If It Looks Like A Duck:
How To Identify Unique Companies In Energy Efficiency Programs

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Introduction

Energy efficiency programs often have limits or caps on the amount of financial assistance that a single company may receive in a given period of time. How do program managers set those caps and how do they decide what constitutes a single company? Some managers take an ad-hoc or common sense approach (If it looks like a duck, walks like a duck, and quacks like a duck, it must be a duck.) However, common sense does not necessarily have an answer for all situations. Businesses have a variety of ownership arrangements varying from single-owners in single facilities, to franchises with separate owners but common brands, to wholly-owned subsidiaries, to corporate ownership of facilities at multiple sites. For single-owner, single facility businesses, it is clear what entity is subject to the incentive cap (it is undeniably a duck). But for other types of businesses, it may be far from clear. Take the case of two McDonalds restaurants, one a franchise and one owned by the corporate parent – they look the same, they walk the same (a Big Mac tastes the same in both), but do they talk the same? In one case, the individual franchise owner can be approached locally. In the other case, all major decisions go to corporate. Should the come under one incentive cap or two? This paper will describe common approaches for defining incentive caps and the entity subject to the cap. It will give specific examples from programs around the country and draw conclusions and recommendations that program managers and designers can use to determine the best approach for their situation.

Why have incentive caps?

Incentive caps are usually put in place to ensure that the budget is not over-spent, to smooth the distribution of funds across the year so the program does not come to a halt when the funds are expended, and to help ensure a broader distribution of the incentives. Incentive caps can help ensure that incentive funds are available throughout the year when the program is not allowed to go over budget. It is not uncommon for programs to run out of incentive funds mid-way through a year but doing so can adversely affect relationships with trade allies and customers and can create distortions in the market.

Incentive caps also can help ensure that incentive funds are distributed across a wider range of participants. Without caps, there is the possibility that a few companies could come up with such large projects that they would monopolize the majority of the funds available. If a program is purely oriented toward achieving cost-effective energy savings, then the distribution of incentives across time, regions, company types, and company sizes should not matter. However, programs rarely are so narrowly focused. With the addition of a goal to move the market toward more efficient equipment and practices comes the need to ensure that the program has some effect on all target markets, which may be expressed in company types or sizes, or in geographic regions. Consistent pressure throughout the year can be very important for moving markets. A program that is only active for part of the year can be much less effective in changing standard operating procedures.

Even if a program is purely oriented toward achieving cost-effective energy savings, with a first-come-first-served approach and no incentive caps, it runs the risk of spending a large portion of its budget on large but marginally cost-effective projects that happen to get in the door first. By spreading funds more broadly across time and projects, a program will have more leeway to pursue aggressively the most cost-effective projects.

Conclusion #1. If a nonresidential energy efficiency program is intended to move markets, not just to achieve current energy savings, then an incentive cap that is low enough to ensure a reasonable distribution of incentives across time, across company sizes and types, and across regions of the state is a sensible approach.

Is raising the incentive cap the best way to increase program spending?

If an energy efficiency program consistently does not spend all its allocated funds, is raising its incentive cap the best way to increase spending? Some argue that it is. In this view, incentive caps could be raised without harming the distribution across companies, regions, or time – the extra funds spent on large projects would simply use up funds that were typically going unspent, rather than robbing other projects. While this scenario may play out, it assumes that raising incentive caps is the best method for increasing program spending. This is not a foregone conclusion. The amount of incentives distributed could be increased in a number of ways, including increased training and advertising, increased staffing of sales and technical assistance teams, broadening the technologies covered by the program, and increased targeting of sectors with high potential but low participation.

Conclusion #2. If under-spent budgets are a problem, raising incentive caps is not necessarily the best solution.

If we now take as a given that an incentive cap is a valid method for helping a program achieve a reasonable distribution of projects, how do we choose the cap? If the program has been in place for a year or more, we can look at the distribution of incentives. If not, we can look at programs in states around the country.

