

Hi Linnea,

I've reviewed the draft report and just a few substantive comments. Overall, the report contains extensive information and stakeholder perspectives on various energy matters (many of which go beyond grid modernization) and should serve as a very useful resource for the Commission and others as the Commission moves forward with policy formation next year.

My high-level substantive comments:

1. "Why Next Grid" – In the introductory chapter, I recommend expanding on the question of "Why Next Grid" meaning "Why does the grid need to be further modernized given all the money that has already been spent." Sections 1.1 through 1.3 contains language that could be moved to the introductory chapter. From my perspective, providing a very clear and compelling explanation of why the grid needs to be modernized should be placed in the early part of the introductory chapter.
2. Introductory Chapter, p. 12 – we did not have a "kick-off plenary" of all the WGs. The questions that are listed were distributed and discussed in a meeting with some of the WGL. However, the language as written makes it sound like the WG themselves had a jumbo plenary meeting, which is not the case. Also, in none of the WG that I participated in did the WGLs really highlight or seek to answer the questions on the list. I suggest deleting reference to the questions altogether because they did not in the end inform much of the study.
3. Introductory Chapter, p. 12: Profs. Sauer and Gross are mentioned by name. None of the WGLs are mentioned by name and organization. I tried to find in the report where the WGLs were identified. Perhaps I missed it, but I could not find the names/organizations listed. As a courtesy to the WGLs who contributed significant time to the study above and beyond what they were initially asked to do, and also given the high-caliber of the WGLs, I think it is important to mention them by name and organization in the same section that Profs. Sauer and Gross are identified. I also suggest a few sentences expanding upon the leadership they provided and contributions they made as a group, again to acknowledge and respectfully value their considerable efforts that went "above and beyond." Similarly, there is no mention made of the Senior Consultants (Marty and I). I think it would be appropriate to mention us by name as well, and provide a sentence or two about our roles. The section reads now as if Profs. Gross and Sauer provided most of the intellectual guidance and substantive content when in fact the report really did result from the intellectual and substantive contributions of a much broader range of leaders.
4. p. 21: There is language that states "for the vast majority of IL customers, the grid performs relatively well." This may be true, but this language really undercuts the argument that grid modernization is essential for IL to maintain leadership. Perhaps the intent of this language was something other than was explicitly stated.
5. Conclusion Chapter
 - a. Suggest removing the many clichés: "known unknowns and unknown unknowns", "low-lying fruit" and "chicken and egg" syndrome.
 - b. p. 200: Remove statement "considerable disagreement on nearly every aspect of grid modernization." For the WG I participated in, I think there was more agreement, generally, than disagreement, and this statement in my view very much overstates the degree of nonconsensus.
 - c. P. 209: Effective collaboration should continue – suggest elaborating on what form the "effective collaboration" should take. In other words, how could the collaborative

process be improved if it is continued next year? I think some more specific recommendations would be helpful that do not compromise any legal issues that may be in play.

- d. Comments on the three substantive recommendations: Move forward with beneficial electrification, storage and cyber task force. I suggest that you say that in the opinion of the Lead Facilitators, the three areas to move forward with are the three identified areas. I do not think a broad swath of the WG participants would necessarily agree with these. I also think it would be useful to expand the recommendations and include at least one recommendation that seems to have emerged from each WG. If I had participated in a WG and did not see any recommendations from the WG reflected in the conclusion chapter, I would feel that my WG was not valued. Even if the other chapters don't contain explicit, clear consensus recommendations, the professors could pull out one or two recommendations from each chapter that they think are important (and note that the recommendations are from the professors based on their review of the chapters).

Linnea, I'm quite certain you've put a tremendous amount of effort into getting the report ready to be released in draft – thank you again for all your work as I do believe it will be a very useful resource for IL as policy discussions proceed next year.