EUI Advisory Committee Meeting Notes
(June 13, 2017)

Meeting kick-off - Mike Bull (CEE)
- Introductions/ Welcome
  - Meeting will discuss CARD funded EUI (also known as supply side management) Potential study and – DOE Grant system efficiency policy project
- Review Purpose of Advisory Committee
- Overview of Agenda

Project overview & modeling approach and data needs - Travis Hinck (GDS)
- Overview of project goals (DOE and CARD)
  - Goal is for EUI project to be useful for stakeholders in identifying potential projects to implement – helping utility companies meet their CIP goals
- Review of proposed modeling approach

Transmission – modeling
- Collect as much information as possible to get a baseline on how much energy is lost in the system and how measures to implement EUI technology can improve energy loss from the baseline
- Technologies that will be studies (all current TRM measures) High efficiency transformers, load loss transmission lines, conservation voltage reduction, substations consumption improvements
  - Consumption on substations – can include lighting, fans or anything that consumes energy at a substation these are not covered by a demand side program

Generation modeling
- Site-by-site analysis to figure out potential savings number – limited by timeline and budget – due to the uniqueness of individual generation sites
  - No fuel switching or technology shifting will be taken in consideration for potential study
  - Wind and solar will be lower priority for this study
  - Limited to coal and natural gas at first
  - CHP and cogeneration has been discussed and may be looked into more
  - Per stakeholder comment – it will likely be important to break out potential by generating UNIT rather than by site.
- Data will be weather normalized when data collection is complete
- A lot of generation data is available for this study – qualitative data, from the utilities (i.e. maintenance schedule) is more of a need for the team that will plug into the model
- Some plants are facing retirement – and virtually every coal plant will be on a retirement schedule – so are the ones that are coming off the grid going to be
studied in the potential study – in terms of technical and economic potential?
  - Yes that will be studied
  - Major policy question - how to define operations and course of regular maintenance schedule
  - CHP is definitely included in the generation potential study - by way of incorporating the previous work into an understanding of how CHP and EUI might interact – we will not be doing additional CHP potential identification.
  - Overall this a unique process and team is looking for feedback and potential improvements for this potential study
  - What is the most useful deliverable format? – question for advisory committee
  - How is the economic potential study going to analyze cost-effectiveness
    - Potential for utilities to compare energy savings demand side programs to EUI improvements that can be used as a another tool for utilities to meet their conservation goals
  - Discussion on utilities who have tried to implement EUI savings projects
    - When are the opportune times to replace this technology –
    - It would be helpful to understand the potential projects to address when there is an outage or opportunity to replace technology
    - ROI may be a better way to understand the savings potential for EUI projects - as opposed to $/kWh saved. Several stakeholders concurred. Part of the overall issue of adding EE to the value stream for decision-making purposes
    - Administratively difficulties in implementing EUI projects
  - Commerce Staff discussed the overall goal is to get stakeholders on the same page for EUI i.e. potential estimates of savings and economic costs and policy discussions that address current utility concerns in terms of customers savings, reliability and rates
  - In the TRM there is the potential to claim savings to properly size a transformer
    - Also note that load leveling and distributed generation siting could also deliver EE savings, but would require custom evaluation to calculate.
  - Discussion on the timeline of the savings for the potential study going several years out and how the technology may change during this time – this is a longer timeframe than a traditional DSM study (accuracy and relevance of potential estimates are as reliable as the load forecasts we use – the lifetime of the equipment typically easily exceeds the planning horizon)

Data needed for the model
  - Identify data gaps – and ask utilities when necessary to complete model
  - Suggestion from a committee member was to identify critical path items – to get an idea of where to focus time
    - Will the team will be requesting data by unit? – consensus is that this is the appropriate method to collect his data as much as possible
  - Goal is not to overload the stakeholders for constant data requests – after project team identifies data gaps – then send data requests in coordination with CEE and DSM study
  - Overall project schedule – See slide deck
Questions/discussion on modeling approach – comments addressed above
- Feedback on modeling approach?
- Comments on data needs? Best way to get from utilities?
- Anything that is missing, or that people would like to see included?

Regulatory barriers to more EUI projects – Jessica Burdette (DER) / Mike / Travis – (see policy barriers notes)
- Discuss context of barriers in larger regulatory discussion (to be more fully explored at future meetings)
  o This is the DOE funded grant portion of the meeting – and it reinforces the work and output of the EUI potential study
  o Inventory the barriers and how they interface with the EUI potential study and how that interfaces with CIP statute
  o Not a lot of precedents in other states working to address this issue
- Present barriers identified in draft literature review
- List of Barriers Discussed:
  o Complicated Cost Recovery Barrier – IOUs basically will not use the existing rider as it is currently designed. Too complicated, especially in terms of base rate effects. Essentially a non-starter.
  o LGF exemption barrier – It is unlikely we’ll find a workaround under the current statute. There will need to be a statutory solution or LGFs won’t be participating. (accruing savings to downstream users is too complicated and LGFs cannot choose to opt in, even if they wanted to)
  o Timing of savings. Compared to Demand-side programs, EUI has a far different timeline for planning and implementation. If you’re building a portfolio including both, it will be difficult to plan across separate schedules – hopefully the carry-forward provision helps defray the issue.
  o Kind of encompasses several other barriers, but EE is simply not part of the value stream considered in the long term planning process. EUI EE projects that have been completed were done for reasons other than claiming savings.
  o The performance incentive available to utilities on the demand-side is specifically excluded from EUI projects (stakeholders agree that this would help promote EUI EE, but probably wouldn’t be the deciding factor on green-lighting projects)
  o General note on barriers – we should be careful to delineate between barriers to implementing EUI EE vs. barriers to counting efficiency implications of already-planned projects.
- Rate barriers – which ones seem to be bigger/more important than others?
- Any barriers that are missing?

Wrap-up, audience comments, next steps – Mike
- Comments from non-advisory committee attendees
- Preview of July Large Stakeholder meeting
- Next Steps – next meetings