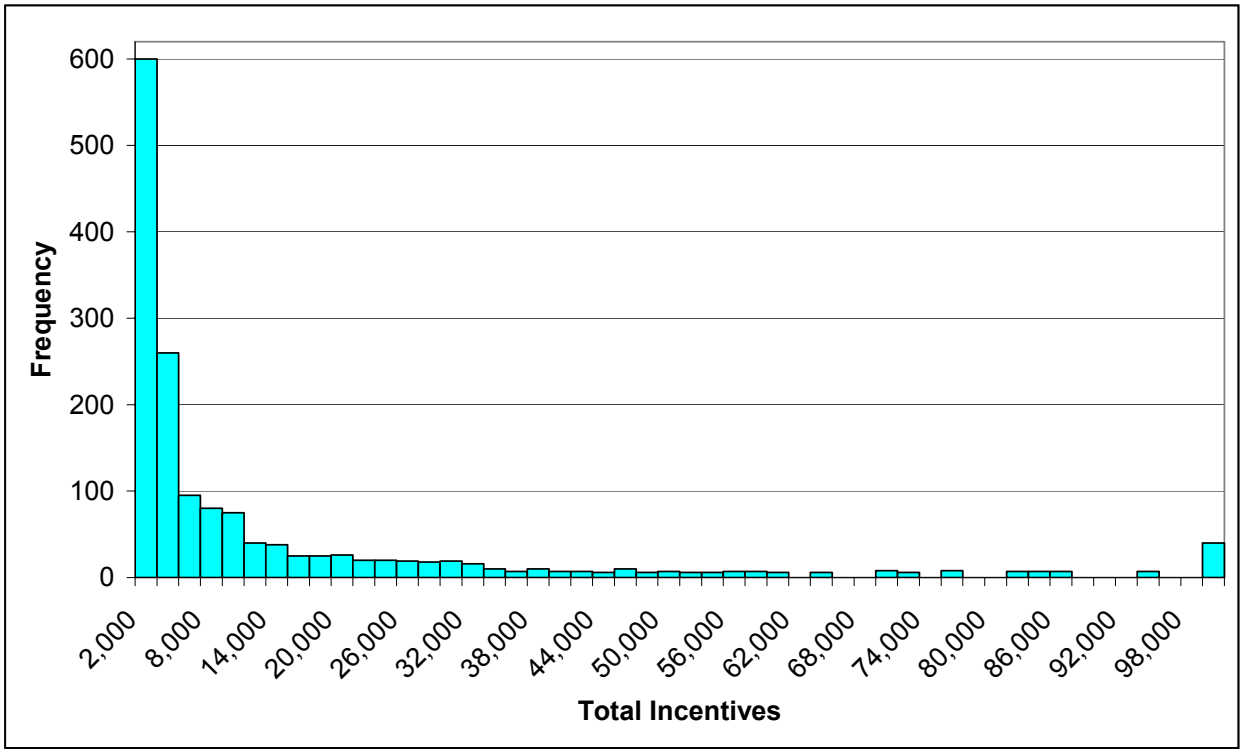
What does the distribution of incentives in the past tell us about where the incentive cap should be?

Looking at the historical distribution of incentives can give clues to how much impact changing the incentive cap will have. How far below the cap is the average incentive? If it is well below, raising the cap will probably not have a large effect on the program. How many participants could the program serve if every one took the maximum incentive? How does that number compare to the pool of potential participants? If it is a substantial fraction of the potential participants, then the cap is not likely to be a significant restriction.

How have the historical incentives been distributed across the range? Do they cluster at or just below the incentive cap? Or are they skewed the other way? Knowing this gives another clue. If the incentives are skewed as shown in the following graph (based on real data), raising the incentive cap seems unlikely to unleash a flood of new applications. In this example, the scarcity of participants receiving more than $50,000 in incentives seems to imply that there are not a

large number of projects that would proceed if they got a small amount more than $100,000 in incentives. The data do not support drawing a conclusion about the number of projects that might come forward if the incentive cap was raised significantly.

Figure 1. Distribution of Incentives – Little Pent-Up Demand



If, on the other hand, the incentives distribution looks like the graph in Figure 2 (based on fictional numbers), then it seems reasonable to expect that raising the cap will unleash a significant number of new projects.

Without testing a new incentive cap in the market, we cannot know what its effects will be on the distribution of projects. However, we can at least place boundaries around the likely effects by creating a hypothetical situation. If a program is spending all its incentive money before the end of the year then any new project that comes in at the incentive cap will displace smaller projects in proportion to their costs. For example, if the average project in a program receives $8,500 in incentives then any new project at the cap of $100,000 project will displace on average $100,000/$8,500 or 12 projects (see Figure 3). If the incentive cap is raised to $200,000, each new project at the cap would displace 24 projects. Twenty-five projects at the $200,000 cap would crowd out almost 600 average projects.

