

# **Yet Another Look at Demand-Side Bidding: Long Island Power Authority's 75-Megawatt Efficiency RFP**

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## **ABSTRACT**

Long Island Power Authority (LIPA) continues to experience significant growth in demand for electricity. While this is not news, LIPA's solution for procuring new supply is. LIPA is committed to cost-effective energy efficiency to minimize the need for additional generation and transmission resources. Though the supply needs ruled out energy efficiency as the only solution, LIPA was determined to make efficiency contribute to the solutions. In spring 2003, LIPA issued a Request for Proposals (RFP) seeking additional supply (SRFP) (Long Island Power Authority 2003).<sup>1</sup> Soon after, a second RFP was issued seeking 75 megawatts from energy efficiency (Long Island Power Authority 2004).<sup>2</sup>

This paper explores the design and implementation of the Energy Efficiency RFP (EE RFP). The RFP required efficiency measures with both megawatt (MW) and megawatt-hour (MWh) savings. MW savings had to be realized from energy efficiency only, not load management or distributed generation. Respondents were asked to include a detailed discussion of how customers would be solicited, what measures would be installed and how savings would be verified. Extra consideration was given to proposals addressing load pockets<sup>3</sup>, publicly-owned buildings, small commercial and industrial (C&I) customers and multifamily buildings.

The paper addresses how bids submitted in response to the RFP scored on the requirements and issues. The paper also compares the costs, kW/kWh ratio, lifetimes of the energy efficiency RFP with the supply RFP, and prior experiences of demand-side bidding (DSM). Particular attention was paid to past efforts at demand-side bidding. LIPA strived to identify, and as often as possible, rectify the deficiencies of those efforts.

## **Introduction**

This paper shows the novel and relevant parts of a process by which a team of LIPA staff and consultants conceived, solicited, received and awarded a portfolio of contracts that fulfilled the 75 MW solicitation.

In the effort to find the best DSM bidding process, utilities continue to experiment with new structuring methods. LIPA researched past experiences and developed a process whereby the tenets of their DSM philosophy could be realized within the confines of the Energy Service Companies' (ESCOs) ability to deliver. Not knowing if the bidders shared or understood how to deliver on this vision, the development team spent significant effort soliciting information from

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<sup>1</sup> <http://www.lipower.org/newscenter/pr/2003/oct7.eer.html>

<sup>2</sup> <http://www.lipower.org/newscenter/pr/2004/jan20.rfp.html>

<sup>3</sup> Load pockets are locally constrained areas of a distribution or transmission network.

the bidding pool. Issuance of the EE RFP was preceded by a Request for Information (RFI) in which the ESCO community offered suggestions on the EE RFP structure and terms. This information was used in crafting a detail-filled RFP that allowed respondents to clearly understand LIPA's needs. (Even the purchase contract that respondents would be asked to sign was included.)

The value of this process to other utilities and contractors lies in its results: a useful number of top-quality bids to deliver energy reduction competitive in cost with new supply generation.

## **Utility Description**

The Authority is a corporate municipal instrumentality and political subdivision of the State of New York. Its subsidiary, LIPA, provides electric service to customers in Nassau County, Suffolk County and portion of Queens County known as the Rockaways. LIPA provides electric service over approximately 1,300 miles of underground and overhead transmission lines to over one million customers.

LIPA's consistent rise in demand has prompted a commitment to cost-effective conservation to minimize construction of additional transmission and generation resources for Long Island. LIPA already offers a broad array of energy efficiency, renewable energy and demand response programs as part of its \$37 million per year Clean Energy Initiative (CEI). The CEI is a successful portfolio of energy efficiency and load control programs that LIPA has been running since 1992. The CEI addresses most aspects of the residential market. In the Commercial & Industrial (C&I) sector, the CEI efforts primarily focus on the New Construction Program; the program derives most of its savings from lost opportunity and market events.<sup>4</sup>

## **RFP Description**

LIPA issued both generation and energy efficiency RFPs during 2003. The RFP for supply was for up to 650 MW and the EE RFP for 75 MW. The simultaneous evaluation of responses permitted a head-to-head comparison of the economics of both types of resources.

The EE RFP sought to provide energy efficiency services to several customer segments who had limited participation in LIPA's CEI. Thus, LIPA focused its RFP on the following segments of the commercial industrial market:

- Commercial customers under 145 kW in demand;
- Multifamily buildings;
- Publicly-owned facilities;
- Retrofit opportunities in the above three market segments; and
- Congested load pockets.

