Implementing Industrial Self-Direct Options: Who Is Making It Work?

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ABSTRACT

The opportunity is growing for industrial customers to "opt out" of paying into publicly funded energy efficiency programs and "self-direct" those funds into energy savings. As more states develop publicly funded energy efficiency programs, advocates from the industrial sector continue to argue that their needs are best served by a self-direct construct. These advocates claim that they will achieve energy savings equal to or better than what they would have achieved had they remained paying participants in the publicly funded programs. While there are some merits to this argument, there is also evidence that there are advantages to keeping large industrial customers in a public benefits fund program, or at least in a self-direct program that better tracks such customers' investments and resultant energy savings.

This paper discusses the current landscape of such self-direct programs, the history behind them, how they are currently viewed and used by customers and energy efficiency program managers alike, and the current issues and challenges such programs present. It then discusses what can be learned from existing programs, and how the concerns and needs of all stakeholders could be collectively addressed by more effectively designing both industrial energy efficiency programs and self-direct programs. The paper concludes with suggested next steps for further inquiry and analysis.

Background

After years of post-deregulation dormancy, the electric industry began to re-emphasize the importance of encouraging the deployment of renewable energy and energy efficiency in the late 1990s (York and Kushler 2005). States began to codify plans in legislation and regulatory directives that developed renewable energy and energy efficiency programs for electric customers. In 1996, Rhode Island became the first state to develop a system in which all ratepayers contributed to a single pool of money used to fund renewable energy and energy efficiency investments across all rate classes (DSIRE 2008). These types of mechanisms are generally referred to as public benefits fund (PBF) programs and are the mechanism by which most U.S. states that undertake substantial energy efficiency efforts now fund the programs designed to encourage increased deployment of energy efficiency, renewable energy, research and development, and demand response projects.¹

Increasingly, as states have established and expanded energy efficiency programs, the largest utility customers that might otherwise be required to pay into the PBF programs have made the case that those funds would be best spent outside of the existing PBF programs. These customers are typically large industrial firms and claim that they themselves could most productively spend the money on improving efficiency in their facilities. One of the most prevalent reasons why they believe that such a construct is in their best interest is that the PBF programs do not offer services or benefits that are responsive to their large industrial customers'

¹ For purposes of this paper, "PBF" charges and funding pools will refer to traditional systems benefit charges and funds and non-bypassable line-items on customers' bills that directly fund energy efficiency programs.

needs. In many U.S. states, public service commissions and the energy efficiency programs they oversee have allowed a small number of these customers to operate within such a construct; large customers opt out of paying for the PBF-funded efficiency programs and self-direct the money toward efficiency investments in their facilities.

The debate is ongoing regarding whether these types of "opt out"/"self-direct"² programs offer the best mechanism to encourage energy efficiency in the industrial sector. Until all major stakeholders can agree on an optimal way to encourage energy efficiency among large industrial customers, the debate will continue. What is clear is that, in states where large industrial customers do not feel adequately served by their local industrial energy efficiency program, a good self-direct program can be a better option, and can in fact encourage more efficiency investments than the in-place industrial program (Bumgarner 2009; Young 2009; Younger 2009). There is clear evidence that self-direct programs can be structured to satisfy most stakeholders and maximize efficiency savings in the industrial sector.

Stakeholder Concerns

As is typical in many public policy arenas, a variety of stakeholders with interests in the design and implementation of energy efficiency policies have emerged to strongly voice their opinions regarding the necessity and efficacy of self-direct programs. Each sector with a keen interest in the manner in which energy efficiency projects are planned and funded has developed effective arguments supporting its positions. Businesses that make energy efficiency investments must consider the manner in which those investments complement their existing business goals and practices. Utilities that administer energy efficiency programs must consider the way in which the programs are run, vetted, and funded. And consumer advocates, public service commissions, and elected leaders must consider the overall societal costs and benefits of the efficiency investments. It is no wonder, then, that tensions often run high when the design and scope of energy efficiency programs are discussed.