Figure 2. Distribution of Incentives – Pent-Up Demand

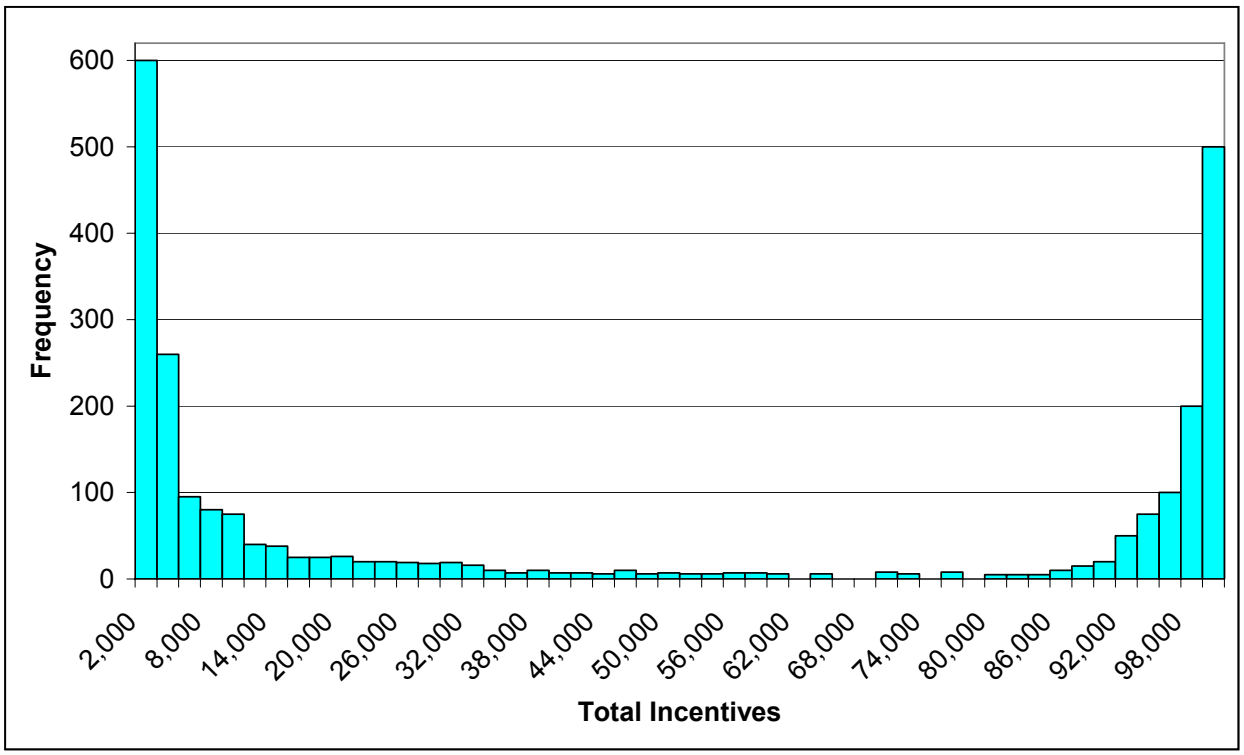
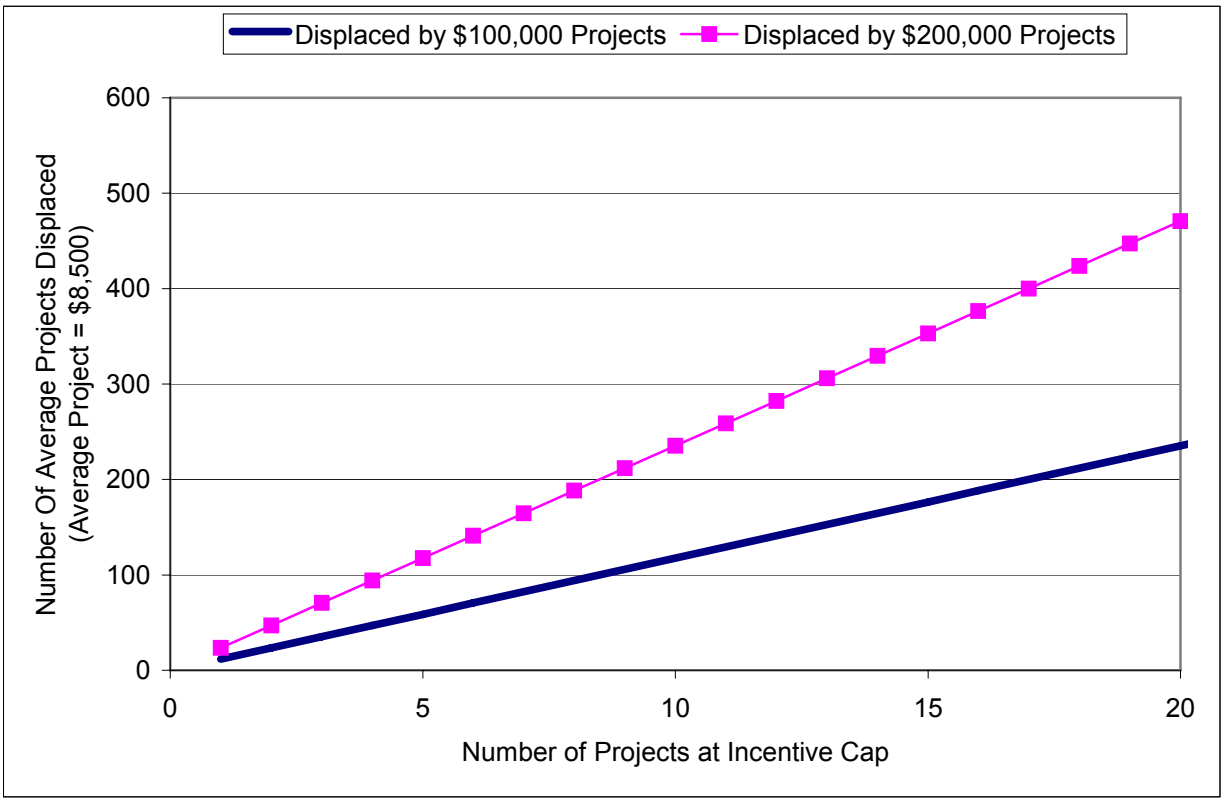


