Costs" to market, procure and install water heat timers is $200/unit, taken for the amount approved by the Commission as part of the HTR Summer Initiative Program. For our proposal, incremental costs are projected to be $125 per unit.

QUESTION (5): "Please provide details on how proposed program will change the process a tenant would take for participating in local water company programs. (p. 11 of proposal). If program funds will be used to augment incentives local water utilities are offering for water-saving devices, please provide details on proposed augmentation. These details should be outlined on both a per-measure basis, and include the number of estimated units rebated per measure. Finally, please provide details on the installation costs the customer would pay, per measure."

ANSWER (5): The option to purchase measures noted in the proposal for "water closets and outdoor watering controls" is directed to "Owners". All incremental costs associated with these options will be born by property owners and local water districts. Public Goods Charge (PGC) will not be used to provide this feature of the SWEEP Multi Family Direct Install Program.

This option, depending upon the water metering configuration and tenant contract, has the potential to save money for both the property owner and the tenants. It also has the potential to reduce water district processing and pumping requirements, therefore decreasing energy demands as a result of reduced water processing plant and delivery system operations. Please note however, that no credit is taken or requested in the proposed program for these energy savings. The number, type and costs for the various improvements will depend directly upon the level of participation by the local water companies and cannot be projected at this time.

QUESTION (6): "Does the program intend to include safeguards to ensure that contractors do not use public purpose funds to promote services not included under this program? (i.e. Contractor promotes own services to residents when conducting program work.) If so, please provide details of these safeguards."

ANSWER (6): Normally the Efficiency Service Group (ESG) would incorporate a contact provision between ESG and each RES-Team contractor, including their sub contractors concerning promotion of services. The provision speaks to solicitation for additional business, that for a period of 12 months on the completion of installation for a customer, a RES-Team contractor, having had a contract with, or knowledge of such customer, by virtue of the program, may not solicit additional work.

Unless otherwise directed by the commission, we expect to include a similar provision in our contracts with the RES-Team contractors and their subcontractors. The exception would be those contractors that participate in other PGC related energy efficiency programs, offering different services or products through other marketing channels, and delivered independently from the Multi Family Direct Install program, or as directed by the Commission.

QUESTION (7): "The program proposed to target the greater Bay Area counties (p. 14 of proposal), and the Fresno-King-Kern area. Please segment the budget according to these two territories, and section costs on a per-apartment basis."

ANSWER (7): Our evaluation of and our experience with both the Greater Bay Area and the Fresno-Kings-Kern county area confirms that both areas have a large number of MF tenants who are not deriving substantial benefits under current IOU programs. Both areas could readily utilize 100% of the proposed PG&E-area programs within their respective counties. Should the Commission desire us to do so, we could shift all of the proposed work to either of the two areas.

Currently, for the program as proposed, we internally projected that the majority (60%) of multi-family HTR units would come from the Greater Bay Area, consisting of Alameda, Contra Costa, Marin, San Mateo, San Francisco and Solano counties. This would consist of approximately 30,000 multifamily units in the Bay Area compared to about 20,000 in the Fresno-Kings-Kern county area.

Internally, we estimated that the average incentive amount per apartment would be about $400. However, because we assume the average apartment size in San Francisco and the Bay Area would be somewhat smaller and because of the more extreme weather of the Fresno-Kings-Kern region, we assumed that the amount of work needed in the average Bay Area apartment would be somewhat less than average while those in the Fresno-Kings-Kern area would need more measures installed. For planning purposes, we have projected an average cost for the Bay Area of about $367 per apartment treated, with the Fresno-King-Kern area average incentive going for about $450 each.

Based upon these projections, we assume that of the total program costs (excluding the 5% IOU administrative fee), about $11,000,000 will be for the Greater Bay Area (30,000 apartments times $367/apartment) and about $9,000,000 (20,000 apartments times $450/apartment) for the Fresno-Kings-Kern area.

CONCLUSION

Efficiency Services Group Inc. and the RES-Team contractors, consisting of American Synergy, Cal-UCONS, Quality Conservation Services and Winegard Energy, appreciate the opportunity to respond to the California Public Utilities Commission's questions. We are confident that our experience in running similar programs in Oregon will provide a level of assurance that the our proposal provides cost-effective and meaningful benefits to targeted hard-to-reach and under served customers while protecting the interests of all ratepayers. We are looking forward to working with the California Public Utility Commission now and in the future.

Respectfully Submitted,
Earl Curtis, Efficiency Services Group Inc.
A wholly owned subsidiary of
Portland General Electric

Earth Advantage National Center
16280 SW Upper Boones Ferry Road
Portland, Oregon 97224
Phone: (503) 603-1699
Fax: (503) 603-1750
E-Mail: Earl_Curtis@pgn.com

Attachment A

MEASURES

FREE MEASURES		
GROUPING	PENETRATION RATE PER MEASURE ESTIMATE	UNIT PER MEASURE
Water Heating Measures		
♦ Low Flow Shower Heads (Each)	0.75 (Note 1)	37,500
♦ Aerators (Per APT.)	0.4 (Note 1)	20,000
♦ Pipe Wraps (Per APT)	0.04 (Note 1)	2,000
♦ Tank Wraps (Per Tank)	0.04 (Note 1)	2,000
CFL Light Measures		
♦ Hardwired Fixtures	1.9 (Note 2)	97,500
♦ Interior CFL	3.0 (Note 3)	150000
♦ Exterior CFL	0.3	15,000
♦ Common CFL	1.0	50,000
Shell Measures		
♦ Setback Thermostats	0.5	25,000
♦ Air Infiltration (Per APT)	0.4 (Note 4)	20,000
♦ Duct Test/Sealing (Per APT)	0.02	1000
♦ Insulation,(All Types)	34 ft^2 (Note 5)	1,705,000 ft^2
Co-Payment Measures		
Insulated Windows	0.2 ft^2 (Note 1)	10,000 ft^2
Water Heater Timers (Each)	0.01 (Note 1)	500

Notes:

1) Not all of the 50,000 units estimated for treatment will require this measure.
2) This number includes interior tenant controlled, common area, and exterior lighting.
3) This is an average of interior tenant controlled lights at various wattage's
4) Every unit will receive air infiltration treatment consisting of different measures. The installation of each measure will be determined on a case by case basis determined by the conditions found at the time of installation.
5) This is an average of insulation values based upon initial conditions. Not all of the 50,000 units estimated for treatment will require this measure. The combined insulation levels are the equivalent of providing some type of insulation to approximately 20% of all multifamily buildings.

PUBLIC UTILITIES COMMISSION
505 VAN NESS AVENUE
SAN FRANCISCO, CA 94102-3298

March 13, 2002

Stephen Shallenberger **Sent via email: shallenbgn@aol.com**
President
American Synergy Corporation
28436 Satellite St.
Hayward, CA 94545
shallenbgr@aol.com

Kathleen E. Carlson Sent via email: rmowris@earthlink.net
President
Robert Mowris and Associates
10 Ridge Lane
Orinda, CA 94563
rmowris@earthlink.net

This correspondence is written regarding the American Synergy Corporation/Robert Mowris and Associates program proposal entitled "Comprehensive Hard-to-Reach Mobile Home Energy Savings Program." We request the following additional information regarding your proposal:

- The program claims to "provide a comprehensive energy program to 4000 small commercial customers." (pg. 6 of proposal) Nowhere are plans for this small commercial program mentioned. Do you plan on offering services to this sector? If so, please provide appropriate details.
- What measures will be provided to the typical mobile home? Please include the number of units installed on a per-measure basis. (e.g. X # compact fluorescent lightbulbs.)
- Will the services provided to mobile home residents include the conduction of Combustion Appliance Safety testing? If so, please provide the budget details associated with this work, on a per-test basis.
- Does the program intend to include safeguards to ensure that, on the whole, a comprehensive package of energy efficiency measures will be delivered to mobile home residents? If so, please provide details of these safeguards.
- Does the program intend to include safeguards to ensure that contractors do not use public purpose funds to promote services not included under this program? (i.e. Contractor promotes own services to residents when conducting program work.) If so, please provide details of these safeguards.

A response should be provided via e-mail, by noon on Tuesday, March 19, 2002. Please send your response to tdh@cpuc.ca.gov. If you wish to mail a hard copy as well, please use the address listed in the above letterhead, Attn: Tuukka Hess, Energy Division.

Thanking you in advance for your prompt response,

Energy Division Staff
CPUC

BEFORE THE PUBLIC UTILITIES COMMISSION

OF THE STATE OF CALIFORNIA

Order Instituting Rulemaking to Examine the Commission's Future Energy Efficiency Policies, Administration and Programs.	R.01-08-028 (Filed August 23, 2001)

American Synergy Corporation with Robert Mowris and Associates respectfully submit the following information in response to questions received March 13, 2002 about the "Comprehensive Hard-to-Reach Mobile Home Energy Savings Program" in the Pacific Gas & Electric (PG&E) service territory.

18 March 2002

Mr. Tuukka Hess
Energy Division
State of California
Public Utilities Commission
tdh@cpuc.ca.gov
505 Van Ness Avenue
San Francisco, CA 94102-3296

Dear Tuukka:

We appreciate your letter seeking additional information on our proposal entitled "Comprehensive Hard-to-Reach Mobile Home Energy Savings Program." I have itemized each item that you have requested clarification or more information with a number and the request for information, with our response in Italics.

1. **The program claims to "provide a comprehensive energy program to 4000 small commercial customers." (pg. 6 of proposal) Nowhere are plans for this small commercial program mentioned. Do you plan on offering services to this sector? If so, please provide appropriate details.**

On the original and hard copies of the proposal this item was supposed to have been crossed-out and initialed. One may have slipped through where it was not crossed off. If it still appears in the proposal, this is in error and should be deleted. I went back and noticed in the electronic filing that it is already deleted.

2. **What measures will be provided to the typical mobile home? Please include the number of units installed on a per-measure basis. (e.g. X # compact fluorescent light bulbs.)**

Typical measures that will be installed include a combination of the following items:

Measure Description	Qty/Mobile Home	Estimated % of Mobile Homes
Duct test and seal (test and professionally seal the duct system)	1	67%
AC Diagnostic and tuning (check and correct refrigerant charge/airflow)	1	17%
Compact Fluorescent Lamps	3.5	50%
Hard-wire interior fixture and fluorescent light.	1	62%
Hard-wire and CFL's in Common Areas (Per Mobile Home Park)	25	85%
Programmable thermostat	1	17%
Water heater blanket	1	3%
Low-flow showerhead	1	78%
Faucet aerator	2	42%
Pipe Insulation	1	8.3%

We anticipate that the mobile home customers that we target will require many of these measures since few contractors specialize in servicing mobile homes and there is a great need for serving these customers and homes (one of the most underserved and hard-to-reach markets).

The mobile home property manager or owner will be contacted about the availability of this comprehensive hard-to-reach energy savings program. With permission of the park manager, each mobile home customer will receive a letter informing him or her of the program. The mobile home owner will call our office for a scheduled appointment. We do not "cold" call customers directly - they call us.

At the appointed time, the trained technician will do a survey of the mobile home to see what energy efficient measures that it stands in need of. Once an assessment is completed, the technician and work crew will perform whatever measures are needed to fully maximize energy savings and satisfaction for the customer. Pre- and post-test results are provided to the customer to indicate the improvement of their system.

It is our estimate that 6,000 mobile home owners will require some type of energy efficiency measure to maximize their energy efficiency, as projected above. Some homes will already have certain measures installed. Because most of the measures have a long-term permanence, we will install what is needed.