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<sup>4</sup> Lost opportunities refer to the replacement of failed equipment with energy-efficiency equipment or the construction of new buildings; if energy efficiency is not promoted at the time of retrofit or new construction, then the energy savings are considered "lost". Custom and whole building refers to LIPA's approach for newly constructed buildings.

Through its own research, LIPA recognized that smaller C&I customers had less contact with staff than the utility desired. Smaller customers make up roughly 90% of the customer list and 40% of the total C&I load, but a disproportionate number of megawatt-hours harvested through the whole building and custom<sup>5</sup> components of the Commercial New Construction Program were from larger customers. Because of this reality, LIPA focused the RFP on engaging smaller customers. The RFP was structured with the following features:

- Minimum bid of 5 MW;
- Bidders were allowed to set their own pricing. (No bid pricing was set by LIPA.);
- Savings had to come from energy efficiency only, not load management or distributed generation;
- The offering was limited to nonresidential loads, with highest priority for small C&I customers, publicly-owned facilities, multifamily buildings over five units, and C&I retrofit markets;
- A preference was established for innovative approaches and new technologies; and
- All proposed Energy Efficiency Measures (EEMs) had to provide coincident peak summer demand savings as well as energy savings.

LIPA did not want to manage hundreds of individual projects, so they asked respondents to aggregate projects. Potential bidders were asked to consolidate projects into 5 MW project blocks. Five megawatts was large enough to keep the number of contractors manageable while not discriminating against smaller bidders. LIPA reserved the right to evaluate smaller bids for niche applications.

LIPA plans to execute master contracts with six ESCOs who in turn will communicate directly with customers. All marketing and project-specific contractual obligations will be between the customer and the ESCO. LIPA will pay for MW and MWh savings, only in conjunction with approved measurement and verification. No payments are made up-front; everything must be verified before any payments are made.

Mechanisms were considered to ensure contractors achieved the savings persistence promised in their proposals, but in the end these were abandoned. LIPA bears the risk of lack of savings persistence based on the following conclusions:

- The results from numerous evaluations show that savings from most energy efficiency measures do persist after the first year or two;
- The expected persistence of the measures would be factored into LIPA's evaluations of the bid prices; and
- It is probably more cost-effective for LIPA to bear any residual persistence risk, than to shift this risk to ESCOs and have them include a risk premium in their bid price.

This approach is consistent with trends in Standard Performance Contracts programs elsewhere (e.g., California and New York State Energy Research and Development Authority

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<sup>5</sup> Custom and whole building refers to LIPA's approach for newly constructed buildings. Custom means the customer is addressing more than one system with non-prescriptive measures. Whole building means that the customer is addressing all building systems in their design of a new building.

(NYSERDA), where Measurement and Verification (M&V) periods were shortened to none, one, or two years depending on the type of measure.

The ESCOs will be responsible for providing energy savings measurements in accordance with the M&V protocols specified in NYSERDA's Commercial and Industrial Performance Program. LIPA established separate contracts to hire consultants to verify pre-existing conditions and installations and to ascertain whether contractors have met contractual requirements.

The type of measure dictates the payment terms:

- EEMs implemented from a pre-approved or prescriptive list are eligible for payment within 60 days of a complete invoice submission. During this 60-day period, LIPA will conduct a post-installation inspection to verify that the measures were installed. Payment is based on verified installations.
- Contractors installing custom EEMs receive 30% of the total invoice after post-installation inspection and receipt of project-commissioning certification. An additional 40% is paid after receipt of the first M&V report depending on the number of reports required: If only one M&V report is required, the final 70% is paid upon receipt. Projects with high persistence and stable savings performance may require only one report. Where additional reports are required, the remaining 30% is paid when the final M&V report is received. This approach decreases the cost of M&V and financing premiums associated with longer term payouts, while ensuring measures are installed and performing as promised.

Each contractor will have all initial projects pre-inspected. The frequency of future pre-inspections will be determined by the results from the initial inspections. Bidders failing to acquire savings distribution within five percent of the contracted amount risk reduction of the contract amount or even contract termination.

Proposers were required to submit a \$3,000 bid fee with their proposal. This was designed to weed out proposals from firms that had insufficient resources to deliver at least five megawatts of energy savings.