Figure 3. Hypothetical Displacement of Average Projects by Projects at the Incentive Cap



Conclusion #3. Examine your historical distribution of incentives. If they are highly skewed with few near the program cap, then it is unlikely that a wealth of projects would come in if the incentive cap were raised modestly. On the other hand, if the program is spending all its incentive money each year, raising the cap could quickly crowd out quite a number of other projects.

What are the Incentive Caps in Other States?

Incentive caps for commercial and industrial programs range from no caps (e.g., National Grid's Design 2000 Plus program and Wisconsin Power & Lights Shared Savings program) to close to $900,000 for BC Hydro's Power Partner's Program. The average cap in this sample is over $240,000 (not counting those with no caps). It is $183,400 if the three largest examples are eliminated. Seven programs have caps of $100,000.

Figure 4. Incentive Caps for C&I Programs

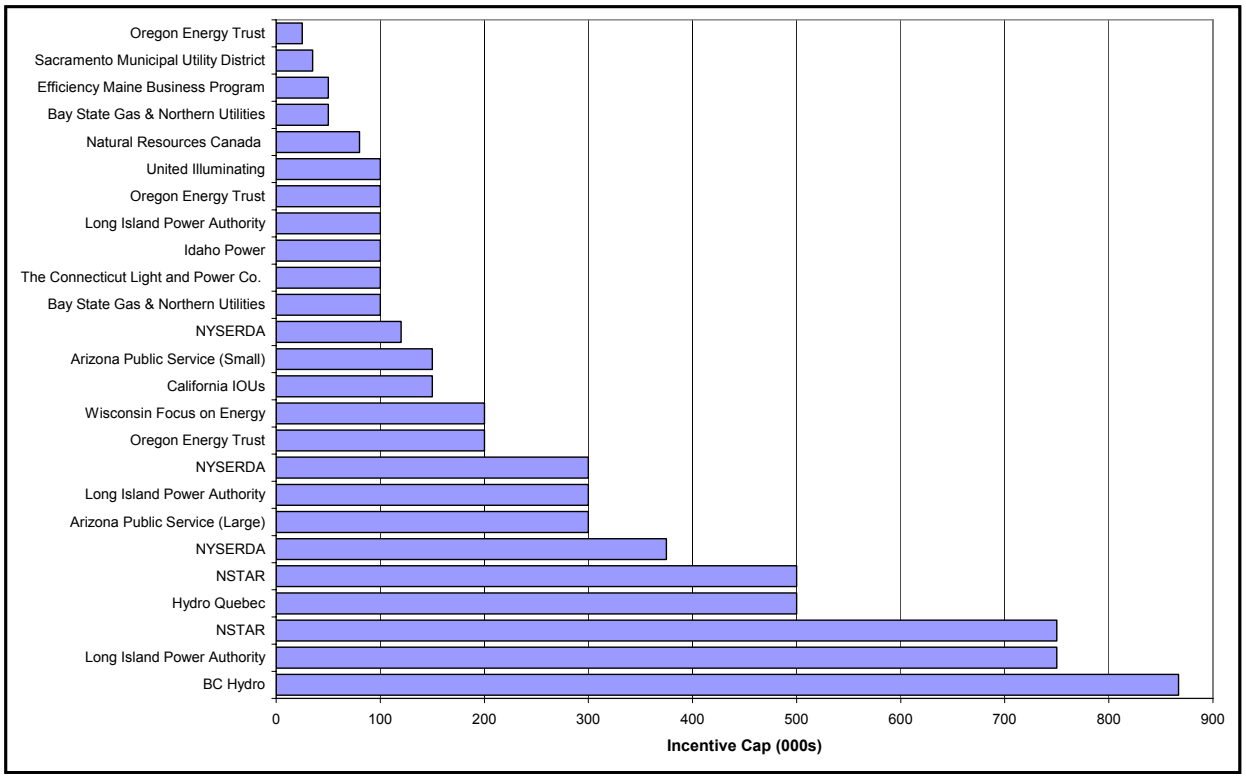


Table 1. Incentive Caps for C&I Programs

Incentive Cap ($)	Program Type	Location
25,000	New Building Efficiency Program - Standard Tract (prescriptive)	Oregon Energy Trust
35,000	C&I Incentive Program (all but lighting)	Sacramento Municipal Utility District
50,000	Small C&I in MA NH	Bay State Gas & Northern Utilities
50,000	Large C&I in NH	Bay State Gas & Northern Utilities
50,000	Retrofit and New Construction	Efficiency Maine Business Program
80,000	Commercial existing buildings	Natural Resources Canada (Office of Energy Efficiency)
83,000	C&I Custom Rebate – Retrofit	Kansas City Power & Light
100,000	Large C&I in MA	Bay State Gas & Northern Utilities
100,000	C&I New Construction and Retrofit Projects	The Connecticut Light and Power Co. and The United Illuminating Co.
100,000	Industrial incentives, HVAC tune-ups	Idaho Power
100,000	Major renovation and new construction - Prescriptive - per project	Long Island Power Authority
100,000	New Building Efficiency Program – Custom	Oregon Energy Trust