3. Will the services provided to mobile home residents include the conduction of Combustion Appliance Safety testing? If so, please provide the budget details associated with this work, on a per-test basis.

If the Commission requires the use of CAS testing for all affected energy efficiency programs, then ASC and RMA will incorporate such testing into our programs. Such a requirements, should they be required at all, should be implemented in a uniform state-

wide procedure for all IOUs and all costs for the testing should come solely from IOU funds outside of PGC funds.

This is the procedure already approved by the Commission in the Commission's LIEE dockets for similar requirements. It is our understanding that PG&E does not include this requirement for its own upcoming (2002) Residential or Multi-Family rebate and retrofit programs. Nor do any of the other IOUs include this testing for their Statewide or Local programs involving combustion appliances or other measures affecting combustion appliance safety.

While the IOU residential and multi-family rebate programs are not as comprehensive and do not include, for example, duct testing and sealing work or AC Diagnostics, they **do include** infiltration reducing measures such as window repair and replacement and attic insulation packages which usually include infiltration reduction features.

The issue of CAS tests being required when retrofits may reduce infiltration rate has been extensively reviewed in a number of dockets, especially in the low-income dockets. In these, the Commission has not required CAS tests be mandated. To date the Commission has left it up to the utilities to determine under what circumstances to require CAS tests and when (before or after installation).

The Commission does have an open docket item to determine the need for such tests and, if needed, how to standardize their use. However, in ALL related decisions, the Commission has required that if PG&E or any other IOU does require any CAS tests, these be paid for by the IOUs, which have been budgeted funds for these, and that the costs NOT be charged to PGC funds. For this reason, we have not included these as a measure or as a cost. The Commission does not require the use of CAS tests to date. And if they do become required, then we expect that the cost of these will be charged to the utilities' general funds and not to the PGC funds. If CAS testing is to be required at all, the utilities should use a uniform state-wide procedure for all CAS testing required and that any costs for the testing shall come solely from IOU funds outside of PGC funds. This is the procedure already approved by the Commission in the Commission's LIEE dockets.

ASC has performed many thousands of duct tests and seals on mobile homes in the Southern California Edison and Southern California Gas areas, without the requirement of a CAS test. We also completed a 3rd party initiative with San Diego Gas & Electric with over 1,000 mobile homes, and once again, there was no requirement of a CAS test.

However, if a CAS test is required, the cost to perform this work takes approximately 30-45 minutes and the per-test cost would be $50.00 per site. If the customer does not pass the CAS test, both the customer and utility will be informed for corrective action. Corrective action would be the responsibility of the customer.

If, indeed, the CPUC requires a CAS test for each mobile home to be paid for from our budget, then ASC will need to modify or reduce the total number of proposed mobile homes served to accommodate this added service.

4. **Does the program intend to include safeguards to ensure that, on the whole, a comprehensive package of energy efficiency measures will be delivered to mobile home residents? If so, please provide details of these safeguards.**

Our installers and auditors are trained to evaluate each potential mobile home participant to determine the most complete set of comprehensive measures to install. All technicians are thoroughly trained on duct testing and sealing and air conditioner tune-ups.[8] A thorough audit of each mobile home is performed to see if the measures mentioned above are installed. Measures are noted on data collection/installation forms or entered electronically into our Microsoft Access Mobile Home Database. Technicians report their pre-test and post-test information in order to verify proper installation (a sample of our Mobile Homes database data collection screens are shown in Attachment 1). These data collection forms will be modified specifically for this proposal.

During the year of 2001, American Synergy Corporation successfully completed a number of Mobile Home Projects and also participated in the Summer Initiative Program. During those programs American Synergy Corporation and Robert Mowris and Associates established a track record of installing a variety of measures that worked toward realizing a comprehensive package view versus installation of one or two measures. In one of the projects, a 3rd party initiative, designed to improve the energy efficiency of mobile homes, ASC and RMA completed Duct Test/Seals, AC Diagnostic Tune-ups, CFL installations on 95% of homes and installed Programmable Thermostats on 13% of homes. During the SIP program ASC completed 51% duct seals, 35% water heater blankets, 26% weather stripping, 65% CFL installations, 39% Low-Flow Showerheads, and 24% aerators.

One of the key parts of this proposal is the strong accountability component established by the ME&V services provided by Robert Mowris and Associates. ASC and RMA are independent companies to one another. Robert Mowris and Associates have a solid reputation as energy efficiency engineer and have worked with ASC to safeguard that a comprehensive package of energy efficiency measures are installed. We will account for the production.

One important additional item is that American Synergy has been a reputable energy efficiency contractor for over 20 years in California. It has a history of completing its benchmarks as outlined. ASC and RMA hope to still be making a contribution 20 years from now. That will only be possible as ASC and RMA completes the work as outlined.

American Synergy's Mission Statement is "We Treat People Right". That applies to customers, employees and the individuals or organizations that we contract to do work for.

[8] EPA refrigerant technician certification is required by 40CFR part 82 subpart F (RMA is qualified to administer the EPA refrigerant certification test through the ESCO Institute). RMA trainers are EPA-certified Universal Refrigerant Technicians. RMA has trained more than 1,500 technicians on duct testing/sealing, ac diagnostic tune-ups, high performance windows, insulation, and high efficiency water heating/fixtures.

We believe that the most significant safeguards are our track record, and the independent accountability set up within the program of ME&V.

5. **Does the program intend to include safeguards to ensure that contractors do not use public purpose funds to promote services not included under this program? (i.e. Contractor promotes own services to residents when conducting program work.) If so, please provide details of these safeguards.**

This program intends to safeguard the use of public purpose funds by installing the work that is outlined in our proposal. We will not offer "other" services unless it is absolutely necessary. For example, if a customer has a non-functional duct system or air conditioner system and desires a functional system, then we will offer to install a functional system at the most reasonable cost possible and take advantage of incentives where appropriate from other statewide programs (i.e., incentives for SEER 12 or better ac units under the 1-2-3 Cash Back Program). This will allow our program to complement existing programs wherever possible without promoting our own self-interest.

Our goals are to maximize energy savings and customer satisfaction by providing an innovative comprehensive energy efficiency program to hard-to-reach mobile home customers. One of the most significant safeguards will be the accountability that American Synergy will provide that accounts for the work done for each customer.

Conclusion:

American Synergy Corporation along with Robert Mowris and Associates appreciate the opportunity to respond to Tuukka Hess' request for clarification. We are excited about the possibilities of working in conjunction with the Commission and Utility to provide these much needed services to a group of ratepayers and customers that are clearly hard-to-reach and underserved because of their economic status, living facilities, and unique demographics. We wish to assure the commission that ASC and RMA will do everything in their power to complete this project in a way that will make us all proud and in a way that will leave a lasting impact in energy conservation and savings.

Sincerely yours,

_____

Steven R. Shallenberger, President ASC
Email: Shallenbgr@aol.com

For and in behalf of:
Kathleen E. Carlson, President RMA
Email: rmowris@earthlink.net

Attachment 1. Mobile Home Database Data Collection Screens

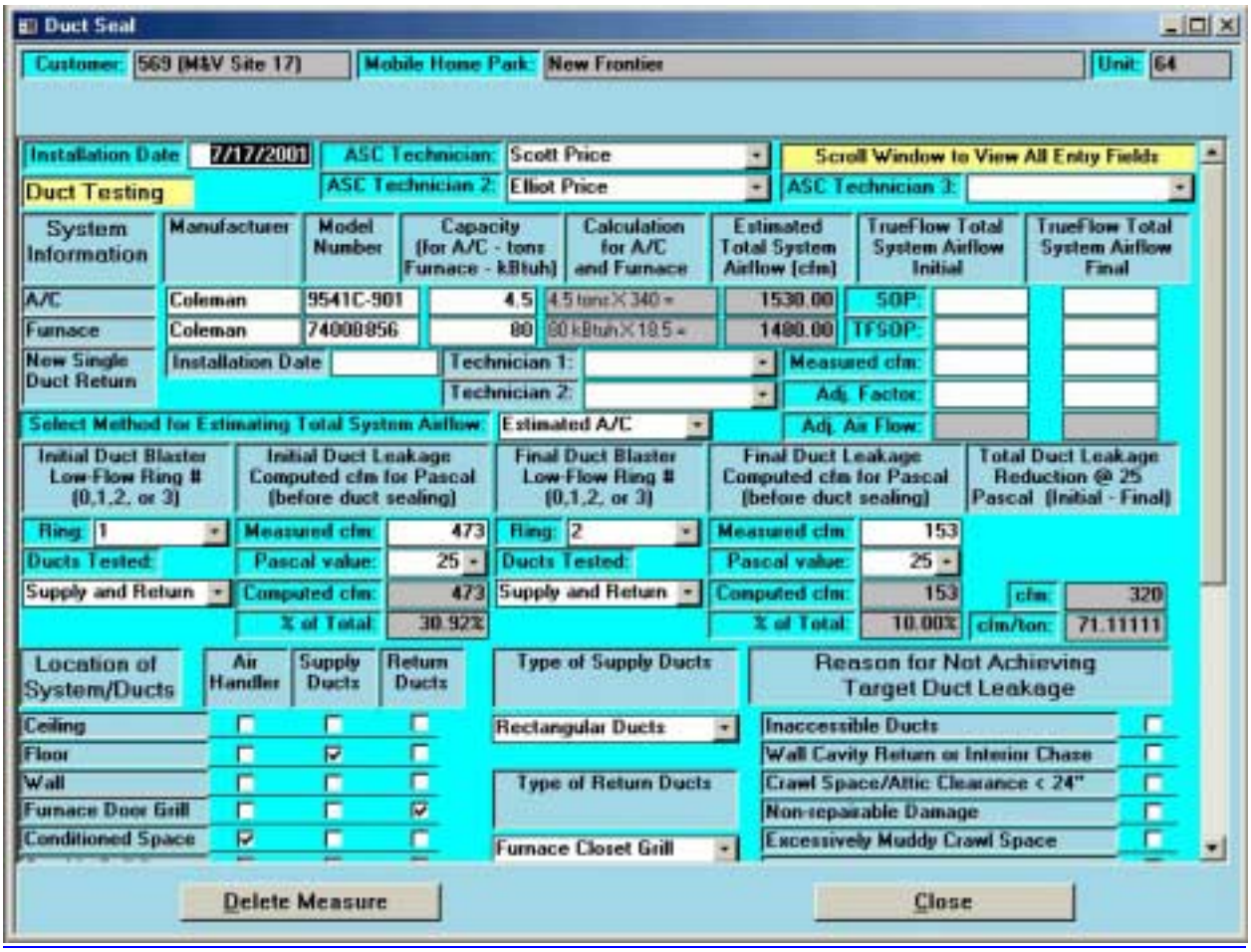


Figure 1. Duct Testing and Sealing Data Collection Screen (Computed cfm and cfm/ton leakage reduction are computed and checked to ensure quality control).