Industrial Sector Positions

Large industrial customers generally support the existence of a self-direct option when PBF programs are in place. The motivation for this position extends from several commonly held beliefs among the sector: 1) that industrial facility managers or company owners know best the internal realities of their firms and are best equipped to make decisions about capital investments; 2) that industrial firms will otherwise pay for "services they do not expect to use;" 3) that industrial firms, due to their constant need to improve their bottom lines and take advantage of savings opportunities, will always invest in all cost-effective energy efficiency; 4) that there is inequity in the PBF mechanisms, requiring that industrial customers effectively "subsidize" other classes of ratepayers; and 5) that self-direct options provide a needed "safety valve" against unnecessary PBF-added energy expenses (Schroeder 2007; Prause et al. 2007; Sedano 2006; ELCON 2008). Large industrial customers frequently work together to present a united front in support of a self-direct program, and can generally strongly influence the development and design of a self-direct program (Chittum and Elliott 2009).

² This paper will use the term "self-direct" to describe the entire realm of regulations and program designs that allow some customers to direct some portion of money that would have otherwise gone toward a pre-determined PBF program toward energy efficiency investments made at their own discretion.

The large industrial customers' position further argues that a number of publicly funded energy efficiency programs have historically not served the needs of the industrial sector very well (ELCON 2008). It is important to emphasize the fact that industrial customers often look at government-managed or regulated programs as interference generally; the presumption that an industrial facility manager knows better than any other individual what is best for his firm prevails. Programs that appear to unnecessarily cost firms money are understandably discouraged by the sector. PBF-funded efficiency programs are often viewed as adding further costs to an industrial customer's bill while offering unequal technical assistance and/or financial benefit to compensate that same customer (ELCON 2008). Industrial energy efficiency programs exist that do an exceptional job of providing their industrial customers with quantifiable benefits; however, the unfortunate truth is that many industrial programs do not always yield excellent results—either objectively through their savings or subjectively through the opinions held by customers (Chittum and Elliott 2009).³

Utility Sector Positions

An investor-owned utility is generally regulated by a state-level public utilities commission that will require the utility to provide a certain level of reliable service to all of its customers while not charging them an unreasonable cost.⁴ To deliver that kind of customer service, a utility engages in an array of short- and long-term planning. Keeping customers "on the books" – in a PBF program – allows the utility greater access to and understanding of the customers that often represent their largest loads (see Figure 1). When a customer chooses to self-direct its PBF funds, the information about what that customer does with the funds is only as good as the measurement and verification efforts of the utility or the entity managing the self-direct program. A utility faces a certain degree of risk when it allows a customer to self-direct but does not require it to check in regularly and prove that claimed savings have truly occurred.

Utilities are also often subject to energy savings goals or requirements through their regulating body. Again, because the industrial sector can make up a large portion of a utility's overall demand, an industrial customer may offer some of the greatest opportunities for energy and demand savings. By remaining involved in the deployment of energy efficiency technologies through PBF program activities, a utility can also learn from the experience and understand how a particular technology works in the field. Some PBF programs are involved in every aspect of project development, and glean a considerable amount of information from each of those projects. This knowledge can help the utility better serve future customers.

Finally, utilities lose revenue streams when a significant number of firms choose to selfdirect efficiency funds (Chittum and Elliott 2009). Some utilities do contend that, in certain cases, the industrial firms themselves are best suited to make decisions about how to spend money to improve a plant's energy efficiency (Prause et al. 2007; Chittum and Elliott 2009). But the utilities or other efficiency program administrators are consequently faced with a smaller pool of money from which to fund efficiency improvements and they must actively reallocate resources and adjust the scope of their programs accordingly, which can pose an administrative burden.

³ The manner in which PBF-funded industrial efficiency programs *could* better serve their customers is beyond the scope of this paper, but is a necessary area of investigation within the topic of self-directed programs. ⁴ Municipal utilities and rural electric cooperatives are regulated by the local government and member board,

⁴ Municipal utilities and rural electric cooperatives are regulated by the local government and member board, respectively, who provide the same function.