100,000	Energy Opportunities – large scale retrofit program for customers > 150 kW.	United Illuminating
120,000	C&I New Construction - pre-qualified and custom	NYSERDA
150,000	Savings By Design (new construction)	California IOUs
150,000	C&I retrofit custom and prescriptive, businesses >200kW	Arizona Public Service
200,000	New Building Efficiency Program - High Performance	Oregon Energy Trust
200,000	With $100,000 per project limit for commercial and industrial statewide programs	Wisconsin Focus on Energy
300,000	C&I retrofit custom and prescriptive, businesses >200kW	Arizona Public Service
300,000	Custom incentive small and mid-sized buildings	Long Island Power Authority
300,000	Major renovation and new construction - Prescriptive - per year	Long Island Power Authority
300,000	Major renovation and new construction - Custom incentive - per project	Long Island Power Authority
300,000	C&I New Construction - Whole Building Design	NYSERDA
375,000	C&I New Construction - Whole Building Design - LEED Certified	NYSERDA
500,000	Building Optimization	Hydro Quebec
500,000	C&I New Construction – custom solutions	NSTAR
750,000	Major renovation and new construction – Custom incentive - per year	Long Island Power Authority
750,000	C&I New Construction – custom solutions	NStar
866,857	Commercial existing buildings	BC Hydro
None	Retrofit	Efficiency Vermont Business Program
None	Major C&I renovation and new construction	Xcel Energy
None	Major C&I renovation and new construction	National Grid
None	C&I Shared Savings	Wisconsin Power & Light (Alliant)

Conclusion #4. If your program's incentive cap is within the most common range of the programs we examined around the country, then the argument for raising it is weaker. In the final analysis, whether the incentive cap should be raised depends on the balance between a desire to increase total potential savings by widening the pool of potential projects versus the distribution of incentives across the market.