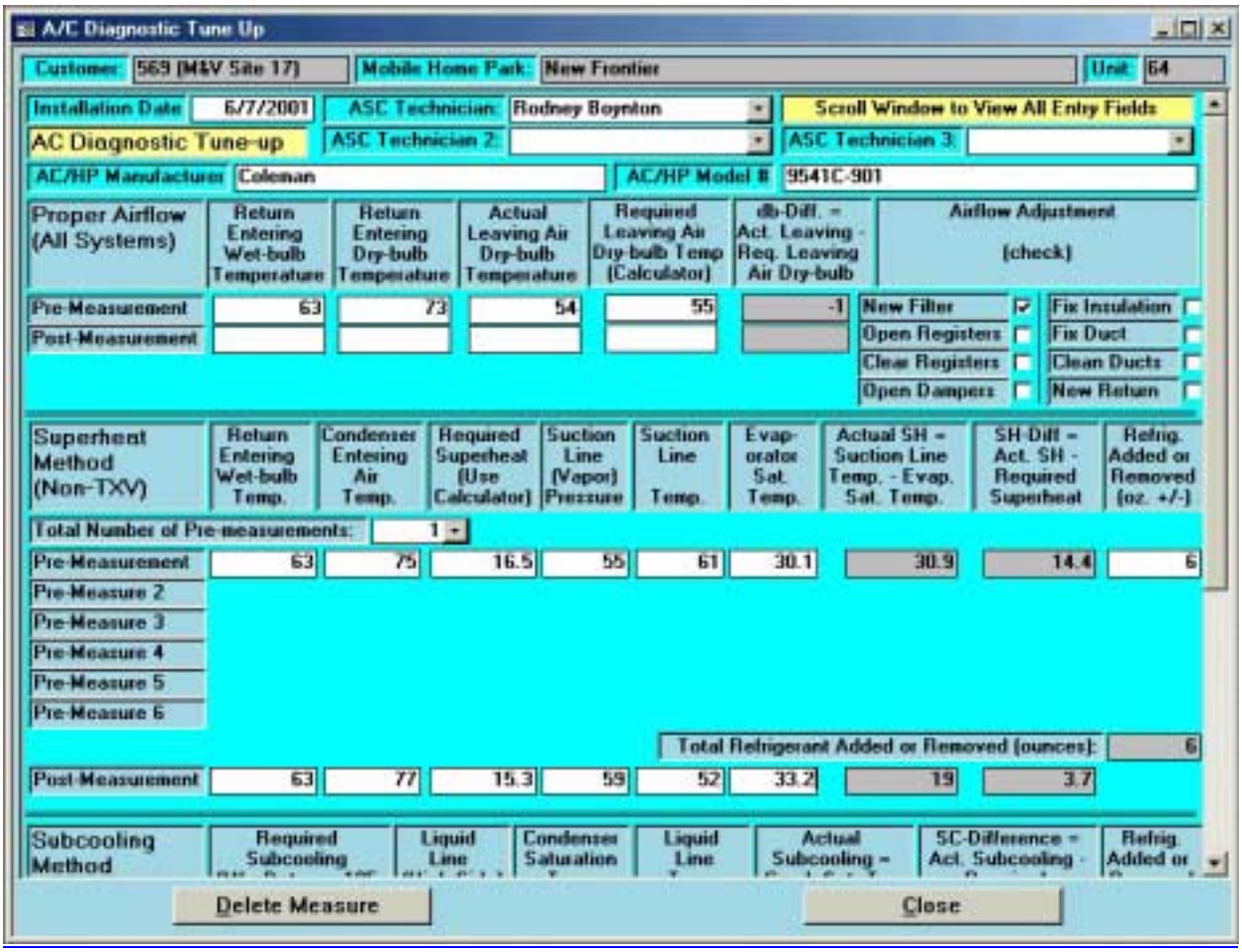


Figure 2. AC Diagnostic Tune-up Data Collection Screen (Superheat and subcooling values and refrigerant properties are checked when data is entered to ensure quality control).

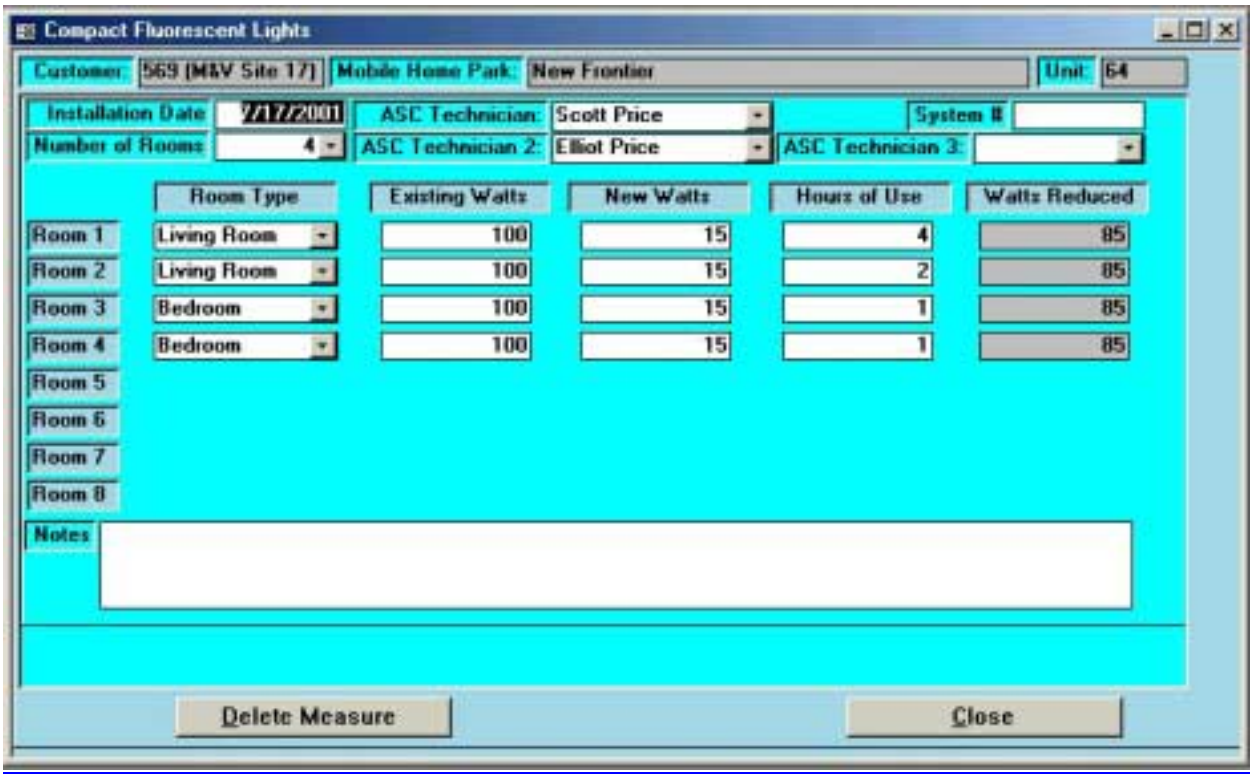


Figure 3. CFL Data Collection Screen (Watts reduced are calculated in database to ensure quality control).

Attached please find SDG&E's response to your request for information on the Local Nonresidential Retrofit EZ Turnkey proposal. If you have any questions or require additional information, please do not hesitate to contact me.

<<Document.pdf>> <<SDGE Response to ED DR 3_11 re EZTurnkey.xls>>

J. C. Yamagata
Sempra Energy
Regulatory Affairs
Phone: 858-654-1755
Fax: 858-654-1788
Email: jyamagata@sempra.com

PUBLIC UTILITIES COMMISSION
505 VAN NESS AVENUE
SAN FRANCISCO, CA 94102-3298

March 13, 2002

Jonathan Kaufman **Sent via email:**
Jon_Kaufman@solem.com
Secretary
California Building Performance Performance Contractors Association
550 Kearny Street, Suite 1010
San Francisco, CA 94108
Jon_Kaufman@solem.com

This correspondence is written regarding the California Building Performance Contractors Association program proposal entitled "Comprehensive Whole-House Residential Retrofit Program." We request the following additional information regarding your proposal:

Number of retrofits accomplished.

- Pg. 17 of the proposal states "The program's market development goal is the education of public demand to allow completion of a target of at least 1000 retrofits within the program's 21-month term."
- Pg. 26 states that "We have projected conservatively that a total of at least 4000 retrofits can be anticipated with only a two-year extension of the analysis in each of the project's two initial cities, using only the personnel trained initially – i.e., as if our program stopped completely after 2003."
- The TRC table on page 26 expects 2000 retrofits in 2002-2003 only, and 8000 retrofits to 2004, same providers only.
- Page 28 claims that by the end of the second year, some 2000 homes will be retrofitted and within four years, about 8000 homes will be completed by the crews trained during this initial two-year program…"

Page 28 also notes that "In the first two years, CBPCA training can reach a minimum of 200 students in the target areas, comprising at least 50 loosely defined crews (20 in year one, 30 more in year two), with at least half of this new capability committed to pursue this new business. …Each team will complete at least 50 comprehensive home retrofits per year…"

Using the information from pg. 28 (20 crews trained in year 1, 10 of which perform energy-efficient retrofits of 50 houses each year; 30 crews trained in year 2, 15 of which perform energy efficient retrofits of 50 houses per year), it appears that the crews trained in year 1 will perform 500 retrofits per year; and that the crews trained in year two will perform 750 retrofits per year. Using this information, it is difficult to understand the abovementioned performance targets. More specifically:

- Pg. 17 (1000 retrofits within 21-month period) appears to underestimate.
- The text within page 26 appears to be consistent with these calculations.
- The TRC table on page 26 appears to overestimate the number of retrofits through 2004, as does the claim on page 28.

Please provide clear calculations on how many retrofits are expected to occur at the end of the first year of the program, the end of the second year of the program, at the end of one year after the program is over, and at the end of two years after the program is over.

A response should be provided via e-mail, by noon on Tuesday, March 19, 2002. Please send your response to tdh@cpuc.ca.gov. If you wish to mail a hard copy as well, please use the address listed in the above letterhead, Attn: Tuukka Hess, Energy Division.

Thanking you in advance for your prompt response,

Energy Division Staff
CPUC

March 22, 2002

Energy Division Staff
C/o Tuukka Hess
California Public Utilities Commission
505 Van Ness Avenue
San Francisco, CA 94102-3298

RE: R. 01-02-028: Staff Request for Further Information on CBPCA Proposal "Comprehensive While-House Residential Retrofit Program"

To the Energy Division Staff:

Thank you for your letter dated March 13. The designated recipient, Jon Kaufman, was out of the country (and still is) so the California Building Performance Contractors Association was unaware of the letter until today, when an assistant checked Jon's e-mail. I have just received this letter from her on Friday afternoon, March 22. We apologize for this communications lapse and hope that you will still find this response useful in your evaluation.

We frankly acknowledge the inconsistency of targets within the CBPCA proposal. The appropriate minimum number of retrofits to be completed was the subject of extensive debate among our participants right up until the proposal was submitted. When the final choice (2000 units) was made, we now see that not all the references in the various sections of the proposal were found and corrected. We make no excuse for this oversight. However, the correct numbers and their underlying logic are easily provided through this letter, and remain realistic and consistent.

The Statements on page 17, 26 and 28 re 1000 retrofits <u>are in error</u> and should have been corrected. As much as we might prefer such a conservative target as cited on page 17, 1000 is incorrect. 2000 is the correct number throughout the proposal. Achievement of only 1000 units would fail to meet your very difficult cost-effectiveness tests. We believe those tests are unduly limited and penalize a growth-oriented program such as ours, but we believe in our program and understand the need for a common basis of evaluation for all proposals.

On page 26, the reference to 4000 units within a 4-year period follows from the 1000, and is also incorrect. The correct estimate of this extended period's completions is 8000, as shown in the table on the same page. This non-linear expansion from 2000 as of yearend 2 to 8000 as of yearend 4 occurs because there is no further training-time penalty and all 50 contractors are working at an average rate of 50 or more completions per year. We actually assume that those crews will gain in efficiency and demand, resulting in a gradual increase in the number of jobs they complete each year.