National Electric Sales	2007 Retails Sales (MWh)	% Sales Total
Residential	1,392,240,996	37.06%
Commercial	1,336,315,196	35.57%
Industrial	1,027,831,925	27.36%
Total	3,756,388,117	100.00%
	Source: EIA (2009a)	
National Natural Gas Sales*	2008 Retails Sales (M cubic feet)	% Sales Total
National Natural Gas Sales* Residential	2008 Retails Sales (M cubic feet) 4,865,691	% Sales Total 33.30%
Residential	4,865,691	33.30%
Residential Commercial	4,865,691 3,121,823	33.30% 21.36%

Figure 1: Retail Sales of Electricity and Natural Gas

Note this does not include sales to electric power producers

Source: EIA (2009b)

Societal Concerns

In most PBF-funded programs, there is some amount of money collected from ratepayers that is used to subsidize programs that the regulator or program administrator deems important. These include programs for low-income residents, weatherization assistance, and in some cases educational programs. U.S. commercial and industrial electric customers pay about 40 percent of all collected PBF fees, but they experience over 62 percent of the PBF-funded savings in all Consortium for Energy Efficiency (CEE)-member programs.⁵ A fairly similar breakdown is found in CEE-member natural gas programs. Thus, while the argument that PBF-paying customers are not seeing the benefits of their contributions may be true for some individual customers, it appears that overall, commercial and industrial customers enjoy a larger percentage of the benefits than they pay into the pool of funds (EIA 2009a, 2009b; CEE 2009).⁶

PBF fees typically include a small charge to help fund programs that do not necessarily directly benefit the paying customer but do offer societal benefits (CEE 2009; Chittum and Elliott 2009). While industrial firms would prefer not to be required to pay for these programs, it is a matter of public policy and remains as a charge even in some self-direct programs.

When customers invest in energy efficiency, there are also benefits to the electric system as a whole: transmission and distribution systems are less strained, which leads to greater reliability; the need to pay for additional generation is alleviated; and greenhouse gas (GHG) emissions are reduced. Further, investments in energy efficiency generally lower the overall price of electricity to all customers across all classes due to the resultant decreased demand (Eldridge et al. 2008). Depending upon the structure of the corresponding utility, a PBF program may also charge for projects that will benefit the system as a whole. In general, society benefits from these efficiency projects and also benefits when PBF programs are fully funded to finance such projects.

⁵ CEE industrial member programs are used as a representative sample of industrial energy efficiency programs, due to the fact that they come from across the U.S. and Canada and are of varying sizes.

⁶ Breakdowns of this funding and overall savings specifically for industrial customers were not available, but would be useful for further exploration of this topic.

Existing Program Structures

Although the majority of U.S. states with PBF funds allow some form of self-direct efficiency programming for their large industrial customers, there is a wide variety of program structures. Some of these programs are better defined by what they are not than by what they are. According to the research conducted for this report, most self-direct programs are *not* actually programs with clear savings goals and measurement and verification mechanisms. In fact, a significant number of states that allow their industrial customers to self-direct have established the legal ability for customers to self-direct without fully delineating the manner in which such customers would prove their efficiency savings to the corresponding utility or regulatory body (see Appendix 1). Self-direct programs fall roughly into two categories:

- Unstructured Programs These programs enable large industrial customers to selfdirect funds away from the PBF pool and directly into efficiency measures at their own plants. As a result, they cannot utilize any of the existing PBF-funded incentives or technical assistance programs. Many of these programs are administered in a "one-off" manner, wherein a company may approach its utility and request to leave the PBF program. Depending upon existing regulations affecting the utility, the utility may be able to use its own discretion to allow the company to self-direct its funds. Programs in this category offer no clear structure once the company has chosen to self-direct. In multiple states, such as Idaho, Minnesota, and Maine, companies are not required to prove that the savings achieved at their facilities with self-directed funds is equal to or greater than what would have been achieved had they remained in the PBF program.
- **Structured Programs** These programs also take many forms, but generally establish clearer guidelines for firms interested in self-directing their PBF payments. Many of them still require companies to pay into the PBF, but then set aside each company's funding streams specifically for efficiency investments for that same company. Others offer a mechanism by which customers receive a discount off of their PBF payments, which is reflected in a line-item credit on a bill. These programs are often developed in close consultation with representatives from the large industrial companies, so as to ensure the design of a program will meet the needs of the affected customers. States such as Oregon, Wisconsin, and Utah offer large industrial customers very clear rules for determining what self-directing will "cost" them and/or which portion of the PBF fees they can be excused from paying. This is a typical design for a structured self-direct programs actively work to help self-directed customers leverage appropriate PBF-funded activities and incentives where useful, and in exchange, the industrial customer may become temporarily responsible for paying a portion of the PBF fee.