How can we create a rule for defining corporate entities subject to the incentive cap? (How do we define a duck?)

Utility Account Number. Some energy efficiency programs use the utility account number to define the corporate entity that is subject to the incentive cap.[1] Using the utility account as the means for defining who is subject to the cap simplifies administration for utilities and is a clear rule for participants. However, it has a distinct limitation in that utility accounts do not always have a one-to-one correspondence with corporate entities as typically thought of in the market. A single business at a single location may have multiple utility accounts. Under the "utility account number" system, they could receive the maximum incentives for each account. A similar business next door could have a single account and thus be eligible for significantly smaller incentives.

If the intent of the cap is to limit incentives to unique businesses, not just to keep a lid on spending, then depending on the utility account number as the sole means for managing the cap does not effectively meet the intent.

This problem has plagued program managers at other utilities; they have addressed it in one of three ways:

Federal Tax ID. Some utilities[2] use the Federal Tax ID[3] to define the entity that is subject to the cap on incentives. This approach should aggregate at the true business level more effectively than utility account. While a business may have multiple utility accounts solely because of how and when they built separate buildings, most do not have separate Federal Tax IDs unless they are in some way distinguishing between distinct aspects of their business.[4] Using the Federal Tax ID will probably reliably indicate a single entity where the company undertakes one line of business in a building or set of buildings but has more than one utility account number. However, it is still possible that aggregating at the Federal Tax ID will still not uniquely identify businesses in some cases. For example, a manufacturer could operate two separate product lines within the same complex but with separate Federal Tax IDs. Using the Federal Tax ID may not consistently treat some kinds of chain or franchise stores, e.g., chain stores may have separate Federal Tax IDs for each store or Tax IDs covering multiple stores. The NYSERDA program manager cited

[1] E.g., New Jersey, Bay State Gas, and Northern Utilities

[2] E.g., Arizona Public Service, Southern California Edison, United Illuminating, Wisconsin Focus on Energy statewide program.

[3] Also known as the Employer Identification Number (EIN).

[4] Subsidiaries of corporations are required to have separate ID numbers. IRS Publication 1635 (Rev. 10-2006).

the Fashion Bug clothing store as an example; each separate store has its own Federal Tax ID. Some churches have more than one Tax ID if they are operating a school within their building they may use a separate ID for the school.[5]

Using the Federal Tax ID would be a more viable option when the programs are run by independent administrators instead of the utilities as the administrators may not have ready access to all utility account numbers.

Ad Hoc. Some program managers we spoke with do not have formal criteria for defining the corporate entity that the incentive caps apply to.[6] Typically, these programs apply a broad definition that considers any store or company marketed under the same name to be a single entity. Thus chain stores are subject to the incentive cap as a group, not individually. They deal with exceptions and complications as they arise applying common sense rules to defining corporate entities. The managers we talked to that use this ad hoc approach do not deal with many applications that reach the cap. This approach may work in part because trade allies and customers recognize the intent of the rule and do not attempt to circumvent it and in part because the volume of large projects has not become an issue.

Ownership and Control. NYSERDA takes a specific approach that is broader than using an account number or the Federal Tax ID. They define their approach as follows:

> For the purposes of determining the maximum incentive, an applicant is further defined to include any and all entities of which the applicant has a 10% or more interest in ownership or control. National or chain accounts are considered a single "applicant" and subject to the maximum incentive per applicant.[7]

NYSERDA requires the Federal Tax ID on its applications but does not require documentation up-front about the ownership criteria. The application materials state that proof of ownership must be submitted upon request. NYSERDA uses the Federal Tax ID for internal quality control of the ownership issue. The NYSERDA program manager for the Smart Equipment Choices Program noted that although policing the ownership criteria seemed a daunting prospect it has turned out to work surprisingly well. Trade allies and program applicants seem to police themselves. The program manager stated that "the trick is making sure the market understands it and does not dispute it."[8]

This approach offers several advantages:

- It creates a definition of a corporate entity that is broad enough to conform to a common-sense view of what a single company is.