Our text description of the contractor-capacity logic on page 28 was also in error since it was scaled to the superseded 1000-unit target. The correct number of students within the two cities over two years was intended to be 400 rather than the 200 cited, resulting in 100 "crews" trained

over the two years. This is still a realistic expectation given the size of the targeted specialty-contractor populations in those areas. To illustrate this further, we estimated approximately ten training sessions, each divided into 1-day segments for each of four specialties. This results in an average of 10 different students per 1-day session, which we believe is a realistic level of success for our intensive contractor outreach program. These 400 individuals represent a small fraction of the specialty-contractor and key-employee populations in the two target areas. In addition, some of the 400 will be new entrants (e.g., energy raters) rather than employees of existing contractor firms.

The resulting estimates of completions lead to the following totals:

Year 1: 500 (Fresno only)

Year 2: 1750 (Fresno and San Jose)

Subsequent years: 2500-3000 per year (assuming no further training)

The two-year total is 2250, somewhat more than our target. Our intent here was to demonstrate that reasonable assumptions lead to more contractor capacity during the project term than our target, so these numbers tend to lead to a different (higher) total.

We also note that we have been highly conservative in other aspects of our estimates. For example, we assume that fully half the trainees will not pursue the new CBPCA retrofit approach. We also assume that no contractors will leverage our training by expanding their own capability beyond the personnel we actually train—which is a very conservative view. Actual levels of contractor capacity created by our program are likely to be significantly higher than these estimates, particularly if we can begin training in San Jose before the end of the first year. And finally, the estimated average of 50 jobs per crew per year may also be conservative, since in practice many retrofit projects are completed in only 1-2 days of time actually on the job. Each crew may be able to complete well over the 50 jobs estimated.

Although not mentioned in the proposal, we also considered the size of the housing stock in both target areas to be sure that our projected market penetration rate was not unrealistic. The two cities alone, without their surrounding suburbs, constitute about 500,000 homes per the latest housing census. Our 2000 completions therefore represent less than half of one percent penetration over two years—a very conservative

interpretation of the early market demand. Since most contractors (and particularly the larger ones whom we believe will champion this innovative program) actually serve a larger area, the 2000 units actually represent an even smaller market penetration.

The TRC and Participant Test calculations are correct as stated. They are based on 2000 retrofits completed within the 21-month program term. Note in the proposal's spreadsheet that we specify an estimated 1400 completions in Fresno and 600 in San Jose. This is based on the much earlier start in the Fresno area, which has the effect of allowing training of a larger number of contractors in that area and providing more time for them to complete projects.

I hope these explanations provide the information you need. We appreciate this opportunity to further clarify our proposal, and we particularly appreciate the obvious thoroughness of your consideration of this uniquely innovative proposal. If you have further questions, it may be most practical to direct them to me.

For the California Building Performance Contractors Association,

Robert L. Knight
Board Member
(President, Bevilacqua-Knight, Inc.)
rknight@bki.com
510.444.8707

PUBLIC UTILITIES COMMISSION
505 VAN NESS AVENUE
SAN FRANCISCO, CA 94102-3298

March 13, 2002

Bruce Mast **Sent via email: bmast@frontierassoc.com**

Frontier Associates
P.O. Box 31356
Oakland, CA 94604
bmast@frontierassoc.com

This correspondence is written regarding the Frontier Associates program proposal entitled "Green Building Technical Support Services." We request the following additional information regarding your proposal:

- Detailed advisory plans. In what manner will participating cities and/or counties will be advised to adopt the ACWMA residential green building guidelines, and USGBC LEED commercial guidelines and rating system? For example, if financial incentive programs will be suggested, please outline suggested incentive structures. If other methods of adoption will be suggested, please outline suggested plans.

A response should be provided via e-mail, by noon on Tuesday, March 19, 2002. Please send your response to tdh@cpuc.ca.gov. If you wish to mail a hard copy as well, please use the address listed in the above letterhead, Attn: Tuukka Hess, Energy Division.

Thanking you in advance for your prompt response,

Energy Division Staff
CPUC

Frontier Associates
4131 Spicewood Springs Road, Bldg. O, #3
Austin, TX 78704

May 6, 2002

Tuukka Hess

Energy Division, Public Utility Commission

505 Van Ness Avenue

San Francisco, CA 94102-3298

Dear Mr. Hess:

On behalf of Frontier Associates and our project partner, Austin Energy, I appreciate the opportunity to provide additional clarification on our Proposal for Green Building Technical Support Services, submitted to the PUC in response to R.01-08-028. I also apologize for the confusion in not recognizing your communication as being specifically directed to me.

In your letter of March 14, you asked for additional information about the manner in which participating cities and/or counties will be advised to adopt the ACWMA and USGBC guidelines. The specific answer to this question will vary on a case-by-case basis but we can sketch out some guiding principles.

The most important principle is that the adoption strategy must be politically viable. Thus it must be consistent with the mandate the governing body has given its staff to develop such a program. If staff is developing a Green Building proposal to present to the governing body for approval, the plan must address specific issues and concerns council members or supervisors might have. The adoption strategy must take into account the relationships between the governing agency, the construction and real estate industries, the broader business community, the voters, community groups, and other stakeholders. As these examples illustrate, we will need to explore the political context within each agency considering adoption in order to craft an adoption strategy that acknowledges any constraints and capitalizes on any opportunities. In some cases, we may be able to modify that context via education and persuasion but we can never ignore it.

A second key principle is that the adoption strategy must represent sound public policy. We consider sound public policies to be those that are cost effective, broadly speaking. We recognize that the benefits of green building are often more difficult to quantify than the costs. Nevertheless, a dispassionate assessment of a sound policy should lead to the conclusion that the likely benefits well outweigh the expected costs, at least from a societal perspective.

A third key principle is that the adoption strategy must be financially and institutionally viable; that is, it must be sustainable. We recognize that a primary barrier limiting local governments' ability to develop green building programs is a lack of technical and human resources. Our proposal is tailored to overcome that barrier. Still our involvement is designed to be of limited duration. The Frontier Team will help develop an adoption strategy but then we will exit the scene. At that point, the agency must be capable of

carrying it out over the long term. Thus, the strategy must fit within the agency's financial resources and the policy priorities it has set for those resources. In-house responsibilities must fit within the agency's available staffing.

A corollary to the first two principles is that, all else being equal, the adoption strategy should be generally consistent with the green building adoption strategies in neighboring jurisdictions. This is not to suggest that sensible strategies should be watered down or discarded in mere deference to the neighbors; nor that there is no room for creativity in designing good strategies. We simply mean that uniform program guidelines across jurisdictional boundaries facilitate compliance, thus reducing compliance costs (and improving cost effectiveness) and improving political viability. In designing an adoption strategy, the value of uniformity should be considered.

It is our intention to promote the Alameda County Residential Green Building Guidelines for residential construction in the area due to the fact that Alameda County's guidelines were written by a local development committee made up of government officials, respected leaders in the local building industry who work throughout the San Francisco Bay area, and are known U.S. experts in the field of green building. Their guidelines are of high quality, are appropriate for the local climate, are appropriate for the local building industry, and are already showing signs of strong acceptance by the local building industry and the local marketplace. This does not exclude the option of a local government agency from using their own guidelines, but the Alameda guidelines do create a very appropriate template for the region.

It is our intention to promote the use of the US Green Building Council's Leadership in Energy and Environmental Design (LEED) Commercial Green Building Rating System for use in designing, building, maintaining, and evaluating municipal and institutional buildings. Although this does not preclude the use of another system by a government agency, we have chosen this system because it has become the standard rating system throughout the country for evaluating commercial green buildings. It is an organized, thoughtful and doable system. Government agencies have consistently and dominantly chosen this system over any other system as their primary evaluation and specification tool. LEED has also been heavily funded and supported by the US Department of Energy and Environmental Protection Agency. Among others, it is being used by the US Dept. of State, US Forest Service, US National Parks Service, US Department of Commerce, US Department of the Navy/Air Force/Marines, and the Cities of New York, Austin, Portland, and Seattle.

Given these considerations, we see our role as helping agency staff assess the trade-offs of a variety of possible adoption strategies and then design and implement a plan that fits their needs. Adoption strategies could include any of the following:

- Direct financial incentives for green building projects
- Incorporation of green building incentives or requirements in the planning code
- Project-specific design assistance
- Marketing support
- Education and training for members of the construction, real estate, and financing industries and then general public
- Resource guides and referrals
- Building commissioning
- Demonstration projects

- Builder and/or building certification

This list is by no means exhaustive. As I have hopefully made clear, we will not advocate for a specific adoption strategy. Rather we will act as facilitators, providing technical support and information to help policy makers choose strategies that fit their needs and circumstances.
Thank you again for this opportunity to respond to your questions. I would welcome any other inquiries you might have.

Sincerely,

Bruce Mast
Manager, California Operations

PUBLIC UTILITIES COMMISSION
505 VAN NESS AVENUE
SAN FRANCISCO, CA 94102-3298

March 13, 2002

Mike Goodison
Public Works Department
City of Davis
23 Russell Blvd.
Davis, CA 95616
mgoodison@ci.davis.ca.us

Sent via email: mgoodison@ci.davis.ca.us

This correspondence is written regarding the City of Davis program proposal entitled "Davis Comprehensive Energy Efficiency Program" (DCEEP). We request the following additional information regard your proposal:

- What resources, including financial incentives, are associated with the Emerging Renewable Resource buydown portion of your program? Please break this down by measure, including estimated number of units, and customer class (e.g. residential, commercial, industrial).
- Please provide detail on the "cool roofs" portion of your program. For example, how many roofs, and associated square feet are estimated? What process will be used to deliver this measure? What financial incentives are associated?

A response should be provided via e-mail, by noon on Tuesday, March 19, 2002. Please send your response to tdh@cpuc.ca.gov. If you wish to mail a hard copy as well, please use the address listed in the above letterhead, Attn: Tuukka Hess, Energy Division.

Thanking you in advance for your prompt response,

Energy Division Staff
CPUC

Mike Goodison
Public Works Department
City of Davis
23 Russell Blvd.
Davis, CA 95616
mgoodison@ci.davis.ca.us
(530) 757-5686

19 March 2002 Sent Via email: tdh@cpuc.ca.gov

Tuukka Hess
Energy Division
California Public Utilities Commission
505 Van Ness Avenue
San Francisco, CA 94102-3298
tdh@cpuc.ca.gov

Dear Tuukka Hess:

This is to respond to your request for information with regards to our grant proposal under rule R01-08-028. You had two questions:

1. What resources, including financial incentives, are associated with the Emerging Renewable Resource buydown portion of your program? Please break this down by measure, including estimated number of units, and customer class (e.g. residential, commercial, industrial).
2. Please provide detail on the "cool roofs" portion of your program. For example, how many roofs, and associated square feet are estimated? What process will be used to deliver this measure? What financial incentives are associated?

Question (1) was presumably triggered by the passage on page 10 of our proposal, where we stated,

> "As in the earlier City-sponsored workshops, we will assist Davis residents with Emerging Renewable Resource buydowns offered by the Energy Commission."