## **Evaluation Criteria**

Each proposal was rigorously evaluated on numerous criteria. Teams of multidisciplinary reviewers considered separate factors, resulting in a comprehensive evaluation of each submittal. The criteria were rated on a scale of 1 to 5 and then combined to form an overall score.

## **Technologies**

Because the proposals identified a broad spectrum of potential customers, the list of measures and services was long. Most proposals targeted the smaller customer; the following lists the technologies most applicable to that group:

- Lighting upgrades (e.g., super T-8, both retrofit and new fixtures);
- Reflectors;
- Low-power ballasts;

- Parabolic troffers;
- Daylighting and dimming;
- Roof-top HVAC units including tune-ups;
- Refrigeration upgrades;
- Motors and variable frequency drives;
- Energy management systems; and
- Commissioning and retro-commissioning.

Most proposals were responsive to the RFP's smaller customer feature, so the measures revolved around end-use technologies present or possible, for the average convenience store, restaurant, small hotel, offices and other retail establishments. The RFP was clear in communicating LIPA's intent to provide long-term savings, not temporary load control, and peak demand savings, not cream skimming.

Criteria in rating the proposals included proven effectiveness of the technologies, appropriateness for Long Island customers, realism about energy and demand savings, expected persistence and customer-perceived risk (e.g., impacts on other customer-owned equipment or customer operations).

### **Management and Verification Protocols**

Establishing procedures to verify that the measures were installed and installed correctly, are producing savings and continue to produce savings for the life of the measure is crucial. Savings were determined using the NYSERDA Measurement and Verification Protocol.

### **Marketing**

To achieve the goals respondents proposed, significant solicitation of customers is necessary. In turnkey contractor-implemented programs, it is critical that whatever marketing is done, it does not alienate nor confuse customers. Since LIPA will be one step removed from customer interaction, it is important to ensure that contractors establish solid plans with superior customer service. Experience, proven results, demonstrated understanding of the targeted segment(s), and promotional and sales strategy were strongly considered in rating proposals.

### **Persistence/Baseline**

A key criterion for evaluation was how respondents characterized the EEM lifetime and efficiency baseline to project savings.

### **Measurement and Verification Plan**

Respondents were not required to provide measurement and verification services but to provide the costs for such services. In addition, LIPA will hire an independent, third party to verify pre-existing measures and the installation of measures.

## **Operation & Maintenance and Commissioning/Retrocommissioning**

Because the contractors receive full payment before the end of the measure life producing the savings, it is imperative that installed equipment operate as designed and continue to produce savings over the contract term.

## **Coordination and Cross-selling with other LIPA Clean Energy Initiative (CEI) Programs**

All respondents were asked to comment on how this essentially retrofit initiative would coexist with the current Commercial/Industrial New Construction Program. Also included in the review were:

- Customer service;
- Local Content;
- Qualifications and Management Plan;
- Quality Control;
- Environmental Quality and Safety;
- Firm Capability;
- Contract Exceptions; and
- Load Impacts.

## **Costs**

Initially, proposals were ranked by the levelized cost of energy saved<sup>6</sup>. Proposals rated as acceptable on all of the above factors, and having the levelized cost of energy saved less than the cost of energy saved from the generation proposals, were selected for more detailed economic evaluation.

## **Portfolio**

LIPA sought at least one high-quality offer for each targeted market segment. LIPA also wanted assurance that the number of ESCOs marketing within a particular segment was manageable, considering coordination, customer confusion and the size of the market segment. Once the top proposals were identified, the savings and number of firms by segment were examined. A portfolio of proposed contracts was developed considering the top ranked proposals in each segment, and the ability of the segment to support the contracts and MW savings.

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<sup>6</sup> Levelized costs are calculated by dividing the NPV of the cost stream by the NPV of the lifetime kWh. It represents the cost per kWh and the cost recovery, over time, at an interest rate equal to the utility discount rate. All-in-cost refers to the actual costs to deliver the kW promised. All administrative, fuel, construction, and financing costs are included.

## Results

### Quality of Proposals

The twelve proposals exceeded LIPA's expectations in terms of quality and megawatt savings offered. They were well presented and provided LIPA with an unexpected spectrum of choices to accomplish the 75 MW goal. The proposals exhibited the following qualities:

- Total capacity offered was almost triple the amount sought (bids offered 120 MW more than solicited);
- Innovative approaches to marketing and well-developed marketing plans;
- Highly responsive to the priorities identified in the RFP (e.g., targeted segments and retrofit applications); and
- Offered several unique solutions: (e.g., retro-commissioning, convenience store/grocery market refrigeration, lighting fixture redeployment, and multifamily apartment measures.)

