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Spreading the Wealth and Savings New Construction Program Adopts Pay-for-Performance Model

By Adam Niederloh

Wisconsin's Focus on Energy program – working on behalf of 108 electric and natural gas utilities – provides information, resources and financial incentives to businesses, design and construction professionals and homeowners, to help them implement energy efficiency and renewable energy projects.

One of Focus on Energy's business offerings is the **Design Assistance Program** that embraces a whole-building, annual energy analysis approach for the new construction and major renovation markets.

Among its services is providing incentives for select combinations of energy conservation measures for each unique building project, as estimated with 8760 hour-by-hour modeling. The program actively searches for new technologies entering the marketplace, to help owners understand the investment in their projects through analysis.

A successful pay-for-performance (PFP) structure was put in place in 2013 that provides full payment only for verified achieved savings. PFP provides a greater degree of cost-effectiveness certainty, tied to a specific objective (in this case, energy savings). This stands in contrast to the traditional approach where a program implementer would be paid a predetermined/fixed fee based on the number and size of projects.

Removing Risks

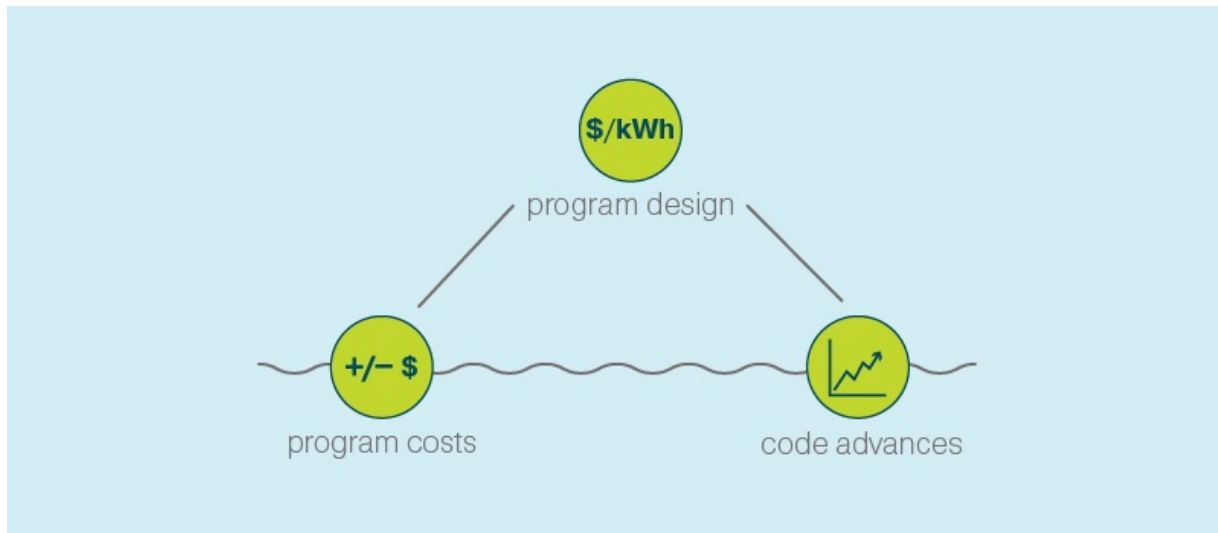
Driving the PFP concept was a cost-effectiveness threshold developed for the Focus on Energy program. Traditional program delivery fees have been based on a flat fee or time-and-materials fee structure. These have their own advantages, such as providing administrative ease, and incentive for process improvements. However, these fee structures have the potential to result in wide variations in cost per unit of energy saved when project-specific factors such as building type, complexity, energy intensity and size (economies of scale) are brought into play. If the range of project outcomes extends too far into negative cost-effectiveness territory, the risk of a net program outcome being negative is typically unacceptable to a program administrator.

Working through several scenarios, the Design Assistance Program Implementer (PI) proposed assuming responsibility for assuring a \$/kWh outcome by setting the fee based specifically on that metric. The risk is managed by:

- careful screening of potential projects, with viable alternatives for projects to be redirected to other programs as needed
- sufficient project volume to balance the risk over a range of projects
- careful monitoring of portfolio performance to guide rebalancing of program criteria as needed
- continual evaluation of new technologies— applicable to new construction, renovation and addition projects, each of which may have different perspectives—to establish acceptable ranges of solutions by building type and size
- evolution of outreach, deliverables and analysis tools to direct project teams most efficiently to Program Implementer
- optimal project timeframe for evaluation and efficiency measures selection

Impact of Energy Codes

The Design Assistance Program uses the \$/kWh approach to address another major perceived risk factor: energy code advances. Code advances pose issues for commercial new construction programs due to higher thresholds and therefore the potential of reduced savings. With a pay-for-performance approach, the potential for reduced savings directly impacts the Program Implementer such that they are appropriately motivated to maintain similar savings levels when the code advances. As such, it is important to consider fee structure flexibility to accommodate code changes, or design the program to meet certain project qualifications.



Some programs are structured so that the administrator accepts all projects, which is viable if the program volume can accommodate this. In other cases, programs may reserve the right to refer projects to other programs if savings potential is below a certain threshold.

Structured for Success

Given the approach of the Design Assistance program, for which projects enroll early in the design process, the program implementer receives its fee in phases, based on savings estimates determined during building design and construction phases. A combination of energy conservation measures is assembled by the project team—with the savings captured within a whole-building energy model. With a pre-determined fee schedule over the course of several phases, the program is paying for the most current kWh savings estimates.

Upon project completion, the savings are verified by leveraging the construction administration process through a combination of document review and project team feedback. Once the savings have been verified by the Program Implementer, a final report is provided to the Program Administrator documenting the achieved savings. At this point in time, the Project Implementer receives the remainder of the fee such that the administrator does not pay out more than the agreed upon \$/kWh for the entire project.



Using this approach, the Design Assistance Program has been able to build up strong pipelines despite not seeing full payment on projects until the end. Outreach and marketing of the program are essentially funded by the first portion of the fee. Each new project helps provide the funds to bring in even more projects to follow.

If well-planned, once PFP programs run through a full project cycle, the costs work out. Since the inception of the PFP model, the Design Assistance Program has so far enrolled 100 percent of budgeted savings for 2018, about 80 percent for 2019, and 20 percent for 2020.

Each program situation is different. Having a thorough understanding of markets, budgets, goals, and an informed assessment of the local risk factors are key to determining if a PFP approach will be as cost-effective as it has for Wisconsin's Focus on Energy program. Given the way a PFP approach mitigates many of these concerns, there's a good possibility for success.

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