The short answer to question (1) is that the program offers no direct financial incentives, but rather provides information and "hand-holding" designed to ease the process of selecting a photovoltaic system, getting it financed, permitted, and installed, and obtaining the CEC rebates. The workshops held last year, sponsored by the City and SMUD, had two main outcomes. First, over 100 residents signed up for the joint City of Davis/SMUD Residential PV Program, taking advantage of SMUD's bulk purchase of low-cost PV panels; over 25 systems (mostly 1—2 kW each) have been installed to date, and another 10 systems are in the works. The City developed an accelerated, low-cost permitting process for the 'standard' Residential PV Program installation. The second outcome of the workshop was the formation of a 'Solar Club' of residents interested in installing their own systems; 6 systems have been installed so far.

Looking forward, plans are underway to hold another series of solar workshops, and if our proposal is funded, these workshops could be expanded to combine PV with EEMs for greater impact. Also, the City is presently investigating plans under which it could continue to offer access to the low-cost panels purchased in bulk by SMUD, using public/private partnerships;

the most likely option would have the City's administrative expenses largely covered by fees paid by those purchasing systems. These programs do not have specific targets for numbers of systems, but we believe we can improve upon the past number of installations by making more information available to more people as described in our grant proposal.

The Emerging Renewable Resource buydowns are mentioned in the context of our proposal because we intend to offer 'one stop shopping' for access to information on EEMs and renewables.

Question (2) asks for more information on the "cool roofs" items in the proposal. Our proposal is designed to complement the CEC cool roofs program, which offers a $0.15/sq.ft. rebate until November, 2002, and is aimed primarily at owners of refrigerated buildings. The savings for the multifamily cool roof program were calculated as follows.

> Model the typical multifamily (apartment) building as a 6,400 sq. ft. building with (8) 800 sq. ft. units (either single story or 8 top-floor units). For purposes of this calculation, we assumed the apartment building is in need of re-roofing and we are providing the incentive for them to select the high-reflectivity alternatives. The building roof must be low-slope and the surface being replaced must have a reflectivity of less than 30% (most built-up roofs have a reflectivity of ~20-25%). Each unit is assumed to use 800 kWh / year for air conditioning and saves 20% after application of a >65% reflective coating. Thus each typical building converting to cool roofs saves 1280kWh / yr. Peak demand should be reduced by 1kW. The typical white elastomeric coating costs $1 / sq. ft. and lasts 10-15 years; a complete tear-off and re-roof costs $2 / sq. ft. and lasts 20 years.

The proposal conservatively estimated that 5 such apartment buildings would be converted to cool roofs under the program (Appendix A of the proposal, page 20). The financial incentive is $0.25 / sq. ft. This shows up in Appendix B of the proposal, page 22, as $1,600 per building. For simplicity, we did the cost-effectiveness calculations assuming the CEC cool roofs program ends this November. If it is extended, we would modify the program adding $0.10 / sq. ft. to the $0.15 / sq. ft. CEC program.

We hope this response fully answers your questions. Please contact us if you need any more information.

Sincerely,

Mike Goodison

Assistant to the Director
City of Davis Department of Public Works

J:\pw\adm\elect\energy task force\Reply to 116CityofDavisDataRequest

PUBLIC UTILITIES COMMISSION
505 VAN NESS AVENUE
SAN FRANCISCO, CA 94102-3298

March 13, 2002

Val Jensen
Vice President
ICF Associates, Inc.
60 Broadway
San Francisco, CA 94111

Sent via email: LNardoni@icfconsulting.com

This correspondence is written regarding the ICF Associates, Inc. program proposal entitled "Partnership for Energy Affordability in Multi-Family Housing." We request the following additional information regarding your proposal:

- Pg. 2-3 of the proposal states that "Prospective clients seeking financial support for measures not otherwise eligible for the Statewide Multi-Family standardized rebates will be eligible to receive customized incentives." Appendix 1 appears to list measures available under statewide programs. Please provide detail on the circumstances under which rebate opportunities would not be possible under the statewide multi-family program, necessitating customized rebates.

A response should be provided via e-mail, by noon on Tuesday, March 19, 2002. Please send your response to tdh@cpuc.ca.gov. If you wish to mail a hard copy as well, please use the address listed in the above letterhead, Attn: Tuukka Hess, Energy Division.

Thanking you in advance for your prompt response,

Energy Division Staff
CPUC

Tuukka,

Attached are four documents in response to your information request regarding Quantum Consulting's proposal entitled "The Oakland Energy Partnership Program". These files include:

- Response to 3.19 Data Request.doc: A word file containing our response to your request
- E-Source Report.pdf: A PDF file that documents the retro-commissioning costs for office buildings
- PECI Report.pdf: A PDF file that documents the retro-commissioning costs for non-office buildings
- Delivering DSM to SM COMM MKTS.pdf: A PDF file corresponding to referenced materials in the Direct Install Small Commerical program element write-up.

The three pdf files are referenced in the word document.

I have one additional PDF file that is too large to include along with these other documents. I will send you this in a follow-up e-mail.

I would appreciate it if you could please send me a note to let me know that you have received this e-mail.

Please do not hesistate to contact me if you have any further questions. I look forward to the opportunity to work with you and the Energy Division,

John Cavalli
Sr. Vice President
Quantum Consulting, Inc.
51-540-7200

-----Original Message-----
From: Hess, Tuukka D. [mailto:tdh@cpuc.ca.gov]
Sent: Thursday, March 14, 2002 11:01 AM
To: 'jcavalli@qcworld.com'
Subject: Energy Division Information Request

Mr. Cavalli,
Attached is an information request from the Energy Division. Please feel free to contact me with any questions you may have. <<174 Quantum Consulting Data Request.doc>>

Tuukka Hess
Regulatory Analyst
California Public Utilities Commission
(415) 355-5505

tdh@cpuc.ca.gov

PUBLIC UTILITIES COMMISSION
505 VAN NESS AVENUE
SAN FRANCISCO, CA 94102-3298

Insert Date

Peter Canessa
Center for Irrigation Technology
California State University, Fresno
5370 North Chestnut Avenue – M/S OF18
Fresno, CA 93704
559-278-2066
peter_canessa@csufresno.edu

Dear Mr. Canessa:

This correspondence is with respect to CIT's program proposal entitled, "Agriculture Pumping Efficiency Progam." We are requesting the following additional information regarding your proposal:

Complete itemized budget separated by utility territory.

A response should be provided via e-mail, by noon on Monday, March 18, 2002. Please send your response to ru4@cpuc.ca.gov. If you wish to mail a hard copy as well, please use the address listed in the above letterhead, Attn: Ariana Merlino.

Thanking you in advance for your prompt response,

Energy Division Staff
CPUC

DRAFT Detailed, Two-year Budget for "Agricultural Pumping Efficiency Program" - a proposal to CPUC by the Center for Irrigation Technology, CSU Fresno in response to R.01-08-028

Prepared by Peter Canessa, P.E. - 3/13/02

June 1, 2002 - May 31, 2003

	Total		PG&E		SCE		SCG		SDG&E		Total		PG&E	
			Electric	Gas	Electric	Gas	Electric	Gas	Electric	Gas			Electric	Gas
Multiplier (see Multipliers)->			0.6512	0.0581	0.1853	0.0000	0.0000	0.0682	0.0271	0.0100			0.6512	0.0581
Admininstrative														
Labor	$381,000		$248,107	$22,136	$70,599	$0	$0	$25,984	$10,325	$3,810	$381,000		$248,107	$22,136
Benefits	$110,490		$71,951	$6,419	$20,474	$0	$0	$7,535	$2,994	$1,105	$110,490		$71,951	$6,419
Overhead (office)	$80,000		$52,096	$4,648	$14,824	$0	$0	$5,456	$2,168	$800	$30,000		$19,536	$1,743
Travel	$46,300		$30,151	$2,690	$8,579	$0	$0	$3,158	$1,255	$463	$46,300		$30,151	$2,690
Reporting	$30,000		$19,536	$1,743	$5,559	$0	$0	$2,046	$813	$300	$30,000		$19,536	$1,743
Materials and handling	$30,000		$19,536	$1,743	$5,559	$0	$0	$2,046	$813	$300	$15,000		$9,768	$872
General and Administrative	$329,250		$214,408	$19,129	$61,010	$0	$0	$22,455	$8,923	$3,293	$329,250		$214,408	$19,129
	$1,007,040	22%	**$655,784**	**$58,509**	**$186,605**	**$0**	**$0**	**$68,680**	**$27,291**	**$10,070**	**$942,040**	22%	**$613,456**	**$54,733**
Marketing														
Mass media/brochures	**$120,000**	3%	**$78,144**	**$6,972**	**$22,236**	**$0**	**$0**	**$8,184**	**$3,252**	**$1,200**	**$120,000**	3%	**$78,144**	**$6,972**
Direct Implementation														
Education and training	$1,000,000		$651,200	$58,100	$185,300	$0	$0	$68,200	$27,100	$10,000	$850,000		$553,520	$49,385
Pump tests (4500/year @150)(no money is allocated to SCE for pump testing as they maintain their own pump test program)	$675,000		$539,497	$48,099	$0	$0	$0	$56,542	$22,421	$8,441	$675,000		$539,497	$48,099
Pump repair (350/year @ 3675)	$1,286,250		$837,606	$74,731	$238,342	$0	$0	$87,722	$34,857	$12,863	$1,286,250		$837,606	$74,731
	$2,961,250	65%	**$2,028,303**	**$180,930**	**$423,642**	**$0**	**$0**	**$212,464**	**$84,378**	**$31,304**	**$2,811,250**	65%	**$1,930,623**	**$172,215**

SAN DIEGO GAS & ELECTRIC

Appendix A (from SDG&E's 12/14/2002 Filing Volume 4 of 5)
EZ Turnkey Program
Table A Measures List

Measure Description	Incentive $ 1 (B)	Forecast No. of Units (C)
A/C - Reflective Window Film	$ 0.70	1,800
A/C - Setback Programmable Thermostats	$ 25.00	600
Lighting - 2 Foot Lamps 2nd Generation T-8 w/LBO Ballast	$ 15.00	50
Lighting - 2 Foot Lamps T-8 w/ Ballast	$ 12.00	50
Lighting - 3 Foot Lamps 2nd Generation T-8 w/LBO Ballast	$ 15.00	100
Lighting - 3 Foot Lamps T-8 w/ Ballast	$ 12.00	55
Lighting - 4 Foot Lamps 2nd Generation T-8 w/LBO Ballast	$ 15.00	22,576
Lighting - 4 Foot Lamps T-8 w/ Ballast	$ 12.00	9,575
Lighting - 8 Foot Lamps High Output T-8 w/ Ballast	$ 15.00	400
Lighting - 8 Foot Lamps T-8 w/ Ballast	$ 15.00	90
Lighting - Hardwire 14-26 Watt Lamp	$ 16.50	85
Lighting - LED Exit Sign New Sign	$ 55.00	145
Lighting - LED Exit Sign Retrofit Kit	$ 75.00	-
Lighting - Occupancy Sensor Plug-Load	$ 15.00	100
Lighting - Occupancy Sensor Wall or Ceiling-Mounted	$ 33.00	75
Lighting - Occupancy Sensor Wallbox	$ 50.00	173
Lighting - Occupancy Sensor Wallbox (Ungrounded)	$ 80.00	176
Lighting - Screw in 14-26 Watt Lamp	$ 5.00	180
Lighting - Time Clocks	$ 13.50	12

Total Program Incentive Budget

Notes:

SAN DIEGO GAS & ELECTRIC

Appendix A (from SDG&E's 12/14/2002 Filing Volume 4 of 5)
EZ Turnkey Program
Table A Measures List

