**dWind next steps discussion**

Key things:

* Present for discussion all of the assumptions – finalize as we go through the process
* Present some of the alternative approaches that were considered – we don’t want to only present the final “fully baked” solution. Be thoughtful and acknowledge weaknesses in the approaches we are using at the start of the conversation – make sure you express the big weaknesses – make sure you express the big picture
* Things that Jose likely wants for any analysis: Transparent, Peer Review with industry, and Published

Timeline:

* Brief Jose on schedule and approach [10/25/15] – Mark (support from Ian)
* Creating a detailed assumptions document [11/6/15] (5 written pages)
  + Pull out assumptions from current documentation
  + Summarize assumptions for future values
    - Financing rates
    - Costs improvements
    - Performance improvements
    - Customer adoption rates - maximum adoption level at each payback level.
    - Rate escalations (how appropriate)
    - Policy assumptions (incentives and net metering)
  + Summarize current algorithms/methods
* Brief Jose on TRC [11/15/15]
* Brief Jose on assumptions [12/1/15]
* TRC in-person meeting in CO - conference call (Assumptions review) [12/15/15]
* Finalize response to TRC [1/1/16]
* Brief Jose on TRC [1/5/16]
* Initiate modeling [1/5/16]
* HQ Model results review (Mike, Rich, Dan, Bret) [1/20/16]
* Dry run presentation to Jose [2/1/16]
* Present to DWEA executive committee briefing [2/15/16]
  + DWEA Business meeting 2/23-25/16
  + Bookend {Best/most likely/worst/BAU}
* Briefing on scenario matrix
* Present full sensitivity analysis [May-June 2016]

How the assumptions should be presented (Based on the wind Vision) :

* Listing of the key assumptions (started in excel/word, presented in powerpoint)
* Listing of the algorithms that were used to address specific concepts (started in excel/word, presented in powerpoint)
* Assumptions/algorithms OK’ed with DOE; presented to the TRP; comments brought back to the modeling team; final results presented back to DOE then TRP.
* Included in addition to (as part of) the model documentation as a quick reference document..

Areas of most uncertainty in dWind assumptions:

* Financing rates
* Costs improvements
* Performance improvements
* Customer adoption rates including - Maximum adoption level at each payback level.
* Rate escalations (how appropriate)
* Policy assumptions (incentives and net metering)

Key thoughts things that need to be improved:

* Classifications of assumptions – where does the data come from – how does it diverge from what the other industries are doing. (Order of assumption strength would be Wind assumptions, RE assumptions, generic model algorithms)
* Focus on the industrial market sector
* Document the gaps between dWind and ReEDS
* Documentation for the adoption rates – where does it come from?
* We describe the algorithms well – but not the levers – we need to define a framework of the specific assumptions so that when we start to present results – there is a consistent way to express the key assumptions (financing, cost improvements, customer adoption) that were used in the specific run – these are really the critical data points. Would also be good to include some max/min values for these parameters.

DOE Team: Mark, Rich, Dan B., Bret from Japan

TRC members

* Current: Mike Bergey (Bergey), Russell Tencer (United), Ben Polito (Pila), Diego Tabaldi (NPS), Brian Kuhn (Aeronautica), Roger Dixon(Skyline), Trudy Forsyth (Wind Advisors), Brent Summerville (SWCC), Alice Orrell (PNNL)
* Additional suggestions: Val Story (Clean Energy Group), representative of Endurance, Andy Kruse, UCS, Navigant
* Organizations looking at larger turbine projects: Foundation Windpower (Steve Sherr), One Power (Jason), Tom Wind, representative of RES Americus.

Ideas of what could be studied (list not complete)

* Best parameter to like to adoption - monthly bill as compared to simple payback
* Adoption rates for distributed wind