Table 1 shows how much the responses exceeded expectation: 75 MW were solicited; 194 MW were proposed. Several proposals offered a range of attainable savings from the minimum of 5, to 60 MW.

Some respondents used most of the ten-year timeframe to install measures; others, just three years. The least expensive savings came from bids that dealt only with lighting. The range in the average cost of savings was partly attributable to the range of technologies proposed: with circuit power reducers and single technology lighting on the low end, and comprehensive retrofit HVAC on the high end. The more expensive MWh were simply the result of higher measure costs. The extent of customer contribution (e.g., the percentage of the installed cost subsidized) was also a significant driver of cost.

**Table 1. Summary of All RFP Responses**

Company	Total Capacity (MW)	Number of Years	Average MW/Year	Average GWh Savings per Year	Load Factor of Savings	Average Cost (\$/kW)	Average Cost (\$/MWh)
Totals/Averages	194	6	39	627	37%	\$1,341	\$53.57

Each proposal suggested baselines for the technologies proposed. Full load hours for T-8 fluorescent lighting, for instance, ranged from a low of 1,300 hours to a high of 6,000. The selection team risked discounting more expensive proposals that offered realistic baselines for harder and expensive-to-reach customer segments, in favor of proposals with a single technology and unrealistic market penetration and run times.

A standard set of assumptions was factored into all proposals on a measure-by-measure basis. The standard assumptions revealed the differences the baseline assumptions<sup>7</sup> had on the

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<sup>7</sup> Hours of operation, coincidence factors, measure life, unit savings, etc.

average cost per MWh of the measures in each proposal (e.g., ten-year measure life for a super T-8). This was not used as a definitive test, but as yet another way to compare cost-effectiveness. The next step in evaluating the results was to put each proposal through a utility cost-effectiveness screening tool<sup>8</sup>. The Excel-based tool uses avoided cost of generation derived from the SRFP and the measure costs to calculate a benefit/cost ratio. Two scenarios of avoided costs were used:

- Reference case: a capacity expansion plan of LIPA building 80 MW combined-cycle plants to meet load growth; and
- Avoided plants based on the all-in cost<sup>9</sup> of generation from the SRFP that LIPA issued at the same time as the EE RFP. Components of the avoided costs included cost of the generation plant, gas pipeline capacity, transmission connection to the grid, operation and maintenance costs, fuel costs and air emission allowances.

Cost-effectiveness was evaluated at two levels: individual measures and aggregate proposal. The individual measure analysis allowed LIPA to develop effective de-rating factors (accounting for persistence, coincidence, and hours of operation) and to identify specific measures LIPA might want to have the ESCO drop. Every measure from each proposal was entered, along with the costs to LIPA, kWh and kW savings, lifetime and applicable load shape. Table 2 shows a sample of lighting measures from the proposals and the resulting benefit/cost ratio for each. The table reveals the inherent difficulty in characterizing and comparing measures from proposal to proposal and why standard assumptions were necessary.

**Table 2. Lighting Measures Cost-Effectiveness**

Company	Measure Name	Electric Resource Benefits	Electric Resource Costs	Electric Resource Net Benefits	Electric Resource B/C Ratio
E	2L4'T8EE/EL low power	\$69	\$50	\$18	1.37
F	Commercial Super T8 2L retro	\$75	\$33	\$42	2.27
D	Common Area Super T8 2L retro	\$140	\$48	\$92	2.91
E	Sm. Retail/Commercial Lighting	\$102,887	\$8,775	\$94,112	11.71
H	Small Hotel - Lighting Retrofit	\$11,274	\$3,121	\$8,152	3 .61
J	2L2' T8/ELEC.	\$34	\$47	\$(13)	0.73

<sup>8</sup> Societal cost-effectiveness screening was not possible as not all proposals had provided the customer contribution information at the time of this draft. Information will be included in final paper.

<sup>9</sup> All-in-cost refers to the actual costs to deliver the kW promised. All administrative, fuel, construction, and financing costs are included.



Table 3 shows the same measures as Table 2 but with standard baselines and measure lives used in the analysis.

