Uniform Methods Project Steering Committee Meeting – 4/23/2013

Attendees

- Michael Brandt
- Don Gilligan
- Hossein Haeri
- Tina Jayaweera
- Chuck Kurnik
- Michael Li

- Julie Michals
- William Newbold
- Mary Ann Ralls
- Pam Rathbun
- Chuck Rea
- Alex Rekkas

- Amy Royden-Bloom
- Steven Schiller
- Nancy Seidman
- Rodney Sobin
- Daniel Violette

Meeting Notes

- Phase I protocols are live
- Assistance from SC members on outreach
- Adoption updates?
- Hossein – Statewide evaluator in PA (GDS Associates) have expressed interest in using UMP protocols as part of audit plan. Expect them to adopt protocols that apply to programs in PA.
- Mary Ann – From NRECA's perspective, we are making the report available to members. Providing summaries and information. Putting it up on internal website. Talking it up great deal.
- Hossein – We'll be dealing with several aspects of NTG analysis, starting with definition and components. What are the issues and topics that need to be covered? Question of measurement methods. What are the appropriate techniques? Since NTG is question of attribution, there is a host of issues. How are we going to use NTG results with respect to reported and claimed savings? Are adjustments appropriate? Are they going to be applied retrospectively? How do we factor NTG results into CE analysis?
- We had to reschedule some of the work in developing these protocols. NTG and other cross-cutting protocols were going to be worked on in Phase I. Because of the Phase I workload and timing of other guides, this chapter was put off until Phase II.
- Dan Violette – Three iterations of outline with NTAG. One question was what is different in this chapter of NTG. It's high-level and a practitioner's guide for people who will be estimating NTG. What are the tools that they should consider using? Other guides have not been at practitioner's level.
- Start by defining NTG. CEE Action chapter. Work going on at NEEP. Stay within bounds that have been developed in other reports. Follow what is in literature now.
- Describe how NTG is used in energy efficiency industry. Designing programs, evaluating programs, track market changes, fit into regulatory framework. People use NTG studies even when they are not calculating freeridership.
- What are the challenges that people face in estimating NTG numbers? We will focus on how different methods establish a baseline/point of comparison against which the gross estimates of the program are compared to. If we know exactly what would have happened had the program

not existed, we wouldn't have any biases, and we would be able to calculate NTG (perfect control group). Mainly baseline problem.

- Freeriders are a biased group. There's a larger fraction of those people in participant group than in control group. Biased baseline.
- Spillover has a contaminated baseline. The program has influenced the control group to some degree and need to take that into account. Some of the participants have been influenced to take on EE measures because of the program, but they are not participants of the program.
- All the methods we are talking about to estimate NTG is to get a better baseline. We're trying to get the best baseline we can get to determine what net impacts actually are.
- We will address market effects in introductory challenges section.
- We will list and identify the confounding factors in estimating NTG. Discuss the challenges at the measure, program, and portfolio levels. Will use this section to develop list of tables of issues, potential biases, challenges that need to be met by different methods.
- Controlled experiments and quasi-experimental design. Controlled experiments have a randomly selected control group. Most EE programs allow people to select themselves into participant group. Therefore, we have quasi-experimental design. Question again of baseline. Will discuss non-participant and participant control groups. Cross-sectional pre- and post-sectional consumption.
- Survey-based approaches. This includes issues of survey design. There are chapters in UMP about surveys and sampling. We will cross-reference.
- Regression/econometric approaches. Regression models, looking at energy use for participants and among customers – same size, industry, and location – who did not participate in program.
- Market sales data analyses. Regional approach. Look at sales of high efficiency lighting measures in state without EE program and try to compare data across regions. Regression shows up in a few places.
- Top-down evaluations. Macro-economic models. Looks at all the customers in CA, for example, runs model on energy use for all end use customers in state or region. Explanatory variable that might affect efficiency evaluations. Looking at energy use in state or region in total and try to separate out what you think EE has accomplished. Reduces some of the issues we have with other approaches.
- Structured expert judgment approaches. How many measures would have been sold had the program not existed. Probabilistic surveys. Feed general information back to each expert and see if they want to revise their estimates. Growth in this type of approach.
- Stipulated NTG ratios. Rather than confront a complex NTG estimation/study. If NTG ratio is 0.7, then net impact are 70% of gross impacts and then leave at that. Relies on research. People should understand what research methods are before they use stipulated values.
- Section on other methods that have been used, but haven't really taken off yet. Stated and revealed preference. Conjoint analysis. Historical tracing. Multiple case study approach, which may only rely on a few studies. Methods came from NTAG, not too much literature, but we would like to mention.