Measure Description	Incentive $ 1 (B)	Forecast No. of Units (C)
A/C - Reflective Window Film	$ 0.70	1,800
A/C - Setback Programmable Thermostats	$ 25.00	600
Lighting - 2 Foot Lamps 2nd Generation T-8 w/LBO Ballast	$ 15.00	50
Lighting - 2 Foot Lamps T-8 w/ Ballast	$ 12.00	50
Lighting - 3 Foot Lamps 2nd Generation T-8 w/LBO Ballast	$ 15.00	100
Lighting - 3 Foot Lamps T-8 w/ Ballast	$ 12.00	55
Lighting - 4 Foot Lamps 2nd Generation T-8 w/LBO Ballast	$ 15.00	22,576
Lighting - 4 Foot Lamps T-8 w/ Ballast	$ 12.00	9,575
Lighting - 8 Foot Lamps High Output T-8 w/ Ballast	$ 15.00	400
Lighting - 8 Foot Lamps T-8 w/ Ballast	$ 15.00	90
Lighting - Hardwire 14-26 Watt Lamp	$ 16.50	85
Lighting - LED Exit Sign New Sign	$ 55.00	145
Lighting - LED Exit Sign Retrofit Kit	$ 75.00	-
Lighting - Occupancy Sensor Plug-Load	$ 15.00	100
Lighting - Occupancy Sensor Wall or Ceiling-Mounted	$ 33.00	75
Lighting - Occupancy Sensor Wallbox	$ 50.00	173
Lighting - Occupancy Sensor Wallbox (Ungrounded)	$ 80.00	176
Lighting - Screw in 14-26 Watt Lamp	$ 5.00	180

Column (B): per unit incentive; from Appendix A page A-1
Column (C): forecasted number of measures; from Appendix C, page C-2
Column (D): Total dollar incentives; (D) = (B) * (C)

Lighting - Time Clocks	$ 13.50	12

Total Program Incentive Budget

Notes:
Column (B): per unit incentive; from Appendix A page A-1
Column (C): forecasted number of measures; from Appendix C, page C-2
Column (D): Total dollar incentives; (D) = (B) * (C)

STATE OF CALIFORNIA GRAY DAVIS, Governor

PUBLIC UTILITIES COMMISSION
505 VAN NESS AVENUE
SAN FRANCISCO, CA 94102-3298

March 14, 2002

Ted Flanigan, Managing Director
The Energy Coalition
1540 South Coast Highway, Suite 204
Laguna Beach, CA 92651

Sent via email: tflanigan@energycoalition.org

Re: Data Request on a Proposed Energy Efficiency Program (Rulemaking 01-08-028)
Regional Energy Efficiency Initiative (Southern California Edison Territory)

Dear Mr. Flanigan:

This letter is regarding the above-mentioned proposal. Please provide the following additional information by noon on Tuesday, March 19, 2002 to nyg@cpuc.ca.gov.

- **A breakdown of the proposed budget for each city. For each city, detail the (a) different measures by sectors (residential: mobile homes, multi family; nonresidential; school district; municipal facilities), (b) cost per measure (c) number of units per measure, and (d) incentive amount per measure; indicate if direct install or if a rebate amount is to be given to customers. Although you have provided hard and electronic copies of your proposal, the hard copy of the non-administrator costs table does not have these details and not all rebate amounts are shown in the "Rebates" column; whereas, the electronic copy of the proposal does not include the spreadsheet for this table.**

- **A breakdown of the measures for the "common areas" mentioned in your proposal. Incorporate the measures associated with "common areas in the budget breakdown requested above.**

- **The proposal mentions innovative mentorship program in Brea and West Hollywood. Please provide more details on this program. What are the energy measures proposed for these two cities? Incorporate, if possible, the measures for these two cities in the budget breakdown requested above.**

If you wish to mail a hard copy of the requested information, please use the address listed in the above letterhead, Attn: Nora Gatchalian, Energy Division. For any clarifications or questions regarding this data request, contact Nora Gatchalian at (415) 703-2421 or at nyg@cpuc.ca.gov.

Thank you for your prompt response.

Energy Division Staff

March 18, 2002

Nora Gatchalian, Energy Division Staff
California Public Utilities Commission
505 Van Ness Avenue
San Francisco, California 94102-3298

Dear Nora Gatchalian:

Thank you again for your efforts evaluating the Regional Energy Efficiency Initiative Local Cross-Cutting 2002-2003 Energy Efficiency Proposal.

The purpose of this memo and the attached spreadsheet is to provide detailed information on the three points raised in your March 14 Data Request. In addition to this, I conclude with a short discussion of the unique REEI/Energy District approach that we have piloted in Irvine and Santa Monica and which we now propose to extend and expand. If there is any further information that I can provide please let me know and I will do so at once.

1. Performance Goals for Each City

The spreadsheets attached presented the city-specific budget detail that you request in the first bullet of the data request. The projections presented link the budget numbers presented on page 48 of our proposal and the performance goals presented on page 41. The spreadsheets present information for the six cities that we intend to serve with the REEI/Energy District approach for the delivery of energy efficiency. At your request, I have presented the customer segments, the number of participants, the types of measures, the cost per measure, the number of measures, the incentive per measure, the type of incentive, and the total incentive for each.

Customer Segments: In addition to the customer segments that you present in the Data Request, the REEI presents projected savings for two types of apartments – multi-family and owner-occupied – given our experiences with serving these two considerably different ownership patterns. We expect to spend considerably more money on multi-family (which we define as non-owner-occupied) to overcome the split incentive between the landlord who owns the facility and the tenant who generally pays the utility bills. Naturally, if your needs require a single multi-family distinction, our two categories can be added. Note also that our work with municipal facilities encompasses overall municipal energy management that extends beyond government buildings and services throughout the community, specifically related to city-wide energy management plans.

Inter-City Variations: While the data largely speaks for itself, there are subtle assumptions embedded in the projections presented. Given the demographics of the various cities, and the fact that we have "primed the pump" for energy efficiency in Irvine and Santa Monica, and the differences in climate between our coastal and inland communities, there are differences in the projections. For instance, we intend to do more retrofit work in mobile homes occupied by senior citizens on fixed incomes in Irvine than Santa Monica. We intend to reap greater savings from owner-occupied apartments in Irvine, and greater savings from multi-family apartments in Santa

Monica where we are focusing on the less affluent Pico Neighborhood. We expect that Moreno Valley will carry out a Halogen Torchiere Exchange program given its predominantly middle-income demographics and the preponderance of this lighting technology in this income bracket.

We estimate greater penetration of "miscellaneous energy efficiency" measures (including weatherstripping, window films, shades, air conditioner tune-ups, insulation, etc.) and thermostats in the hotter cities of Palm Desert and Moreno Valley where electricity use is predominated by cooling, than Santa Monica and Irvine. In addition to these variables, our efforts have concentrated on different types of energy districts in Irvine and Santa Monica. In Santa Monica, we intend to reap greater small business savings given our viable partnerships with the small business community there. And we do not intend to repeat certain kinds of program activities in the two original cities, notably the sale of discounted CFLs to city employees and Halogen Torchiere Exchange events, as these technologies have been prepared for adoption through more common market-based purchases and the funds for these activities can now be better directed to the new program cities.

Incentive Types: Please note that in addition to the incentive type distinctions that you made in the Data Request of "rebate" and "direct install," I've added a few others: "Grants" are presented for items that are given to the cities and their constituents, for instance CFLs that are distributed to students through the PEAK Student Energy Actions program. We also provide "grants" for the PEAK curriculum to school districts and for the technical analysis and support that we provide to the cities so that they can craft energy management plans, specifically to get their "own houses in order" as they work with the REEI to promote energy efficiency throughout their communities. We also present "discounts" that pertain to CFLs that we bulk purchase and then distribute in the cities for resale at lower prices to allow for greater penetration, particularly among hard-to-reach customers. If these more literal terms do not synchronize with your needs, please substitute "direct install" for "grants," and "rebates" for "discounts."

2. Common Area Measures

The second bullet of your query asks for a breakdown of efficiency measures in the common areas presented. Program activity thus far has predominantly been on lighting with much lesser attention to efficient windows, skylights, and doors that cut cooling and heating demand. In terms of kWh savings, our past common-area efforts have been about 90% lighting related. And within this arena, the focus has been on the replacement of incandescent lamps with efficient compact fluorescent lamps plus hard-wired measures such as the replacement of tubular T-12 fluorescents with T-8 lamps, electronic ballasts, and lighting controls. In one community in Irvine we addressed exterior street lighting.

In the 2002-2003 program years, and as the REEI moves east into hotter climate zones, we expect that common-area retrofits will concentrate more on measures that mitigate cooling, specifically the promotion of high-efficiency air conditioners coupled with insulation, window shades and films, and efficient doors and windows. These more complex retrofit measures will complement lighting measures that tend to have a shorter lifetime and less formidable barriers to their implementation.

3. The Mentorship Program

The Mentorship Program presented in our proposal is highly unique and is perhaps the most encouraging aspect of the potential for the program model's expansion in the State. It is a powerful testament to the REE/Energy District approach in that it grew quite organically from the pilot REEI program in Irvine and Santa Monica. Each of these cities has been so supportive of the REEI that they proposed to mentor nearby cities in terms of community-based energy management.

That said, this is perhaps your most difficult data request. Frankly, we are not sure what energy measures will be realized during the project period. As described in the proposal, we expect that the initial focus of the program in these cities will be related to community organizing. Nevertheless, I present a projection of measures for each the City of Brea and the City of West Hollywood through the Mentorship Program.

Municipal Facility Energy Management: In each of the four "new" cities to the REEI – Moreno Valley, Palm Desert, Brea, and West Hollywood – the REEI will help develop an energy management plan for the city that will define the energy efficiency approach for both municipal facilities and homes and businesses. Our experiences in Irvine and Santa Monica, as well as draft agreements in principle that we have discussed with each of the Mentorship Program cities, support our expectation that each city will begin the REEI process with mapping out a strategy to "gets its own house in order." Brea, for example, is hoping to launch a campaign similar to the Irvine Saves! campaign in which Irvine sought to raise awareness throughout the city by setting the example by first focusing attention and resources on the effective energy management in its municipal facilities.

Santa Monica will no doubt urge West Hollywood to "get its house in order" through its successful deployment of Energy Advisors that promoted energy savings through simple behavioral changes throughout City departments. Each city established energy conservation guidelines for its municipal facilities and stepped up its efforts with efficiency retrofits as well as behavior modification of building occupants to cut electricity and peak demand. We expect these kinds of programs to be launched through the Mentorship Program in the 2002-2003 REEI program and that municipal facility "housekeeping activities" will set the stage for community-wide efficiency efforts.

Raising Awareness through Kick-Off Activities: We also anticipate that the Mentorship Program cities will follow the REEI/Energy District Approach by raising awareness through highly visible and publicized kick-off events. While each city will be privy to a large number of program options, we expect that at least one of the Mentorship Program cities will host a Halogen Torchiere Exchange event that has the tremendous benefit of linking fire safety with energy efficiency and dollar savings. The attached spreadsheets incorporate this projection in the West Hollywood programmatic budget.

The City of Brea has expressed an interest to raise awareness of the REEI program through a highly visible low-income rehabilitation project. This, like the rehabilitation of the 20th Street Apartments in Santa Monica, will likely encompass new and highly efficient lighting, refrigerators, windows, doors, and skylights. Both communities might also "raise the flag" of the REEI through discounted sales of compact fluorescent lamps to city employees, or at city and/or

public works energy fairs and community events. These anticipated activities are also incorporated into the spreadsheets attached.

