* Current Representative emissions due from States to WRAP – July 3rd
  + Emissions used to determine sources of interest for states (Q/d tool from Control Measures Subcommittee)
  + Great time to engage sources of interest in RH2 (if haven’t done so already). Acceptable to use AEI data from recent years if engagement hasn’t started. \*Sometimes there are anomalies by just doing this (i.e. controls came online in mid/late 2017 and AEI isn’t reflective of new emissions rate).
  + The modeled results will be used to determine where “States” are at currently with respect to the glidepath, takes into consideration controls which have come online since 2014 baseline (as applicable). (plant shutdowns, plant turndowns are included)

**Projecting Future Emissions and Next Steps**

* **2028 OTW/OTB** (Expected baseline used to compare future control costs against) – August 31st
  + States should work with identified sources (from Q/d tool) to accurately project this number.
    - Determine how 2028 will look compared to Current Rep. emissions, taking into consideration expected/planned future operational rates (capacity factor)
    - take into consideration any planned fuel changes since Current Rep.
    - incorporate any current plans to reduce emissions through control projects (sources should get credit for this)
  + Vital to engage sources for this information, they can provide sufficient justification to defend why the projected numbers are accurate to the best of their knowledge.
    - The better the justification, the more defensible the State Proposed SIP.
    - Important to identify which source units should be included in a 4F evaluation (easy for Coal EGUs – not as easy for sources with many units. Look at high emitting units and current controls on those units as starting point)
  + If sources don’t have projected operational data, 2028 Expected Baseline may be the same as the Current Representative Baseline
    - Sources have better information then States, when sources see the impact that this information may have on their facility(s) – they become more engaged and willing to work with the State.
  + Model Results will show States where they will be at in 2028 with respect to the glidepath – not considering additional control(s) to be installed (this is the intent of the next step)

Defensibility:

* + important for States to review and ensure legitimate information is provided which supports the emissions projections. Should be 'agreed upon' between Source/State
  + this is the number sources should start from, "Expected 2028 Baseline", when evaluating the feasibility of control technologies selected for 4F analysis
* **2028 Future Controls Case** – Dec. 1st
  + Accurately determine the post-2028 Emissions after implementation of controls determined reasonable through 4F analysis. Model how this looks in relations to the regional haze reasonable progress goals and meeting the URP on the glidepath***.***
  + the technological evaluations should begin ASAP, this takes time for sources to complete and we are only ~5 months from Dec. 1 (ND gave sources ~8 months to complete and were told this was difficult to complete in time). ND guidance was to focus on the Technology aspect of the 4F, 2028 expected emissions can be adjusted in the 4F reports received.
    - Cost of technological feasible projects won’t change
    - Cost effectiveness can change depending on projected 2028 emissions (starting point). The reason it is vital to engage sources, so defensibility of starting point is included in proposed SIP.
    - Economic feasibility (or selection of what is determined to be economically feasible) will depend on the State needs and attainment status. Model results should point States in right direction to take with needed reductions to show reasonable progress.
* **2028 Source Apportionment / Sensitivity** 
  + This is also a vital aspect of the modeling scenarios (potentially the most integral)
    - Will take into account and remove non-State sources impacting visibility
      * International contributions
      * Wildfires and prescribed fires
    - Model Results may allow states to adjust the natural visibility conditions and/or uniform rate of progression based on impacts outside of the States control. (RH1 modeling performed, at least in ND, indicated this would have significant impact on natural visibility condition – See page 127 and 170 of March 2010 SIP Package) – based on the RH1 modeling, ND Sources have expressed interest in this.
    - See Graph below for example. Numbers are approximated and meant for discussion purposes only.

2028 Source Apportionment Modeling Change