What's At Stake?

Publicly funded energy efficiency programs do not operate with centuries of history behind them. Program managers are constantly learning from best practices, improving their programs, and setting new goals and standards (York et al. 2008). As the likelihood of a federal

efficiency policy increases,⁷ the manner in which all rate-paying customers are incented to invest in energy efficiency becomes paramount (Furrey et al. 2009). Federal climate change legislation will likely call on energy users in all sectors to reduce consumption, and the specter of future supply constraints and the burdensome cost of new generation requires that the country maximize energy efficiency.

When industrial customers are allowed to self-direct without clear guidance and administration, the overall funding and design of the entire PBF-funded program can be compromised (KCC 2008). In Maine, after the largest industrial firms opted out of funding Efficiency Maine's programs in 2007, Efficiency Maine saw its funding pool decreased by \$2.5 million, representing 17 percent of the business program's funds (Vrabel 2009). Operating without a clear understanding of which customers may choose to self-direct and not having a clear plan for managing those customers can be problematic. A PBF-funded program could find itself short of funds and facing high degrees of uncertainty about future funding, program participant numbers, and the characteristics of their remaining industrial customers (Sedano 2006).

While the structure-less programs may be easy to administer and elicit little resistance from the industrial sector, they cannot effectively secure energy savings, as there is little followup to measure and record savings and to force compliance. Additionally, it appears that selfdirect options that apply unilaterally across the board to certain classes of customers can sometimes alienate the affected customers who would prefer to remain in the PBF-funded program to take advantage of its services and technical expertise. These are critical issues that could be addressed with more effectively designed and managed self-direct programs.

What We've Learned

The good news is that there are self-direct programs that are both effective and fair. The bad news is that many self-direct programs are neither. The research conducted for this paper indicates that a great number of self-direct programs with murky structures and goals have been allowed through ill-considered regulatory and legislative action. The programs that appear to be most effective and most well-received by industrial customers are those that offer a high degree of flexibility to respond to the ever-changing needs of particular industrial firms. Oregon offers a clear example of a flexible public policy that stands to benefit all parties. Oregon offers both robust PBF-funded industrial energy efficiency programs, administered through the Energy Trust of Oregon, and what the authors believe to be a substantial and fair self-direct program, administered through the Oregon Department of Energy (Prause et al. 2007). The self-direct program is very structured and offers industrial customers a clear, delineated path for certifying and monetizing their energy efficiency investments. The PBF program and the self-direct program work together to help customers determine their best fit (Gordon 2009).

The manner in which such collaboration occurs and the justification for it will clearly vary from state to state. Interestingly, the mutually exclusive claims on either side of the aisle that a PBF program or a self-direct program offers greater administrative utility and less overhead appear not to be true in either regard. A PBF program does offer a decrease in a utility's or PBF-funded program's marginal administrative costs of new projects overall, since a single administrative employee often manages a great number of projects. However, as projects

⁷ See <u>http://aceee.org/energy/national/eers.htm</u> for a more in-depth discussion.

become more complex for customers and require a longer amount of time and an increasing amount of labor to fully understand and assess a manufacturing facility, the institutional knowledge of the existing industrial facility manager becomes a crucial asset. In those cases, a self-directed project can benefit from the intimate knowledge of the facility that an internal manager already possesses (Prause et al. 2007; ELCON 2008; Chittum and Elliott 2009). An internal expert proactively working to assess and address energy efficiency opportunities can potentially do so with less administrative costs than someone completely unfamiliar with the facility.

