

FEDERAL STIMULUS BILL

Avoiding Over Rebating

By Rafi Musher

Over rebating is officially here. How does the industry avoid wasting ratepayer dollars and setting itself up for public and regulator backlash?

With the best of intentions, the massive inflow in the federal Stimulus Bill of demand-side management/energy efficiency (DSM/EE) tax credits has immediate unintended consequences for utilities and regulators, especially in the form of over-rebating. What started as a potential blessing for utilities in helping them hit DSM/EE goals could backfire on them, through no fault of their own. Over-rebating on some products will cause ratepayer money to be wasted, and in other categories will drive demand so rapidly as to overwhelm the utilities' resources allocated for DSM/EE programs.

The numbers are significant—one region in the Midwest paints a picture of what will be seen throughout the country over the next two years. A high-efficiency furnace installed in the Midwest can cost roughly \$3,000, and with the local utility rebate of \$250, the payback period for a high-efficiency unit is roughly two to four years, while a less efficient unit costs about \$1,900 installed. This is a reasonable choice set for a consumer staying in a home to make, as the payback period is relatively short, yet the price premium is still a big spread for a builder or a budget-conscious consumer. The Stimulus Bill, as of Feb. 17, 2009, provides an additional 30% off of the purchase price in the form of a tax credit. The \$3,000 unit, which was costing \$2,750 with the rebate, is now priced at \$1,850 and less expensive than a

low-efficiency burner.

On the surface, this seems like a windfall for consumers, manufacturers, distributors, and the nation's demand for energy efficiency. Consumers and builders should find it impossible to pass up the higher-efficiency, higher-priced product now available to them at a lower cost. Manufacturers and distributors should be able to stock fewer items and higher efficiency products generally are higher margin products. However, it also raises serious questions.

How much is enough? Is a 30%-plus subsidy overkill? What about alternative uses of those funds? Ratepayer dollars are used to fund utility rebates, and utilities have a responsibility to use those funds effectively. The majority of purchases are for repairs and replacements, and one would expect that trend to continue over the two years in which we have excess housing inventory. Therefore, the consumer is seeing a monthly benefit already, which should have some bearing in the pricing and rebate equation. In an era of renewed focus on accountability, does anyone want their local newspaper journalist writing that ratepayer dollars are being spent on an obviously free ride when the goal was to lower everyone's bills? If your region sells 100,000 furnaces per year, a wasted \$250 per furnace is a cool \$25 million that could get anyone into hot water with customers and advocates.

What are the implications for manu-

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facturers and their distribution chains? In regions with federal credits combined with utility rebates, the market for lower-efficiency units should crater as awareness of the tax credits increase. Manufacturers, distributors, and dealers run the risk of getting stuck with inventory, as lower-efficiency units have traditionally made up 55%-60% of the furnace market. Is this inventory now dramatically devalued, further straining manufacturers and distributors in this industry?

How will consumers react? Given the delivery method of the federal money (tax credits), some consumers still may choose to purchase lower-efficiency units in the short-term rather than pay the extra money now for a tax credit in 2010, depending on their financing options.

While this is going on with furnaces, consider the implications of the stimulus on the utility rebate programs for solar and small wind that were budgeted in 2008 with the current economy in mind. Expecting limited construction and interest in capital outlay, many utilities set a solid rebate and a reasonable budget for solar and wind in 2009-2010. With the 30% tax credit (for new and existing homes), monies for federal and municipal building "greening," and the drive to spend on shovel-ready projects, demand on those utility fixed-rebate budgets could outpace supply.

This example from the Massachu- >>

setts' list of shovel-ready projects—a 3,000 line Excel spreadsheet available on the Mass Recovery Reinvestment Act Web site—should scare a variety of people in any utility: “Silver Hill Horace Mann Charter School - Project Green: Replace and install new roof shingles. Install solar panels to provide at least 5 percent of the building’s electricity. Install a monitor in the cafeteria to display real-time energy the panels are generating for student learning. \$500,000.00.” With the federal government providing a base level of funding bringing down the total price of a solar installation, many more customers than expected could install solar, request the commensurate utility rebates, and challenge the utilities to keep pace. Who at the utility wants to tell the school that it ran out of rebate dollars by the time the application was submitted?

What to do about it? The answer is not business as usual. Most utility request for proposals (RFPs) for DSM programs take a year to be posted and answered, and it takes years before compliance reporting determines whether dollars were spent well. In the meantime, the problems already are here in an era of heightened sensitivity about accountability. It is time for utilities to do what companies in other

industries do before deploying capital—get out and understand the customer via traditional business analysis on consumer tradeoffs, pricing sensitivity, potential market share shifts, and how to optimize the spend of the money available. A recent Stax study of utilities determined that most use secondary analyses of take rates from old programs with low hurdle rates to develop new programs.

Research and deep analysis on consumer needs and choices and channel insights on DSM and EE are rare. Rapid reviews of programs to understand success and improve performance mid-stream are almost nonexistent.

With a halo effect from the Stimulus Bill, utilities are at a unique point in time to modernize more than the grid and to join the millennium in how they think about serving consumers, products, increasing market penetration, and thinking about ROI in ways unconnected to building plants. The alternative is to waste consumer, federal and state money, putting industry leaders and regulators in the crosshairs of the same credibility recall that we’re seeing with Wall Street and Detroit today. Imagine sometime in the next two years, when the economy still has a way to go before recovering, and



everyone starts questioning where all the stimulus money went. These big numbers are sure to stand out, both nationally, and locally. ■

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RENEWABLE ENERGY

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pursuing renewable energy projects in or near their service territories to develop multiple, rather than one-off projects, or more straight-forward acquisitions of renewable energy assets. The federal RPS, when coupled with the economic incentives included in the economic stimulus package, also may drive utilities to look beyond wind and solar energy to other emerging technologies such as geothermal, biomass, and wave and tidal power,

in order to meet the RPS mandate.

As renewable generation continues to grow in the United States, major transmission upgrades and new transmission infrastructure will be required to deliver wind power from sparsely populated areas to the load centers. In 2008, transmission infrastructure projects serving renewable generation were announced and continued to be assessed by states and the private sector alike. Last August, Duke Energy

and American Electric Power announced the formation of a joint venture to build 240 miles of 765-kV transmission lines and related facilities in Indiana. The project is expected to provide interconnections for power plants in Central Indiana, including more than 3,000 MW of wind energy, and total project costs have been estimated at \$1 billion. ISO New England determined that although transmission needed for system reliability in »