3.3.4 Conclusion: Summary of Utility Program Insights

While many utility programs do not currently offer home energy upgrades directly, their ability to track customer usage data and provide targeted rebates and services makes them highly valuable partners for contractors and non-utility program administrators. The summary below details important observations on utility program administrators and those observations' impact on potential expansion into the residential energy efficiency market. Understanding these impacts can help program administrators and other actors create and/or sustain a business that promotes energy efficiency.

Summary of Utility Program Administrator Insights		
	Observations	**Impact on Potential Entry into Residential Energy Efficiency Market**
Market	■ IOUs represent the majority of the market, in terms of installed generation capacity (375 gigawatts, or GW, versus 195 GW for all other utility types—public, federal, and cooperative).[48]	■ IOUs have increased spending on energy efficiency steadily over the last few years. However, the energy efficiency spending remains a small fraction of total revenues (e.g., 1 percent of overall revenue). ■ Municipal and cooperative utilities, while smaller in terms of market share, often have advantages in that their stakeholders are willing to take a less profit-driven approach to energy efficiency investment.
Governance	■ Utilities can be divided into three categories: – **IOUs** have a traditional corporate governance structure and are motivated primarily by profit – **Municipal utilities** are influenced by the municipal government and are generally regulated at the local level, rather than at the state level – **Cooperative utilities'** service offerings are driven by the decisions of their members, which are their customers ■ IOUs have profitability requirements (the average net margin in 2010 was 8 percent), whereas municipal and cooperative utilities are not bound by similar profit mandates from their stakeholders.[49] ■ Most IOUs are constrained by state regulations that have public agendas that can contrast with shareholders' profit requirements. ■ Municipal utilities are influenced by the municipal government and are generally regulated at the local level rather than the state level. ■ Cooperative utilities' service offerings are driven by the decisions of their members, which are their customers. ■ State legislatures directly impact the regulation of utilities through PUCs. ■ Regulated utilities prioritize reliability above other considerations, unless directed to do otherwise by mandates. Stakeholder value is the second priority followed by clean energy in the hierarchy of utility priorities.	■ Working with an IOU requires an understanding of the corporate chain of command. Managers of existing energy efficiency programs are key points of contact for program administrators as they are more familiar with energy efficiency. ■ Municipals and cooperative utilities, while regulated, are not driven by profit margins. (The regulations they must comply with often differ from those covering IOUs.) ■ Program administrators and other entities can work at the legislative level, as a starting point, to influence energy efficiency goals and targets, and can work with the PUC regarding utility regulations (a long-term process). The intervention process allows for some public participation in regulatory cases, such as rate evaluations. ■ Other programs should be prepared to make a partnership case based on both cost and reliability grounds as well as on the value of efficiency as a social good. ■ Making a quantitative case on the cost and value of efficiency to the utility is critical to influencing management and partnership decisions. ■ Partners that can provide solutions to financing home energy upgrades without resorting to blanket ratepayer charges would be favored by utility management.

[48] U.S. Energy Information Administration, Office of Electricity, Renewables & Uranium Statistics. *Electric Power Monthly.* (2011). http://205.254.135.24/cneaf/electricity/epm/epm.pdf.

[49] Source: Booz Allen research.

Summary of Utility Program Administrator Insights		
	Observations	**Impact on Potential Entry into Residential Energy Efficiency Market**
	■ Presenting real cost and value data (rather than deemed savings) to decision-makers is critical to making a partnership case to utility decision-makers. ■ Many utilities (and their regulators) are also highly concerned about passing program costs along to program non-participants.	
Financial Model or Structure	■ Utilities most commonly finance energy efficiency programs through ratepayer funding. This funding can take the form of a surcharge or cost-recovery rate. ■ Many utilities advocate decoupling revenues from the sale of kWh to customers when developing energy efficiency programs, as the decrease in sales of electricity stemming from demand side management (DSM) negatively affects their profitability. ■ Decoupling lowers the value of energy efficiency for customers as their energy costs may not decrease despite their investments in home energy upgrades.	■ Decoupling is just one of many ways to remove negative financial incentives to utilities for pursuing energy efficiency. Other ways include allowing the utility to increase its rates to compensate for decreased revenues caused by energy efficiency programs, or removing the onus on the utility to run the program altogether. ■ Third-party efficiency program administrators can provide similar benefits to decoupling, while being funded by fees levied on ratepayers. This structure removes the onus for running the efficiency program from the utility itself and provides incentives to homeowners to invest in home energy upgrades.
Assets and Infrastructure	■ Utility energy efficiency programs must meet mandatory cost-benefit tests, such as the TRC test, which compares the generation and transmission cost savings from energy efficiency against the program's operating costs.	■ If other programs wish to collaborate with utilities in the energy efficiency market, understanding the cost-benefit methodology used by their local utility, as well as their basic infrastructure constraints, is critical to determining how the program can add value to a utility's existing programs. ■ Expansion into the energy efficiency market can be more cost-effective than creating new capacity. An average tipping point is approximately $600 per kilowatt for the cost of new generation.[50]
Service Offering	■ The services for residential customers in the energy efficiency market may include the following: – DSM – Customer services (rebates, home energy upgrades, loans, education) ■ Utility energy efficiency programs do not typically offer home energy upgrades, which represent one of the least commonly offered services among utilities. Penetration rates are under 2 percent, due to a lack of demand, incentives, or sufficient contractor breadth.	■ Utility cost-benefit tests are cited as a barrier for their entry into the energy efficiency market. Bundling packages of highly cost-effective and less cost-effective energy conservation measures together for submission can help get more aggressive measures to pass the test. ■ Utilities can partner with other non-utility programs that can provide services on their behalf that would not pass strict Benefit Cost Tests.
Customers and Customer Acquisition	■ Utilities have direct access to customer energy usage data, which allows them to target key customers and better measure the effectiveness of specific energy efficiency programs. ■ Utility bills are an often-cited advantage in program advertising, as they provide free advertising to potential customers.	■ Utilities can effectively target customers in the energy efficiency market and enable greater impact of program dollars spent through the use of energy usage data. ■ Positioning the program information next to the total cost of the bill is the optimal way to get customer attention when conducting on-bill advertising.

[50] Source: Industry interviews. (See "Acknowledgements" for a complete list of industry representatives interviewed.)