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Workforce Development and Influencing Decision Makers

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Market Transformation for HVAC Services: Bringing Up the Rear and Reinforcing the Champions

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QUALITY Residential HVAC Services

The Quality Residential HVAC Services Program is funded by California utility customers under the auspices of the California Public Utilities Commission and implemented by Frontier Energy under a contract awarded by San Diego Gas & Electric Company (SDG&E®). Customers who choose to participate in this program are not obligated to purchase any additional services offered by the Implementer. The trademarks used herein are the property of their respective owners.



Transforming the Market for Quality HVAC Services

- IOU Market Transformation Program throughout California
- Program will enable California contractors to carry out and to market higher quality HVAC services long after the program goes away.







Program Features

Quality Services and Tiers:

Single Family Incentives	Tier I ("Begin The Journey")	Tier II ("Advance the Average")	Quality Contractors ("Elevate the Champions")	
Quality Bid	\$350	\$700	+ \$105	
Quality Installation	\$500	\$1000	+ \$150	
Quality Maintenance Setup	\$350	\$700	+ \$105	
Quality Maintenance Call	\$150	\$300	+ \$45	

Multifamily per Unit:

Same as SF for Units 1-5; 25% for Units 6-50; 10% for Units above 50

Other Features:

- Large number of sites / small number of contractors = individual attention
- Quality Service Report
- Focus on thermostats
- Focus on contractors employing disadvantaged workers and serving prioritized customers
- Quality Contractor program: criteria and perks
- Discounts on tools for QC and small firms or firms with a lot of disadvantaged workers
- Training

Tier II Requirements

CATEGORY	TASK	Bid	Install	Maint Setup	Maint Call
INSPECT	Attic Insulation	•	•	•	•
	Duct Insulation	•	•	•	•
	Air Filter	•	•	•	•
	Ventilation Mechanism	•	•	•	•
	Thermostat	•			
	Suppl Heat Control	•			
	Defrost Control	•			
TEST	Static Pressure	•	•	•	•
	Temperature Split	•	•	•	•
	Airflow	•	•	•	
	Duct Leakage	•	•	•	
	Air Balance	•	•	•	
	Charge Test			0	0

CATEGORY	TASK	Bid	Install	Maint Setup	Maint Call
DESIGN	Simplified Load Calculation			•	
	Full Load Calculation	•	•		
	Provide Alternative Bids	•	0		
	Meets Sizing Limits	•	0		
	Meets Other Design Criteria	•	0		
ADJUST	Thermostat		•	•	•
	Heat Pump Control		•	•	•
	Defrost Control		•	•	
	System Evacuation		•		
	Charging		•		
	Refrigerant Management		•	0	0
	Clean Condenser Coils			•	•
COMPLETE	Permit Taken Out / Closed		•		
	Offer Maintenance Contract		•	•	•
	System Manual		•	•	•
	Refer Other Programs	•	•	•	•



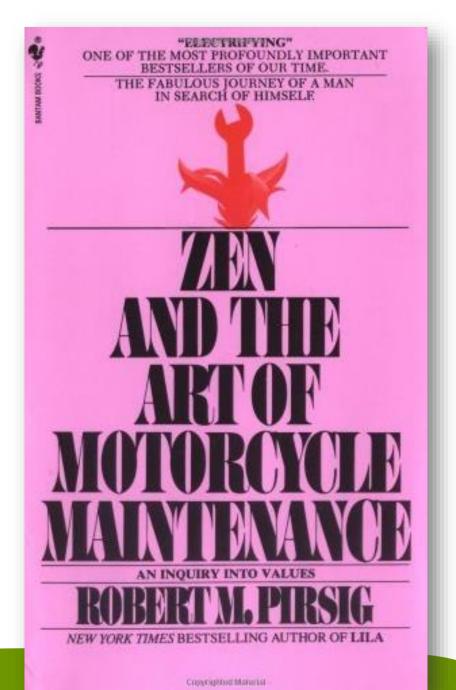
Market Transformation

- Goal is to...
 - ...encourage more contractors do "quality" residential HVAC services, especially those with disadvantaged workers and serving prioritized communities.





But what is quality?





Market Transformation Indicators for Quality HVAC Services

Study for California Public Utilities Commission in 2015, results from a survey of 145 contractors

- 1. The customer regards the technician and contractor with respect due to his/her professionalism and values his/her advice.
- 2. Customers are willing to pay more and tolerate longer service calls in order to receive a very comprehensive service.
- 3. Customers have access to user-friendly materials and tools (calculators, charts, case studies, analysis, etc.) to help them decide whether or not to invest in improving the performance of their HVAC systems.
- 4. The idea of "Service" is framed such that the process is not considered complete until a solution is provided.
- 5. Customer satisfaction feedback is routinely evaluated, including perceived value of the service.





QHVAC Program Key Performance Indicators

- Pay for Performance
- Plus...bonus based on the difference between one-time baseline surveys of non-participants and annual surveys of participants:
 - Customer: what was the quality you received in your recent HVAC services?
 - Contractor: what was the quality you provided in your recent HVAC services?







Customers: Assess Service you Received

- Cost of the service
- Quality of the assessment before making any changes
- Value and quality of any written report about the existing condition of your system
- Amount of time contractor spent with you or spent conducting assessment
- Overall value you received







Assess Technician and/or Contractor

- Overall satisfaction with technician/contractor
- I respected their professionalism
- I valued their advice
- I felt they were knowledgeable about héating/cooling systems, including new technologies
- I felt that I could trust them
- They provided a complete solution to my issues







Assess Decisions you Made

- I received a report that described the condition of my system and justified the contractor's recommendations.
- The technician took detailed measurements to determine the right solution for me
- I received adequate material (such as a unique report) or sources/tools that I needed to make a decision on the service
- I was able to contact the contractor beyond the initial visit for more information
- I received clear criteria for recommended repairs
- I received concrete, actionable and trustworthy information
- Recommendations were based on the conditions of my system and my needs—not a cookie-cutter solution.







Assess Outcome of your Service

- The service call took longer than I thought, but I felt the contractor was thorough
- I opted to replace the system rather than repair it as I originally intended, because of the information provided and advice of the contractor.
- I opted to replace my system with a better alternative than I had originally considered because the information provided was compelling.
- I was never pressured to do more costly repairs or order a more costly system than I needed.
- I felt that the contractor performed a high quality service (bid, installation, or maintenance)
- The contractor went above and beyond the heating/cooling system to make sure I got a comfortable and affordable home.







Survey Issues to Consider

- Non-Participant Customers:
 - Ask contractors to distribute post card to their customers, with a chance to win a YETI cooler.
 - Card has QR code, URL, and Business Reply
 - \$5 Gift card for customer response
- Considered self-selection bias and bias against hard-to-reach customers
- Ideally match participants and non-participants on location, HTR/DAC status, system type, type of service.



Option 2: Take the survey at bit.lv/ucb-hvac.

Participant Code: 12345

Option 3: Fill out your address and return this postcard if you prefer to receive a paper survey in the mail.

Name & Address:







Thanks for your attention!

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