**Table 3. Table 2 Data with Standard Baselines and Measure Lives**

Company	Measure Name	Electric Resource Benefits	Electric Resource Costs	Electric Resource Net Benefits	Electric Resource BCR
E	2L4'T8EE/EL low power	\$66	\$50	\$16	1.31
F	Commercial Super T8 2L retro	\$86	\$33	\$53	2.61
D	Common Area Super T8 2L retro	\$124	\$48	\$76	2.58
E	Sm. Retail/Commercial Lighting	\$137,782	\$8,775	\$129,007	15.70
H	Small Hotel: Lighting Retrofit	\$17,913	\$3,121	\$17,792	5.74
J	2L2' T8/ELEC.	\$63	\$47	\$17	1.36

The second stage of economic evaluation focused on aggregate dollars and MW by year, compared to the avoided costs in each year. This was required to assess the financial impacts to LIPA, as well as any rate impacts.

The last task for the selection team was to evaluate the comprehensiveness of the responses. As Table 4 reveals, the proposals offered more than lighting, they showed diversity of end-use, and responsiveness to the RFP by addressing small customers, load pockets and publicly-owned facilities.

After LIPA selected respondents qualified to receive consideration, the task turned to establishing the portfolio of bids to fulfill requirements in each market sector. In some cases, the number of awards was determined by several factors including the MWh potential of the sector, the realistic number of companies who could market within LIPA's territory without confusing customers and the number of MW offered by each company. In all but two cases, respondents did not offer enough MW to cover any single category fully. It was determined that:

- The multifamily sector could only support one award;
- The general, small C&I sector could support two awards, plus one focused on refrigeration end-use;
- Publicly owned facilities could support three awards;
- The large C&I segment could support five awards; and
- In all segments with multiple awards, the ESCOs would be required to disclose to the customer that other ESCOs are offering similar services.

**Table 4. Comprehensiveness of RFPs**

Company	Percent of Savings by End-Use			Percent of Savings by Targeted Segments		
	Lighting	HVAC	Other	Small Customers	Load Pockets	Publicly-Owned Facilities
A	70%	30%	0%	60%	50%	60%
B	81%	15%	4%	67%	0%	0%
C	23%	4%	73%	62%	18%	0%
D	73%	23%	4%	54%	53%	11%
E	64%	20%	16%	44%	20%	16%
F	70%	20%	10%	100%	23%	10%
G	76%	0%	24%	10%	15%	10%
H	76%	12%	12%	12%	15%	49%
I	28%	72%	0%	15%	20%	25%
J	70%	20%	5%	25%	17%	5%
K	100%	0%	0%	45%	50%	5%
L	36%	44%	19%	30%	55%	15%
Average	64%	26%	10%	57%	27%	14%

Note: for Company C, “other” refers mostly to refrigeration.

The results of this RFP are summarized in the following tables:

**Table 5. Total and Sector Results**

	Large C&I	Small C&I	Publicly-Owned	Multifamily	Total
MW Savings	28.22	30.29	17.65	11	87.16
Number of Awards*	5	3	3	1	6
Average Cost of Savings	\$784	\$908	\$985	\$1,479	\$976

\* Some companies received more than one award.

**Table 6. Levelized Costs Results**

Levelized cost of energy saved	\$49.80/MWh saved
Levelized cost of capacity saved	\$118/kW-Year saved
Levelized rate impact	\$0.011/kWh

**Table 7. Prevent Value Results**

	Reference case	Proxy plant case
Present value of benefits	\$217.36 million	\$142.36 million
Present value of costs	\$ 95.51 million	\$59.51 million
Net present value (benefits – costs)	\$157.85 million	\$82.85 million

## RFP Success

The RFP succeeded in receiving top-quality responses because it built upon experiences from other utilities and ESCOs to create a mutually beneficial agreement. ESCOs can build their businesses supplying inexpensive megawatt-hours--while making a profit. Ongoing efforts in New Jersey and Massachusetts have set the stage for regional ESCOs to engage in DSM bidding programs that are market-based, not the result of limits established by supply-side pricing. In this case, the only constraint on pricing is from competition. In the early 1990s, utilities pushed the financial and technological risk to the ESCO side. This approach tended to increase the cost to the utilities, or resulted in the easiest to acquire, least expensive and least comprehensive EEMs installed. Utility costs rose when bidders factored in payments over long contract terms and penalties for failure to achieve contracted energy and demand.