In addition to Municipal Facility Energy Management and Kick-Off programs for the Mentorship Program cities, the power of the REEI approach is such that through community information and education, the galvanizing effects of the model, the cities themselves as well as their residential and business communities, become aware of their program options for efficiency through ongoing (statewide) electric utility, gas utility, and other state and federal efficiency program funding options. By raising awareness, and catalyzing responsible efficiency action within communities, the REEI serves to stimulate activity that would simply not happen in its absence. As such, the spreadsheets present considerable energy efficiency retrofit activity in owner-occupied apartments for the Mentorship Program cities.

The REEI/Energy District Approach

REEI/Energy District approach has merit for communities, cities, and the State of California as an alternative model for the delivery of energy efficiency. While I realize your need to boil down our proposal to specific measures in specific cities with specific costs – and information is presented herein that fulfills this need – flexibility and the ability to custom tailor efficiency services to our constituents is the essence of the community-based approach that we have developed over the past three years in Irvine and Santa Monica and which we now propose to extend, expand, and mentor in Irvine and Santa Monica; Moreno Valley and Palm Desert; and Brea and West Hollywood.

As presented in the proposal, and specifically on page 41: "…the [REEI] process is based on flexibility, adaptability, and the ability to hear what people want in the communities we serve want and need to chart their sustainable energy futures." On page 45: "…If a certain set of anticipated activities appear unlikely to deliver results, the REEI with Executive Committee authorization, is able to adeptly withdraw funds from one planned activity and reapply those funds in another more likely to succeed area…." It is this responsive attribute that provides for cost effectiveness and programs that squarely address community interests while tapping community assets and channels for success.

One of the most interesting aspects of the past REEI works in Irvine and Santa Monica has been the interaction between the cities, and a natural "one-ups-man-ship" that has occurred. We've found that early success with one specific program activity in one customer segment in one city often is taken as a challenge/opportunity for the other… and this has created a ratcheting effect between the two that we expect will occur in the proposed Six Cities initiative. For instance, when we exchanged 6,000 halogen torchiere lamps with safe and efficient fluorescent models in Irvine, Santa Monica quickly got on board and attempted to top that mark with 7,500 exchanged lamps. Unfortunately Santa Monica did not reach its target, but the program there was a rave success there nevertheless. This form of cross-pollination underscores the value of multiple cities engaging in the REEI process and the fluid ability with which the REEI/Energy District approach has functioned to realize results beyond our expectations. The REEI experience over the past two years strongly suggests that being attuned to the needs of the people, and applying and reapplying resources to them in unique ways, is at the core of the success of the approach.

I trust that these responses and the attached spreadsheet fulfill your needs to evaluate the Regional Energy Efficiency Initiative Local Cross-Cutting 2002-2003 Energy Efficiency Program Proposal. Please do not hesitate to be in touch if there is additional information or explanation that I can provide. I can be reached at The Energy Coalition offices at (949) 497-5110 and/or via cell phone at (949) 292-7314.

Respectfully submitted via e-mail,

Ted Flanigan
Managing Director

PUBLIC UTILITIES COMMISSION
505 VAN NESS AVENUE
SAN FRANCISCO, CA 94102-3298

Insert Date

Joe Williams
CEO
Richard Heath and Associates
7847 Convoy Court, Suite 102
San Diego, CA 92111

Mr. Williams:

This correspondence is with respect to the RHA program proposal entitled, "Mobile Home Energy Efficiency and Education Program." We are requesting the following additional information regarding your proposal:

- A detailed itemization of your budget. Please include in the budget the details in terms of staff positions, and their respective pay rates for those positions and the projected hours in each labor category. To the extent possible, please include a similar level of detail for subcontractor costs as well. Please itemize the rebate funds requested, absent rolling in the labor or subcontractor costs associated with those rebates.

A response should be provided via e-mail, by 5:00 pm on Monday, March 25, 2002. Please send your response to ewk@cpuc.ca.gov. If you wish to mail a hard copy as well, please use the address listed in the above letterhead, Attn: Eli Kollman.

Thanking you in advance for your prompt response,

Energy Division Staff
CPUC

March 26,2002

Eli Kollman
Energy Division
California Public Utilities Commission
505 Van Ness Avenue
San Francisco, CA. 94102-3298

Mr. Kollman:

RHA is pleased to provide the attached budget detail information for our proposed "Mobile Home Energy Efficiency Program". Should you require additional information please do not hesitate to contact George Sanchez Jr., RHA Chief Operations Officer, or John Jensen, RHA-San Diego- Field Operations Manager, at our San Diego office. Thank you.

John Jensen
RHA-San Diego Field Operations Manager
7847 Convoy Court #102
San Diego, CA. 92111
(858)514-4025
e-mail jjensen@rhainc.com

cc: Joe Williams
CEO
Richard Heath & Associates

MOBILE HOME ENERGY EFFICIENCY AND EDUCATION PROGRAM –BUDGET DETAIL

RHA COSTS

Measure	Units	Staff Position	# of FTE's	Labor Total Hours	Labor Hourly Rates*	Total Labor Cost
Energy Education in Home Visit	4250					
13 Watt CF Bulb	1,063					
20 Watt CF Bulb	7,438					
13 Watt Ext.CF Bulb	850					
Torchiere Lamp	3,188					
		Outreach Specialist	3	9360	$22	$205,920
Duct Sealing	2,125	HVAC Technician	3	9360	$23	$215,280
2nd Refrigerator Recycle	340	Delivery Driver	2	680	$15	$10,200
2nd Refrigerator Recycle	340	Warehouseman Recycling	1	136	$15	$2,040
Project Management		Manager	1	686	$35	$24,010
Field Supervision (Duct Sealing)		HVAC Supervisor	1	686	$35	$24,010
Clerical Support/Scheduling / Fiscal Reporting		Clerical	1	1560	$16	$31,920
					10% profit on labor	$51,338
					Totals	**$564,718**

*** Labor rates include overheads & benefits**

SUBCONTRACTOR COSTS

Measure	Units	Staff Position	# of FTE's	Labor Total Hours	Labor Hourly Rates*	Total Labor Cost
13 Watt Ext.CF Fixture	3,400	Field Technician		1810	$18	$32,580
Low Flow showerhead	3,188	Field Technician		797	$18	$14,346
Faucet Aerator	3,400	Field Technician		850	$18	$15,300
Water Heater Blanket	850	Field Technician		425	$18	$7,650
Water Heater Pipe Insulation (12 L.F. per unit)	3,188	Field Technician		798	$18	$14,360
Infiltration Measures	4,250	Field Technician		7132	$18	$128,376
		Subtotal	4	**11812**		
Clerical Support/Scheduling / Fiscal Reporting		Clerical	1	3120	$16	$49,920
Project Supervision		Supervisor	1	3120	$32	$99,840
					10% profit on labor	$36,235
					Sub contractor costs	**$398,607**

*** Labor rates include overheads & benefits**

MATERIALS & HANDLING

Measure	Units	Per Unit MaterialCost	Total Material Cost
13 Watt CF Bulb	1,063	$6	$6,272
20 Watt CF Bulb	7,438	$9	$65,454
13 Watt Ext.CF Bulb	850	$6	$5,015
Torchiere Lamp	3,188	$30	$94,046
Duct Sealing	2,125	$30	$63,750
2nd Refrigerator Recycle	340	Incentive paid to customer $50	$17,000
13 Watt Ext.CF Fixture	3,400	$13	$44,200
Low Flow showerhead	3,188	$9	$29,425
Faucet Aerator	3,400	$4	$14,484
Water Heater Blanket	850	$11	$9,350
Water Heater Pipe Insulation (12 L.F. per unit)	3,188	$12	$38,256
Infiltration Measures	4,250	$22	$93,500
		Subtotal	$480,752
		Mark-up @10%	$48,075
		Tax @.0775 (x $480,752)	$37,258
		Warehouse and Handling	$48,572
		Total Material & Handling	**$614,657**

PUBLIC UTILITIES COMMISSION
505 VAN NESS AVENUE
SAN FRANCISCO, CA 94102-3298

March 19, 2002

Basu Mukherjee **Sent via email: BASU@earthlink.net**
Global Energy Services
1774 Cliffbranch Drive
Diamond Bar, CA 91765

Re: Data Request on a Proposed Energy Efficiency Program (Rulemaking 01-08-028)
Chinese Language Efficiency Outreach (CLEO)

Dear Mr. Mukherjee:

This letter is regarding the above-mentioned proposal. Please provide the following additional information by noon on Friday, March 22, 2002 to nyg@cpuc.ca.gov.

- **An explanation of "Rebate Assistance" on page 9 of your proposal. The "Rebate Assistance" is not mentioned anywhere else in the proposal and it is unclear how the outreach you propose to provide intersects with existing rebate programs.**

- **A brief discussion on the energy audits. In your proposal, it is not clear what the outcome of the energy audits will be. What specific utility programs do you intend to translate for or recommend to the targeted communities?**

- **Evidence that you are also in touch with and have the support of local organizations in San Francisco. CLEO is proposed to run in Los Angeles County in 2002 and in San Francisco in 2003. In your proposal, you provided letters of support and listed local organizations with whom you intend to partner. The same synergies are not evident in the PG&E/2003 part of your proposal.**

If you wish to mail a hard copy of the requested information, please use the address listed in the above letterhead, Attn: Nora Gatchalian, Energy Division. For any clarifications or questions regarding this data request, contact Nora Gatchalian at (415) 703-2421 or at nyg@cpuc.ca.gov.

Energy Division Staff
CPUC

March 22, 2002

California Public Utilities Commission
505 Van Ness Ave
San Francisco, CA 94102-3298

Attn: Nora Gatchalian

Re: Letter (dated March 19th, 2002) requesting additional data on Proposed Energy Efficiency Program (Rulemaking 01-08-028) Chinese Language Efficiency Outreach (CLEO)

Dear Ms. Gatchalian:

We are pleased to provide our response to the request for additional data on the Chinese Language Efficiency Outreach - CLEO proposal. We list below your requests and our responses.

- **An explanation of "Rebate Assistance" on page 9 of your proposal. The "Rebate Assistance" is not mentioned anywhere else in the proposal and it is unclear how the outreach you propose to provide intersects with existing rebate programs.**

The "Rebate Assistance" is part of CLEO's Implementation efforts. The media marketing (Newspaper, Radio & TV) and classroom training will be designed around existing Utility efficiency programs. Customers enrolling and participating in the education and training will receive Utility program summary in Chinese and will receive instructions or "Rebate Assistance" in completing these forms and participating in these programs. A toll free number will also support customers with filling up Rebate applications and provide simple phone audits. This is how CLEO's outreach efforts will intersect existing rebate programs.

- **A brief discussion on the energy audits. In your proposal, it is not clear what the outcome of the energy audits will be. What specific utility programs do you intend to translate for or recommend to the targeted communities?**

CLEO will enroll 1200 residential and small business customers for Energy Efficiency education and training. 10% of them or 120 Customers will be provided with free energy audits. Chinese Energy Auditors will accompany the participants (60 residential and 60 small business customers) in performing an
Assessment of potential energy efficiency opportunities. The auditor will highlight the major energy users.

A written audit report will provide recommendations on managing energy usage and costs. The report will also include Utility programs and Rebates as applicable to residential and small commercial customers for that Program Year.

CLEO will translate **all** available Utility energy conservation programs for residential and small business customers for that program year. This includes but is not limited to Lighting, Heating and Cooling, Refrigeration, Appliances, and other applicable programs(Ref: SCE, and PG&E energy efficiency program web-sites as mentioned in CPUC Homepage). To create sustainability,

our experienced Chinese faculty will provide classroom training, highlighting the technology and benefits of these programs.