[5] In "Important federal requirements for churches". https://www.guidestone.org/NR/rdonlyres/2431E95E-44A1-443B-91DD-90EA066124C2/0/2112_MinTaxGuideFinal.pdf.

[6] KeySpan Energy provided the most complete description of this approach.

[7] Program Opportunity Notice (PON) number 968. Smart Equipment Choices Program. http://www.nyserda.org/Funding/funding.asp?i=2. This rule applies to most C&I programs, not just this program.

[8] Interview with Kimberly Lenihan, February 14, 2006.

- The approach is specific, concrete, and not complicated, which leaves little room for varying interpretations that would damage uniform application.

- The approach is verifiable.

This approach offers two potential disadvantages:

- It is possible that other utilities' experience would not mirror NYSERDA's and program managers would have to expend significant resources policing the rules.

- It is a broad definition and will reduce the kinds of customers who are able to fit individually under the cap. Although, if a less-broad definition is needed, the "10% or more interest in ownership or control" criteria could be increased without throwing out the general approach.

Conclusion #5. Incentive caps serve multiple goals but the primary ones should be to help ensure that incentives can be spread throughout time and across a broad spectrum of the market to support both energy savings and transforming markets. Incentive caps should also be implemented consistently and equitably which implies that customers in largely the same circumstances should not face different incentive caps. With those goals in mind, the logical conclusion is that the definition of the corporate entity subject to the incentive cap should be broad enough to conform to a common-sense definition of a company. Utility account numbers fail on that criteria. The Federal Tax ID number is significantly better, but can still fail. Defining a company by its ownership makes the most sense. The approach NYSERDA took seems to offer a solution that is not overly complex to administer (at least based on NYSERDA's experience) and still conforms to the intent of limiting the amount of incentives that can go to individual entities.

When should exceptions to the cap be allowed?

Regardless of the characteristics of the incentive cap rule, should program managers be allowed to make exceptions to allow some companies to exceed the caps? If so, under what conditions? Should individual managers be given lee-way in interpreting the rules? Should there be specific rules for the exceptions? Should there be a specific escalation path that exceptions have to follow?

Most utility programs that we examined did not allow exceptions to the incentive caps. Of those that did, none had specific rules for when the cap could be exceeded but rather dealt with situations on a case-by-case basis. The closest criteria to specific rules were escalation rules – when projects exceeded a certain size they had to be approved by someone higher up the chain of command. For example, in Wisconsin, individual program managers could approve incentives up to $25,000; above that but below the $100,000 cap the overall program manager had to approve applications. Projects that exceed the cap have to be approved by staff in the state Division of Energy, which is supervising the statewide programs.

One possible exception approach would be to allow participants to get an advance on future year's incentives. For example, a participant in 2007 could combine incentives from 2007 and 2008 for one project but then could not participate again until 2009. This would allow large but worthy projects to proceed without harming the long-term structure of the incentive caps. We did not interview any program managers using exactly this approach. However, while the Shared Savings program in Wisconsin has no annual cap it does limit companies to one contract every four years for lighting and HVAC technologies, which will limits any one company's ability to dominate program expenditures.

Conclusion #6. If a program uses the "Ownership and Control" definition to enforce caps, exceptions should be rare if not prohibited entirely to present a clear message to the market. If a program uses a less comprehensive approach, then exceptions should be allowed to correct inequities. These exceptions should be handled on a case-by-case basis and should only be allowed when it can be shown that a direct competitor has received more than the cap by virtue of having multiple account numbers or Tax IDs. Specific rules should be established to define who has the authority to sign off on these exceptions.

Summary

Choosing the magnitude of an incentive cap is probably more art than science, but paying attention to historical patterns in incentive sizes and the size of caps from similar programs will help ensure the cap has a reasonable chance of achieving its goals.

Energy efficiency programs with relatively few participants and smooth relationships with customers and trade allies may not need complex, elaborate procedures for defining who is subject to the incentive caps. However, large programs and those where customers or trade allies frequently test the boundaries of the program, would be well advised to publicize a clear definition of the entity subject to the incentive cap. The best approaches use the Federal Tax ID for day-to-day administration of the cap but make clear to the market that they will use an "ownership and control" standard so that incentives can be distributed equitably.