The easiest to acquire EEMs had other hidden costs; for example, a contractor might install lighting-only EEMs at a site where more comprehensive measures were also cost-effective. When the contractor finishes the lighting retrofit, the ability for future contractors to supply attractive savings at this site is reduced. This diminishes the value of future DSM to the customer because the mix of measures without lighting is less attractive and less likely to garner company support.

## Responses to Past Challenges

Though this process is only beginning, LIPA responded to the shortcomings of past RFPs directly:

- **Past Challenge #1:** Increased risk made the field of available contractors small, expensive, and leery.
- **LIPA's Approach:** LIPA's energy efficiency purchase agreement was fair in sharing of risks, balancing administrative costs, ensuring quick payments and specifying measurement and verification requirements.
- **Past Challenge #2:** Lack of definition of the target market complicated, and even caused the demise, of past efforts. RFPs often left out where the utility needed to focus its DSM measures. Bidders were left to target customer projects capable of producing the greatest

profit, without concern for whether the energy savings would maximize benefits for other stakeholders.

- **LIPA's Approach:** LIPA provided clear definitions of its preferences in the RFP, e.g., load pockets, small customers.
- **Past Challenge #3:** Previous RFPs were issued without consulting potential bidders. If the RFPs were ill-defined or did not provide a value prospect for bidders they stayed away, leaving the utility with a less competitive field.
- **LIPA's Approach:** LIPA's RFP was developed based on input from a Request for Information (RFI) process, and the RFP provided information for bidders on baselines, standard practices, and kWh sales, by segment and geographic region.
- **Past Challenge #4:** Many problems from RFP processes were attributable to inexperienced companies entering new areas of endeavor. Inexperience led to underachievement and defaults. Many bidders were comfortable with combined RFPs, where DSM made up only a small part of the entire package and the costs were based on the supply side of the same bid. When these same companies began to bid on DSM-only RFPs they found it less certain and their success rates lower (Goldman and Kito 1994).
- **LIPA's Approach:** LIPA found the ESCO community has matured; it can respond well to specific DSM-only requests. The bid fees limited participation to firms that clearly have the experience, management, and capabilities to deliver.

## Lessons Learned

- **Lesson #1:** One shortcoming of this effort was not asking enough questions about what the respondent would be asking customers to contribute to individual projects.
- **Solution:** Get clearer information about the deal each firm is offering customers.
- **Lesson #2:** The selected firms all had different pricing to customers. LIPA risked confusing customers if multiple companies contacted them and offered different pricing, financing and incentives.
- **Solution:** Within segments where multiple (more than 3) awards will be made and there is active bidding by a number of firms, either specify a model design (e.g., buy down customer payback to 2 years), with firms encouraged to offer alternatives; or use a single-price auction approach, i.e., all firms are paid the price of the highest accepted bid.
- **Lesson #3: Energy management systems (EMS systems)** are often held up as superior energy savings devices for both energy and peak demand savings. But the technologies (a combination of controls) do not have ready definitions or savings assumptions. In this RFP, the challenge for EMS systems was persistence of savings over the ten-year term.
- **Solution:** Devise a better model for ensuring ongoing maintenance of energy savings from energy management control systems.
- **Lesson #4:** The cost of supply is rising to accommodate air emission credits, rising fuel prices and congested transmission. The maturation of the ESCO industry and the terms of the contracts being offered by utilities result in DSM becoming less expensive than

supply. While no one is suggesting DSM can replace supply altogether, it can at least delay construction.

- **Solution:** Energy efficiency is competitive with new energy generation and can be successfully used to balance or displace the construction of new capacity.

## Data Quality and Assumptions

The data presented in this paper are based on respondents to the EE RFP, not on executed contracts. LIPA's administrative costs of approximately 0.5 cents/kWh saved are not part of this analysis. (These costs are included in the net present value and levelized cost of energy saved.) Administrative costs are low because LIPA is not paying for program-specific marketing or advertising, although LIPA is paying for independent verification and a web-based project management and tracking system that will be used by all of the ESCOs.

This paper does not compare the costs of the EE RFP with other LIPA or other utility-administered DSM efforts. Costs of this RFP are comparable with LIPA's other DSM programs, but the other programs do not specifically target the small C&I market so their comparison value is limited. It also does not explore the cost differential between all-source RFPs and DSM-only RFPs; experiences by other utilities suggest that all-source RFPs result in higher payments to DSM bidders than do DSM RFPs (Goldman and Kito 1994).

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