Is something, in terms of a federal renewable standard, better than nothing?

There is new talk of setting a national renewable electricity standard before this session of Congress ends, due to the introduction of $\underline{S.3813}$, this week. This Bingaman-sponsored bill echoes an earlier proposal that can best be described as imposing a standard of modest proportions. While California aims for 20% renewable electricity by the end of this year and 33% by 2020, the Bingaman bill promises 15% by 2020. It also provides numerous ways for a utility to avoid ever needing to meet 15% of its demand with renewable energy.

The first escape hatch comes in the answer to the question: 15% of what? While California serves as an example, more than half of the states impose renewable power standards on their utilities. California requires 20% of demand to be met with renewable sources. Period. Before calculating that 15% amount, Bingaman's bill would allow the utility to subtract from its total demand the output of any hydroelectric plant serving its customers, the output of any new nuclear plant, incremental output from any existing nuclear plant, the output of any coal plant employing carbon sequestration, and the output of a pumped storage facility (regardless of how unrenewable the source of power pumping that water might be).

Escape hatch number two: garbage is apparently renewable, because utilities can burn it to produce qualifying renewable power (In California, the garbage must first be converted to a clean-burning gas. Not so with the Bingaman bill).

The third escape hatch: all renewable sources are not created equal. The way a utility shows compliance with the standard is by submitting credit certificates for all of the renewable power it is generating or purchasing, and for all of the credits the utility might buy from other renewable energy producers, even if the power from those sources never enters the grid. If a utility serves a billion kilowatt hours of electricity in 2020 (and can't take advantage of the first escape hatch), it would have to submit certificates equal to 150 million kilowatt hours. But the amount of renewable power generated may be quite a bit

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less. That's because renewable power gets double credits if it comes from Indian land, triple credits if it comes from generators smaller than one megawatt, and triple credits if it involves algae. And some biomass generators can produce up to 1.5 credits per kilowatt hour if they are especially efficient. Who knows how much power would actually be generated, but it could be quite a bit less than 15% of the power sold.

We aren't done yet. **The fourth escape hatch**: the credits don't have to come from any of the sources we discussed. They can also come from the results of energy efficiency programs, or from the efficiency gains resulting from combined heat and power projects. Those are power plants that use waste steam from some industrial or commercial project to generate electricity – a process that can save a lot of fuel, but that fuel might be natural gas, oil, or even coal.

All of the things that provide extra credits, shrink demand, or efficiency are good things. The problem is that they are all mixed together with the renewable energy goals. The bottom line is that under the federal standard, the amount of renewable power that will result is impossible to predict. It is very safe to predict that, in most places, renewable power produced to comply with this federal law would be much less than 15% by 2020. All this, while California aims for 33% by 2020 with a formula that is comparatively pure and simple.

The Bingaman bill raises the same question we have faced with climate legislation and health care reform — is something in terms of federal standard better than nothing? There is no easy answer. At first glance, it seems that the federal law would not preempt more ambitious state standards, which is good. Yet, it is in the crafting of rules implementing the law that we find out whether the federal program would undercut efforts in the states. The federal bill recognizes a number of important efforts worthy of promotion, including energy efficiency and combined heat and power. However, by lumping them all together, the bill fails to recognize that each pathway is important on its own. We need to make power use as efficient as possible, and build out renewable generating capacity, and rely on combined heat and power. We cannot take a little from here, and a little from there, and hope to make a meaningful dent in greenhouse gas emissions. In addition, the 15% target is too low — especially considering all of the carve-outs the bill would allow for nuclear power, coal power, and other non-renewable sources. Even with deference to higher state standards, a weak federal program could put pressure on the states to reduce their expectations.

Many environmental groups and renewable energy industry groups are supporting the Bingaman proposal — perhaps not with great enthusiasm, but supporting it nonetheless. With its passage, the United States would have its first national renewable energy mandate

to apply to non-governmental entities. It would lead to a uniform system for tracking renewable energy credits, and provide some hope for later amendments leading to a more meaningful standard.