The overall lesson learned from research for this report is that self-direct programs are just beginning to mature, although many of them are far too new to allow their success to be gauged. Combining the lessons learned from long-running industrial PBF programs and the lessons that could be learned by better communicating with the industrial sector itself could form the backbone of a flexible self-direct program. Such a program could provide the benefits of the technical assistance and financial incentives of a PBF program with the customizable and flexible aspects of a good self-direct program.

What Works

Ultimately, industrial energy efficiency programs, whether defined PBF programs or less defined self-direct programs, exist to encourage energy efficiency investments in the industrial sector. Programs that can do that well may take many forms, but some contain, or are composed entirely of, self-direct programs. A few of these stand out as excellent examples of well-crafted and well-considered programs:

- In Washington State, Puget Sound Energy (PSE) allows its largest industrial customers to self-direct the funds that would otherwise enter into the larger PBF pool. PSE's approach is unique in that it requires that projects by such customers meet the exact same cost-effectiveness standard as every other conservation program the utility administers. Self-directing customers pay would-be PBF fees into their own dedicated pool, which is managed by PSE. Each customer has about 2.5 years to use up their funds for efficiency investments. At the end of the period, remaining moneys are combined into one pool, and PSE issues RFPs for the use of the remaining funds. All self-directing customers can apply for an award from the collective pool. This structure incentivizes companies to use their dedicated funds quickly, and keeps them focused on conservation and engaged with PSE staff. PSE offers technical assistance and access to internal resources for self-directing customers' projects, and pays for those services by extracting a 10 percent administration fee from each customer's dedicated pool (Younger 2009).
- Integrating the planning of the self-direct program into larger efficiency program planning is critical to being able to best leverage the strengths of all existing programs and policies for industrial customers. In Oregon, the self-direct program was integrated into the 5-year planning cycles already conducted by the Northwest Power Planning Council. This enabled the existing efficiency program administrators to understand how their industrial programs and the self-direct program could best be combined and integrated for customers that could benefit by remaining involved in both constructs (Prause et al. 2007). An engaged staff at both the Energy Trust of Oregon and the Oregon

Department of Energy actively helps companies take advantage of Energy Trust products when appropriate and the self-direct option when necessary (Gordon 2009).

• In Utah, customers of Rocky Mountain Power that self-direct their PBF funds can receive a credit toward their PBF fund payment of up to 80 percent of an eligible project cost. By forcing industrial customers to pay the PBF, but then allowing them to receive a credit when they actually make efficiency investments, Rocky Mountain Power's program is actually encouraging more energy efficiency than it would have in a more traditional PBF system. This is because energy managers are able to make a stronger case to their upper management to make efficiency investments since the funding has effectively already been set aside by the PBF payments. Customers are also eligible for a credit of 50 percent of their PBF payments if they can prove that they have made all cost-effective efficiency investments. To date, not a single customer has attempted to make such a claim. Finally, since all customers are still making PBF payments, they can still take advantage of the PBF-funded programs and technical assistance. Customers are given the flexibility of using the self-direct option for one project and a PBF program for another project, and will then receive credits towards the PBF only for the self-directed project (Bumgarner 2009).

What Needs Improvement

There is a tremendous amount of useful information to be gleaned from the experience of industrial companies that participate in self-direct options. Since only a small number of self-direct programs integrate extensive measurement and verification methods into their programs, there exist few opportunities to fully catalogue the savings achieved in the industrial sector through self-directed efficiency investments. Cataloguing and analyzing new and existing efficiency measures is a good way to accumulate the kind of data necessary to build a robust and useful program and an understanding of the area's industrial sectors.

In self-direct programs such as the one in Maine, firms that self-direct are consequently unable to access any of the PBF-funded assistance. As a result, efficiency opportunities that may have been identified by an expert supported by the PBF programs may not be addressed, especially when the firm lacks internal expertise in a particular technology. In Maine, industrial firms that took electric service at the transmission or sub-transmission levels were forced to opt-out of the Efficiency Maine program and self-direct. A number of firms who did not wish to self-direct were put into that category, and are frustrated by the fact that they are now restricted from accessing Efficiency Maine programming (Vrabel 2009). No party benefits from such a construct.