- **Evidence that you are also in touch with and have the support of local organizations in San Francisco. CLEO is proposed to run in Los Angeles County in 2002 and in San Francisco in 2003. In your proposal, you provided letters of support and listed local organizations with whom you intend to partner. The same synergies are not evident in the PG&E/2003 part of your proposal.**

Chinese Organizations in San Francisco are very enthused with the excellent value CLEO will bring to the Chinese Community. These organizations have extended their full support and have agreed to allow us use of their facilities for training and outreach. We have discussed our proposal and obtained excellent support from numerous local Chinese organizations in San Francisco. A few of them are:

1. **Chinese Consolidated Benevolent Association**
   'The Official Representative Association of Chinese in America'
   843 Stockton St.
   San Francisco, CA 94108
   Tel. No. (415)-982-6000
   Attn: Mr. Calvin Quan
   Or Mr. Donald Mok – Presiding President
   (Support letter enclosed with hard copy)

2. **Chinese NewCommers Center**
   777 Stockton St. Ste. 104
   San Francisco, CA 94108
   Tel. No. (415)-249-4687
   Attn: Mr. Sam Wang
   Program Coordinator
   (Support letter enclosed with hard copy)

3. **Chinese Chamber of Commerce**
   730 Sacramento St.
   San Francisco, CA 94108
   Tel. (415)-982-3000
   Attn: Mr. Francis So
   President

In 2003, CLEO in San Francisco, will have the added benefit of our program experience in Los Angeles County for 2002. In fact the advantage of having an extra year to plan for CLEO in San Francisco, coupled with the learning experience in 2002, will ensure an efficient program implementation.

Thank you for providing us with the opportunity to respond. Please feel free to contact us if you need any further clarifications.

Sincerely,

Basu Mukherjee, P.E.
Vice President
Global Energy Services

Enclosures:

1. Support letter from Chinese Consolidated Benevolent Association
2. Support letter from Chinese Newcomers Service Center

PUBLIC UTILITIES COMMISSION
505 VAN NESS AVENUE
SAN FRANCISCO, CA 94102-3298

Insert Date

President
Cohen Ventures, Inc.
DBA Energy Solutions
1738 Excelsior Avenue
Oakland, CA 94602
sam@energy-solution.com

Mr. Cohen:

This correspondence is with respect to Energy Solutions' program proposal entitled, "LightWash: An Efficient Commercial Clothes Washer and Lighting Program." Please provide the following information:

- Budgets segregated by utility service territory
- Number of lighting and washing machine replacements targeted in each service territory

A response should be provided via e-mail, by noon on Monday, March 18, 2002. Please send your response to ru4@cpuc.ca.gov. If you wish to mail a hard copy as well, please use the address listed in the above letterhead, Attn: Ariana Merlino.

Thanking you in advance for your prompt response,

Energy Division Staff
CPUC

Information Request Response Regarding:
The LightWash: An Efficiency Commercial Clothes Washer and Lighting Program,
Local Program Proposal

Submitted to:
Ariana Merlino
California Public Utilities Commission

Submitted by:
Ted Pope
Energy Solutions

The Commission requested the following two pieces of information for the LightWash Program:

- Budgets segregated by utility service territory
- Number of lighting and washing machine replacements targeted in each service territory

In response to this request, we have provided four tables. Table 1 provides the targeted number of replacements by IOU service territory. Tables 2 through 4 provide "Appendix B" format budget detail for each of three IOUs.

Should you require additional information, please do not hesitate to contact us. Please contact Ted Pope at 510-482-4420 ext 221 or ted@energy-solution.com with any questions on this response or the LightWash Program generally.

Table 1

	Target Installations	
	Lighting Retrofits	Washer Replacements
Pacific Gas and Electric Company	380	3,270
Southern California Gas Company	0	3,600
San Diego Gas and Electric Company	0	1,409
Total	380	8,279

Table: Budget Summary for Pacific Gas and Electric Company Territory

Item	First Year Cost	Second Year Cost	Total Cost
Administrative Costs (Task 4)			
Prime Contractor Costs			
Energy Solutions Admin			
Labor	$ 22,688	$ 34,939	$ 57,626
Benefits	$ -	$ -	$ -
Overhead	$ -	$ -	$ -
Travel costs	$ 8,591	$ 6,886	$ 15,477
Reporting costs (non-labor)	$ 1,320	$ 770	$ 2,090
Materials & Handling	$ 413	$ -	$ 413
General and Administrative costs	$ -	$ -	$ -
Total Energy Solutions	$ 33,011	$ 42,595	$ 75,606
Total Subcontractor Admin Costs			
Labor	$ 6,078	$ 5,472	$ 11,549
Travel costs	$ 8,568	$ 6,918	$ 15,486
Reporting costs (non-labor)	$ -	$ -	$ -
Materials & Handling	$ -	$ -	$ -
Total Subcontractor	$ 14,645	$ 12,390	$ 27,035
Subtotal: Total Administrative Costs	$ 47,656	$ 54,984	$ 102,641
Marketing/Advertising/Outreach Costs			
Materials, mailing, calls, presentations, etc	$ 164,286	$ 87,337	$ 251,623
Direct Implementation Costs For Technical Services & Implementation Plan (Task 1 & 3)			
Implementation Planning	$ 30,652	$ -	$ 30,652
Implementation Operations	$ 130,527	$ 186,480	$ 317,008
Washer Incentives	$ 130,830	$ 196,246	$ 327,076
Lighting Incentives	$ 71,250	$ 213,750	$ 285,000
Total Direct Costs	$ 363,259	$ 596,476	$ 959,735
Evaluation, Measurement and Verification Costs (Task 5)			
Consulting Team EM&V costs (excl 3rd party)	$ 18,651	$ 22,898	$ 41,548
Subtotal of Consulting Team Costs	**$ 593,852**	**$ 761,695**	**1,355,548**
Other Costs			
Third Party EM&V Consultant	$ 13,750	$ 41,250	$ 55,000
IOU Administration of Contracts	$ 30,655	$ 37,123	$ 67,778
Subtotal Other Costs	$ 44,405	$ 78,373	$ 122,778
Grand Total Budget	$ 638,257	$ 840,069	$ 1,478,326
Grand Total Budget From Electric PGC Fund	**$ 272,123**	**$ 358,166**	**$ 630,289**
Grand Total Budget for Gas PGC Fund	**$ 366,134**	**$ 481,903**	**$ 848,037**

Table 3

Table: Budget Summary for Southern California Gas Company Service Territory

Item	First Year Cost	Second Year Cost	Total Cost
Administrative Costs (Task 4)			
Prime Contractor Costs			
Energy Solutions Admin			
Labor	$ 13,613	$ 20,963	$ 34,576
Benefits	$ -	$ -	$ -
Overhead	$ -	$ -	$ -
Travel costs	$ 5,155	$ 4,132	$ 9,286
Reporting costs (non-labor)	$ 792	$ 462	$ 1,254
Materials & Handling	$ 248	$ -	$ 248
General and Administrative costs	$ -	$ -	$ -
Total Energy Solutions	$ 19,807	$ 25,557	$ 45,363
Total Subcontractor Admin Costs			
Labor	$ 3,647	$ 3,283	$ 6,930
Travel costs	$ 5,141	$ 4,151	$ 9,291
Reporting costs (non-labor)	$ -	$ -	$ -
Materials & Handling	$ -	$ -	$ -
Total Subcontractor	$ 8,787	$ 7,434	$ 16,221
Subtotal: Total Administrative Costs	$ 28,594	$ 32,991	$ 61,585
Marketing/Advertising/Outreach Costs			
Materials, mailing, calls, presentations, etc	$ 98,572	$ 52,402	$ 150,974
Direct Implementation Costs For Technical Services & Implementation Plan (Task 1 & 3)			
Implementation Planning	$ 18,391	$ -	$ 18,391
Implementation Operations	$ 78,316	$ 111,888	$ 190,205
Washer Incentives	$ 143,976	$ 215,964	$ 359,940
Lighting Incentives	$ -	$ -	$ -
Total Direct Costs	$ 240,684	$ 327,852	$ 568,536
Evaluation, Measurement and Verification Costs (Task 5)			
Consulting Team EM&V costs (excl 3rd party)	$ 11,190	$ 13,739	$ 24,929
Subtotal of Consulting Team Costs	**$ 379,039**	**$ 426,984**	**806,023**
Other Costs			
Third Party EM&V Consultant	$ 8,250	$ 24,750	$ 33,000
IOU Administration of Contracts	$ 18,393	$ 22,274	$ 40,667
Subtotal Other Costs	$ 26,643	$ 47,024	$ 73,667
Grand Total Budget	$ 405,682	$ 474,008	$ 879,690
Grand Total Budget From Electric PGC Fund	**$ 172,964**	**$ 202,095**	**$ 375,059**
Grand Total Budget for Gas PGC Fund	**$ 232,718**	**$ 271,913**	**$ 504,631**

Table: Budget Summary for San Diego Gas & Electric Company Service Territory

Item	First Year Cost	Second Year Cost	Total Cost
Administrative Costs (Task 4)			
Prime Contractor Costs			
Energy Solutions Admin			
Labor	$ 4,950	$ 7,623	$ 12,573
Benefits	$ -	$ -	$ -
Overhead	$ -	$ -	$ -
Travel costs	$ 1,874	$ 1,502	$ 3,377
Reporting costs (non-labor)	$ 288	$ 168	$ 456
Materials & Handling	$ 90	$ -	$ 90
General and Administrative costs	$ -	$ -	$ -
Total Energy Solutions	$ 7,202	$ 9,293	$ 16,496
Total Subcontractor Admin Costs			
Labor	$ 1,326	$ 1,194	$ 2,520
Travel costs	$ 1,869	$ 1,509	$ 3,379
Reporting costs (non-labor)	$ -	$ -	$ -
Materials & Handling	$ -	$ -	$ -
Total Subcontractor	$ 3,195	$ 2,703	$ 5,899
Subtotal: Total Administrative Costs	$ 10,398	$ 11,997	$ 22,394
Marketing/Advertising/Outreach Costs			
Materials, mailing, calls, presentations, etc	$ 35,844	$ 19,055	$ 54,900
Direct Implementation Costs For Technical Services & Implementation Plan (Task 1 & 3)			
Implementation Planning	$ 6,688	$ -	$ 6,688
Implementation Operations	$ 28,479	$ 40,687	$ 69,165
Washer Incentives	$ 56,353	$ 84,530	$ 140,884
Lighting Incentives	$ -	$ -	$ -
Total Direct Costs	$ 91,520	$ 125,217	$ 216,737
Evaluation, Measurement and Verification Costs (Task 5)			
Consulting Team EM&V costs (excl 3rd party)	$ 4,069	$ 4,996	$ 9,065
Subtotal of Consulting Team Costs	**$ 141,831**	**$ 161,265**	**303,096**
Other Costs			
Third Party EM&V Consultant	$ 3,000	$ 9,000	$ 12,000
IOU Administration of Contracts	$ 6,688	$ 8,100	$ 14,788
Subtotal Other Costs	$ 9,688	$ 17,100	$ 26,788
Grand Total Budget	$ 151,519	$ 178,364	$ 329,884
Grand Total Budget From Electric PGC Fund	**$ 64,601**	**$ 76,046**	**$ 140,647**
Grand Total Budget for Gas PGC Fund	**$ 86,919**	**$ 102,318**	**$ 189,237**

(END OF ATTACHMENT 5)