Energy Efficiency Resource Standards Workgroup
Meeting Minutes

Thursday, March 18, 2010
Appoquinimink School District, Room 145

Attendance
Charlie Smisson, Chair, DNREC
Ralph Nigro, SEU
Commissioner Dallas Winslow, DPSC
Michael Sheehy, DPA
Bruce Burcat, DPSC
Steve Thompson, Chesapeake
Jeff Tietbohl, Chesapeake
Janis Dillard, DPSC
Mark Nielson, DEC
Glenn Moore, DP&L
Tom Noyes, environmental advocate
Ken Davis, DHSS
Dr. John Byrne. CEEP
Dr. Lado Kurdgelashvili, CEEP
Cara Lampton, DNREC
Phil Cherry, DNREC
Brian Gallagher, on behalf of the Energy Office

I. Intro and Update

Charlie Smisson began the meeting with an overview of the agenda and outlined the day's presentation. Cara Lampton provided a brief update of the work accomplished since the last full workgroup meeting held last December. The Center for Energy and Environmental Policy's Dr. John Byrne and Dr. Lado Kurdgelashvili were hired by DNREC to provide data analysis for the Secretary and to assist the workgroup. In lieu of the January meeting, CEEP and Workgroup staff met individually with energy providers to review and confirm data and data reporting consistency.

II. Target Scenarios Presentation

Dr. John Byrne presented CEEP's energy consumption data analysis and modeling of the three interpretations of the targets as written in the legislation. Starting with the electricity sector, Dr. Byrne provided a narrative of the energy consumption trends in the state and for each of the three

electricity service providers. It was noted that due to the differences in growth trends within the three jurisdictions, the targets have different demands on each provider.

The targets are displayed in energy sales volume because the legislation calls for reductions in retail deliveries, however it was noted that a metric for energy efficiency or energy intensity will also be an important tool for examining and selecting a target scenario.

Several questions were asked in response to slides that layered the target reduction scenarios on top of the growth forecasts. Phil Cherry asked about where the projection data came from. Dr. Byrne answered that it was from the energy providers, but was screened against the EIA data and the two data sets were found to be very consistent. Mark Nielson responded to Phil Cherry's question about the differences in the growth scenarios by explaining that much of the growth is in areas where seasonal/summer homes are being developed. Dr. Byrne added that the rate of increase in energy consumption can also be attributed to an increase in square footage per household in these new growth areas.

In response to the slide depicting the programmatic savings potential of the weatherization assistance program, Tom Noyes suggested it would be interesting to use the per household savings from the weatherization program as an indicator to meet the different target scenarios. It would be interesting to use the energy savings/cost data from the average weatherized home to see how much savings, and at what cost, we could get statewide.

Transmission and distribution efficiency measures were also discussed briefly as a potential savings mechanism.

Michael Sheehy commented that all of these target scenarios are incorrect because most forecasts are no longer accurate due to the dramatic downturn in economic production. Phil Cherry asked how we can then deal with these changing growth factors—do we include several possible economic scenarios? Dr. Byrne suggested that the Workgroup recommend to the Secretary that we look at the situation as it evolves and re-evaluate as needed. It is too difficult to predict the state of the economy in the next few five years.

Steve Thompson commented on the three scenarios and pledged his affirmation of the green line target. He stated that it is clearly identified in language of the legislation.

The discussion moved to the economics of the targets. No cost analysis has been done yet, but it all the members are in agreement that it is a critical component in making recommendations. Some members expressed concern for the potentially large price tag of enacting the legislation. It was noted that such a discussion on price can really only happen after you determine the program participation rates needed to achieve the targets. Dr. Byrne reviewed a slide presenting

a matrix of participation levels needed per savings target. There was notable concern over meeting the high participation rates needed for the 2015 targets.

Mark Nielson asked about including solar electric energy in the energy savings toolkit. Dr. Byrne advised that all distributed renewable should count toward the peak shaving in the demand reduction targets, but not consumption. The RPS counts renewable energy consumption as a separate policy mechanism.

Dr. Byrne continued with the presentation, noting that the commercial and industrial (C&I) sector for Delmarva is the most price sensitive, and how it is addressed is an important policy consideration. The key question is whether to include all SOS and delivery customers. If you don't and you enact a distribution charge, Delmarva would likely lose customers to third party supply, thereby meeting their targets but simply by shedding load, which is not the aim of the policy. The spirit of the EERS is statewide consumption reduction through efficiency and conservation, but we can't forget that the policy decisions are made within an interactive system, and so we must be considerate in our handling of things like delivery charges and their effect on customers.

Dr. Byrne discussed the importance of creating a market for lowering energy intensity. The residential sector has a good indicator of energy intensity: consumption per customer. Such an indicator is more difficult to come by for the C&I sector because of limitations in available data, but a metric like value added will be used. The Center used GDP to demonstrate energy intensity. Glenn Moore stated that he did not think that GDP was the best indicator for energy intensity. Mark Nielson questioned the large spike in energy use in 2003. Dr. Byrne replied that it was EIA changing reporting systems.