In Idaho, PBF programs don't follow up with self-directing firms to know whether energy efficiency investments were made. This is typical of the less-structured self-direct programs. When companies choose to self-direct their efficiency investments, the local PBF program administrator may be missing an opportunity to gain information about the true performance, savings, and costs of a given technology that is being deployed at a self-directing company (Gordon 2009). There is a societal benefit to sharing that information, and self-direct programs could be encouraged to collect and share their information in a manner that improves the body of knowledge surrounding a particular technology or sector for future program planning.

Suggested Next Steps

The industrial sector offers extensive energy savings opportunities (Shipley and Elliott 2006). It is detrimental to society at large if industrial firms are frequently misunderstood and neglected by the very entities charged with implementing the industrial sector's most substantial energy efficiency programs. Everyone stands to benefit from increased energy efficiency. If industrial customers lack the trust of their local utility or believe that their local energy efficiency program does not understand their needs, it is unlikely that they will partner in any future efficiency endeavors (ELCON 2008). And while industrial firms may believe they have instituted every cost-effective energy efficiency activity and investment at their facilities, there are almost always further opportunities (Shipley and Elliott 2006; Bumgarner 2009). The technical assistance and access to financing and additional support offered by a utility or other PBF efficiency program can be invaluable to an industrial firm trying to maximize its energy efficiency. Discouraging industrial customers from working with their local energy efficiency program can result in a number of critical lost opportunities.

It is suggested that PBF-funded industrial energy efficiency programs work to better understand the needs of their customers. Industrial energy efficiency programs that offer custom incentive and technical assistance programs, such as those offered by National Grid and the New York State Energy Research and Development Authority, are more likely to be able to address the concerns of their industrial clients who believe their only option for energy efficiency is to opt out of the PBF. In Wisconsin, industrial customers are given the choice to self-direct, but have thus far not taken up the option due to the robustness and technical expertise of the Wisconsin Focus on Energy programs (Schutt 2009). There is significant flexibility built into these three PBF programs. Customers who wish to self-direct often cite a lack of flexibility in local efficiency programs as a major reason why they should be allowed to self-direct. Custom programs are designed to address specific needs at a facility. Regulators and program administrators could work harder to understand the manner in which a self-direct program could complement and augment an existing PBF-funded industrial program. Such flexibility with program design and ratemaking policy is critical to keeping industrial customers feeling satisfied and included in the process, and will help maximize their energy efficiency by allowing a more nuanced and customized response to their unique needs.

All too frequently it appears that regulators, perhaps in response to aggressive lobbying on behalf of the largest industrial customers, have created self-direct options that lack any guidance or enforcement on long-term savings measurement and verification (Chittum and Elliott 2009). These same self-direct clauses also lack any sort of clear connection or integration with existing PBF programs, leaving industrial customers to face an "either-or" situation. This should not be the case.

Conclusion

The argument between saying "yes" or "no" to opt-out/self-direct options is not the right argument to be having. Discussing the manner in which a program can achieve the greatest amount of savings within the industrial sector while benefiting society and all ratepayers at large would be a more effective dialogue. There exist in the U.S. very concrete examples of ways to fairly and effectively encourage industrial sector customers to maximize energy efficiency in their facilities by taking advantage of existing PBF programs, as well as by self-directing particular investments and projects when appropriate (Chittum and Elliott 2009).

The industrial sector is difficult to serve well in any policy or technical arena. The sheer heterogeneity of the sector necessitates a degree of flexibility and technical expertise that can be difficult to come by, especially given limited resources and current economic conditions. For these reasons, combining the best aspects of a PBF program and a structured self-direct program can offer industrial customers the best of all worlds. The products, institutional knowledge, and support that most PBF programs offer can be useful tools for large industrial customers, while the opportunity in a self-direct program to more directly manage the funds dedicated to energy efficiency allows firms to integrate their own internal understanding of their needs. A program that offers both can exist, wherein a portion of the self-directed funds is used to finance the administration of the components of the PBF program that large industrial customers will require, and stringent cost-effectiveness tests are undergone for self-directed activities. This allows industrial customers to remain connected to and in communication with the local PBF program, and ensures that savings will be achieved that benefit society at large.

