Subject: Methodology for Analyzing Certified Product Data

I was reviewing the cover letter and white paper on a new methodology for analyzing the NFRC Certified Product Directory data. The cover letter states "To provide full transparency to the process, EPA can release a spreadsheet analysis with complete performance distributions based on the December 2015 CPD." I think that would be very helpful, and would appreciate it being released.

The cover letter also asks whether the product characteristics were combined into appropriate categories. I'd like to look at the spreadsheet in more detail, but a few quick comments after a first reading of the white paper:

- I'm not really aware of dual-sided low-e (code 6 - coatings on both sides of a pane of glass) having any substantial use in the real market, except for maybe on some suspended films. On the other hand, I suppose there is no harm in keeping it, as if my assumption is right, the analysis will just show very few in the CPD.

- I don't know if you want to include tinted uncoated glass as a category separate from clear glass (code 9). It's less common in residential windows, but does impact the solar transmittance and SHGC, and is found in some places like Florida and Arizona.

- Some of the double pane configurations with two low-e coatings on surfaces #2 and #3 (e.g. 11NN, 13NN, …) are unlikely to be used in the market. There is very little benefit in U-factor from this configuration to justify the cost of the extra low-e. On the other hand, I suppose there is no harm in keeping these, as if my assumption is right, the analysis will just show very few in the CPD.

- It should be made more explicit what surfaces the low-e coatings are on. For instance, 14NN just says "Soft-coat 1 on outside pane; Hard-coat 1 on inside pane". I believe 14NN is intended to be soft coat 1 on surface #2 and hard coat 1 on surface #4, which does have a significant impact on U-factor, and not soft coat 1 on surface #2 and hard coat 1 on surface #3, which has little impact on U-factor. The descriptions could be clarified.

- It's not shown, but I bet you can reduce the number of triple pane configurations. For instance, you probably don't need to include configurations with three low-e coatings, as designs usually avoid putting low-e in the middle for thermal stress reasons (besides the fact that the incremental change in U-factor probably does not justify the extra cost). But again, I suppose there is no harm in keeping it, and the analysis will just show very few in the CPD.

Otherwise, I think the categories are reasonable at first glance, and it will be interesting to see what the analysis shows.

Best regards,

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