In a review of the natural gas targets, again the blue and green lines appeared to be much more reasonable than the red line because of the projected growth, but are still believed by most to be a challenge. Even with participation rates as high as the 30% each participant would be required to have significant weatherization and efficiency gains, which may be hard to come by and costly. A major issue to be addressed under the recommendations for the natural gas targets is the treatment of fuel switching. Conversions to natural gas can greatly improve efficiencies and reduce emissions, however the economic viability and reach of conversion was questioned, since it is also a matter of infrastructure costs.

Glenn Moore raised the subject of the treatment of large customers under the legislation. Despite the difficulty in reaching them, there are potentially high impact opportunities for efficiency gains. Glenn then asked if these targets should be per customer segment or not. Dr. Byrne replied that the targets now reflect 15% for electricity and 10% for natural gas across the board,

but suggested that once cost is a factor it might be good to look at it by sector. To that point, Tom Noyes emphasized that the next step should be to put the dollars to the programs.

Michael Sheehy made the argument that in any of the scenarios, the current programs leave a gap, even under the lowest target scenario. He asked if it would be politically feasible to change the legislation. Dr. Byrne suggested that, at this stage, the Workgroup should focus on the aspiration of the legislation and should recommend targets that adequately reflect that. If the Workgroup recommendations clearly demonstrate the goals are untenable and should be revised, then the Secretary can make decision to change the legislation. Another opportunity within the Workgroup recommendations is to extend the goals of the legislation along with the workgroup as an advisory body. Instead of decreasing the targets, it would be preferential to extend the targets and timeframe to make the goals more achievable.

Commissioner Winslow asked if the targets would include non-programmatic efficiency gains, such as voluntary or indirect efficiency gains from programs and outreach. An example would be the efficiency bid into the PJM. The biding helps create a market for efficiency and certainly should be considered a program that benefits the state. JB suggested that that policy should certainly get credit and perhaps even some sort of multiplier.

Michael Sheehy commented on the relationship of dynamic pricing as both a direct and indirect source of efficiency because of its behavioral component. There was mention of a recent study that discussed the strong indirect effect of pricing feedback on energy bills. The study showed a large percentage decrease in energy consumption from behavioral tools such as the emoticon on the energy bill. The neighbor to neighbor energy use comparison on a bill along with goal setting has been found to motivate significant conservation behavior.

Charlie Smisson asked about how we would calculate energy intensity for commercial space. We need a reliable indicator or metric and square footage data is not available. Additionally, he noted that the State has a big potential to influence the targets. The state has its own goals under the recent executive order and the SEU tax exempt bonds offer secure financing for efficiency projects.

Dr. Byrne recalled the power plant analogy to think in terms of the cost of implementation. We spend huge amounts of capital on power plant construction, but are hesitant to invest upfront for energy efficiency, even though the cost of saved energy is found to be consistently lower than new energy supplies. Additionally, there are mechanisms to pay back the upfront costs such as performance contracts and guaranteed savings.

Phil Cherry asked if the revenue stream from the savings bid on the PJM capacity market will be included in the economic model. Commissioner Winslow noted that they will hire a private third party entity to sell into the market.

Dr. Byrne said it was likely they would have the economics modeled by the end of the month and would distribute the presentation before the meeting so that the workgroup has time to review. They will most likely use bands of cost to account for varying programming and participation rates as well as the targets themselves.

The Workgroup debated a vote to throw out the red line target, but decided to keep it in just for comparison, but would mainly focus on the blue and green target scenarios. The Workgroup voted in favor of investigating the blue and the green targets in more detail before making a final endorsement of one or the other. Glenn Moore would like to see a chart similar to the efficiency gap chart, but for the dollar costs. He would also like to see a mock up of where the funding will come from and how it will be applied programmatically to meet the targets and fill the gap.

It was agreed that next time that the Workgroup would review cost scenarios, focusing mainly on the green and blue targets scenarios. Tom Noyes suggested it would also be useful to have a comparison of costs and cumulative benefits to consumers. For example, Chesapeake could present us with an analysis of the benefits of fuel switching. The cost benefits of reducing peak demand are also an important when evaluating the cost effectiveness and benefits of the EERS policy.

III. Timeline

Charlie Smisson noted the timing issues of the workgroup process and the regulations, as written in the legislation. At present course, it is highly unlikely that the workgroup could prepare recommendations by the planned date of May 30th. Additionally, the legislation calls for regulations by the end of July. Phil Cherry said the regulations could be pushed back and recommended that the Workgroup focus on developing an interim report to the Secretary. Dr. Byrne suggested that one of the recommendations of the report could be to establish the Workgroup within of the regulations. Michael Sheehy suggested that the workgroup develop subcommittees to expedite the process.

Lastly, the Energy Office will work on compiling any savings and cost data on past and current state efficiency programs and Mark Nielson offered to share the analysis from their KEMA report when it is available.

IV. Next meeting

The next workgroup meeting will be at the normally scheduled date: the second Thursday of the month, April 8th at Appoquinimink.