- We will discuss timing of NTG analysis. Regulatory structure varies from state to state. Maturity of programs. When you collect the data. Frequency of studies. Concept of layering approaches. Some approaches may be best for estimating freeridership.
- Take information and develop charts by sector. Implications for NTG. Guide to the types of methods they should be using.
- Mary Ann – Not uncommon to use a mix of methods. Triangulation to come up with robust estimate. References to best practices.
- Dan – Will have good cross-section of industry literature.
- Hossein – In the earlier stages of the project, with the members of the SC, we had several conversations about what the elements of NTG are or should be. SC members raised issues of rebound, take-back, and persistence of savings. Discussed in another UMP chapter, other evaluation issues.
- Chuck – Steve Schiller has a question. Is this report going to be based on current common practice and uses of net savings as has been done with rest of UMP (e.g., self-reports and free riders) - or will it discuss and promote best practices/new approaches and uses (top down evaluation and RCTs, GHG mitigation and resource planning)?
- Dan – In literature on NTG, all of these methods are being used. There are methods that people would consider to be more rigorous than others. Triangulation was mentioned. We will emphasize what we think are current methods, but more recent current methods. In past few years, we are looking at fast feedback approaches, approaches that use more triangulation. This chapter will emphasize the last two or three years of experience. Earlier approaches have leaved some dissatisfied.
- Julie Michaels – On first page of outline, you have a list of the uses of NTG estimation. "Meeting goals" could be more specifically identified. We list all these different practices. Understand you are trying to focus on best practice. May be helpful to try to tie it back to purposes for which we're using NTG. If some states are willing to only spend so much to address this issue. Maybe that's not the appropriate approach to monitor progress toward statewide goals. People would want to know how approaches compare in cost, if it is worth doing a more rigorous analysis, what do we want to invest in this type of research, for what purpose. How will this be connected to Section 3?
- Dan – You can do an expensive NTG study and it will improve estimates, but there will always be uncertainty in estimates. I would say this question has only come up in the last year or so. Depends on the program. Hoping we can discuss that in the last section (Section D1). We may have to break that down into more sections to cover everything. All of the strategies depend on goals you set out for your NTG research. Challenge for this chapter.
- Julie – Helpful outline. One observation is that there's a long list of approaches. Is this exhaustive? Need to help users of document identify what is the best practice or combination of practices to best serve what their state is looking to do. If I was a regulator or program administrator I would want pros and cons explicitly documented in chapter.
- Dan – If we can provide some information at the end that would be helpful. The issue of timing would be useful for a jurisdiction. Stepwise approach to doing NTG. Has freeridership increased

- to the point where you need to redesign the program? We're going to try to put that in the last chapter.
- Hossein – We went through similar conversations for other protocols. In others, at least implicitly conveyed idea that what is described in protocols is best practice. We don't want to leave recommendations completely open, although we want to give flexibility; we want to provide more guidance as to which methods should be applied to which situations.
- Julie – I think that sounds reasonable.
- Bill Newbold – Concern about resource planning. If we apply NTG to forecast. What we're really achieving in terms of savings is more of a verified gross, because number used in forecast isn't good. How to deal with that?
- Dan – On GHG issue, there is the concept of additionality. Definition is almost exactly the same as net impact definition, what is attributable to program. I wrote a guidebook for OECD, used many of the same methods to get at GHGs. Clean development mechanism allowed developed countries to invest in EE of developing countries. The link is there, but we let planning apply to the DSM portfolio. We can add resource planning as one of the objectives. Short discussion on how EE fits into a resource planning situation.
- Bill – I'm not suggesting we add it, but if you use capacity markets, question of what went into forecast. Econometric modeling at high level.
- Hossein – Many utilities have to deal with that issue – how and how much of DSM is already reflected in the load forecast. It's an accounting issue more than anything else. The non-programmatic impacts that are reflected in econometric forecasts. This NTG protocol will raise those topics, but we cannot address them because they don't belong with the scope of this NTG analysis.
- Bill – I agree, this is to tell you how to do the NTG analysis, not how to apply. Worried about people applying it to places where it should not be applied.
- Dan – There is the concern that we are double-counting net effects. There may be some cautions we can add.
- Julie – We recognize this as a challenge. We are planning to have a dialogue with ISO New England to get better understanding of what's in the baseline using econometric models.
- Hossein – Maybe this discussion could fit in "top-down approach" section.
- Chuck – First draft should be ready at the end of June. NTAG review through August. SC review beginning in September, maybe late August. We will be setting up scoping call on what issues SC members would want to move forward with.
- Slides and notes will be posted to SC website.