The historically acrimonious relationship between large industrial customers and the efficiency programs that desire to serve them need not be perpetuated. New and inventive program approaches in place in several parts of the country offer excellent examples of how these two sides can come together and maximize something that can benefit everyone: energy efficiency.

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Appendix 1: Summary of Opt-Out Provisions in States with Active PBF Programs

State	Offer self- direct option?	Required min. demand/ annual usage	Description of self-direct option	How many choose to self-direct?
California	No	-		
Colorado	Yes	10GW annual and 2MWh demand	Customers can apply to self- direct a portion of PBF; a rebate is granted based on kW and kWh savings; projects subject to same TRC as other efficiency measures	A "few" customers have applied
Connecticut	No	Self-generators only		
Delaware	n/a			
District of Columbia	n/a			
Florida	No			
Idaho	Yes	Special contracts customers only	No M&V requirement, no requirement to prove hardship	A handful of customers
Illinois	No		Not for electric. Current draft legislation would allow for natural gas self-direct	
Iowa	n/a			
Maine	Yes		All transmission and sub- transmission customers are forced to self-direct. No M&V requirement.	All transmission and sub-transmission customers
Maryland	No		New program; no self-direct provision yet	
Massachusetts	No		Large industrial users currently considering whether to attempt to institute self-direct	
Michigan	Yes		Too new to assess	
Minnesota	Yes	20MW	Customers must prove that they have internal conservation programs in place, and that paying PBF would be a hardship due to competitiveness issues. No M&V requirement; state follows up in several years to determine if still eligible	Most of the customers that are eligible choose to self-direct
Montana	Yes	8760 MWh	Pay PBF, can ask for reimbursement of moneys spent on conservation projects. No M&V requirement, but customers must file reports with PSC	55 of 56 eligible customers chose to self-direct
New Hampshire	No			
New Jersey	No			

State	Offer self- direct option?	Required min. demand/ annual usage	Description of self-direct option	How many choose to self-direct?
New Mexico	Yes		Can have third-party evaluator, credit comes as credit toward PBF. Allows credit of previously done conservation + credit if no conservation can be done cost- effectively	
New York	Yes		Some large industrials have; no structured program in place	
North Carolina	Yes		Too new to assess	
Ohio	Yes		Unclear how structured program will be. Too new to assess	
Oregon	Yes	8,760 MWh	May use up to 68% of their "related portions of PPC" on new conservation measures. Can combine self-direct option with PBF-funded programs	
Rhode Island	Yes		Natural gas customers can self-	
Texas	No		direct? Need further info.	
167422	NO			0::f:
Utah	Yes	1MW / 5,000 MWh	Can get up to 80% of project cost as a credit toward PBF on bill. Can get 50% of PBF credited if demonstrate they've done all cost-effective conservation. 1-5 year simple payback required on projects.	Significant number of participants in 80% program. No customers have taken 50% option for "no cost-effective projects available" option
Vermont	No		Currently being considered by regulators	
Virginia	Yes		Too new to assess	
Washington	Yes		Self-directing customers pay into a dedicated pot, minus 10% admin. fee. Customers have 2.5 years to use up funds. After that, all funds are combined, and companies compete via RFP for remaining funds.	About 30 customers
Wisconsin	Yes	1MW / 10,000 Dth of gas	Not scrutinized for free ridership issues like Focus on Energy programs, but high degree of administrative burden for companies	No customers have taken this option
Wyoming	Yes	1MW / 5,000 MWh	Can get up to 80% of project cost as a credit toward PBF on bill. Can get 50% of PBF credited if demonstrate they've done all cost-effective conservation. 1-5 year simple payback required on projects	No customers have taken this option, it is too new

Data compiled from Chittum 2009, Schroeder 2007, Gordon 2009, Prause et al. 2007, York and Witte 2008, Bumgarner 2009, Haase 2009, Schutt 2009, Zuraski 2009, Anderson 2009, Vrabel 2009, Timmerman 2009, Davis 2009, Younger 2009, Young 2009, White and Gunderzik 2009