ENERGY FORECAST

TOT Reviews – Quarter 1 2013

Reviewer #1: I had really hoped OSM could move the coal map forward more, but their relationship with States did not allow it. The project is progressing well and is on target. I look forward to learning more about the products. *[LCC Staff Note: TNC was later able to obtain the data directly from mining States.]*

Reviewer #2: I concur that the project seems to be making progress, but we really don't have any detail and are evaluating only the available summary statements. Not much to respond to other than saying it sounds like a typical project with a variety of issues. Would really like something more to look at. *[LCC Staff Note: The PIs have arranged a webinar with the TOT for June 27, 2013*.]

Reviewer #3: The project appears to be coming along quite well despite the initial hurdles TNC faced with the access to shale gas and coal mining data. Even though not all the key model criteria were available, it appears that there is rather good correlation between actual shale gas well and the predictive model based upon the remaining criteria. TNC anticipates modifying the wind model based upon updated DOE information. I appreciate these adjustments to better refine the model as better information becomes available. I am pleased with the progress of the project and look forward to the next quarterly progress report.

Reviewer #4: It appears that TNC has responded to comments regarding more detailed information and explanation of the methods for shale, wind, and coal models and future scenarios by providing such information in the Q4 2012 Reporting Material Folder. Although they provide detailed documentation of the methods, it would be helpful if they could elaborate on the model validation section (specifically shale and wind methods document but also on the coal model when that information is provided) by providing more than just statistical justification and jargon. It would be helpful if they could explain what that information means in terms of use and limitations of the results. If the intent is to have decision makers use the products of this research in their decision-making process, knowing the appropriate use of the results and their limitations is key.

I'm not very familiar with Ventyx or their data. Why were they and their data chosen? What are the limitations of their data? Since pieces of the project rely heavily on this data, it would be helpful to have this information. Also, I agree with Ginny's point about including pipeline location data

I'm also unclear about how and what type of forest and aquatic impacts will be examined by the results of this project. In the latest progress report (2013 Q1) there is brief discussion about disturbance mapping relating to coal while in the draft shale and wind methods; there is a different and limited description of assessing water quality and habitat impacts. How are the aquatic and habitat impacts being evaluated for the different energy sectors? The similarities I see are tabulating disturbance indicators by HUC 12 sub watershed which makes sense to some extent for aquatic endpoints. However, for terrestrial or habitat considerations, the current progress report and the shale and wind methods document lacks detailed description. For example, the shale and wind methods states they will look at deforestation under the different scenarios but what about examining the change in the type of forests from interior to edge under the different scenarios or examining how fragmented the landscape could become under the different scenarios (I'm sure TNC has various ways to do this, but one thought is the landscape fragmentation tool - http://clear.uconn.edu/tools/lft/lft2/)? In general, the documents submitted have some of this information but it isn't coherent in that some of it is in one document and some of it is in a different document and both are a little different but both lack details. Essentially, it would be good to know more information about evaluating the habitat impacts from the different energy sector scenarios.

In summary the project looks to be on track and there has been a lot of thought put in to their methodology for the energy extraction scenarios. Some clarifications will help in understanding their assessment of environmental impacts. Additionally, explaining limitations and how to use the results so that decision makers can utilize the information will make this research useful for practitioners.

I'm not sure if any of my comments have been addressed in previous discussions. If they have, please let me know and I apologize for the duplication.