We acknowledge and appreciate all of the work by DOE, LBL and D&R to provide a more realistic ENERGY STAR (E*) Program that will impact energy efficiency.

After attending the DOE E* Stakeholder meeting in Washington, D.C., we are providing comments regarding the E* proposed revisions:

- On page 22 it is stated that “stakeholders questioned whether the NFRC database is sufficiently reflective of actively marketed products. DOE therefore ran a parallel analysis on a subset of window types advertised for sale and confirmed that the NFRC database is sufficiently accurate.” We still believe that the figures presented in Table 7 are overstated (and what are the numbers listed as NA for ES3, ES2 and ES1?). For example, Alside window has 2,888 Double Hung windows listed in the CPD as having been tested and certified. Let’s generously assume only half meet the proposed criteria (1,444), and using even the lowest percentage of 20% (table 7), it would calculate that they would have 288 double hung products they manufacture for sale that would qualify without modification. What we question is the assumption that the companies that were surveyed are actually manufacturing the number of products presented in the CPD. Just because a window is tested and certified, it does not mean that the company is actually producing it for sale. Ray Garries stated at the meeting that JeldWen has 500,000 products in the CPD – surely they are not manufacturing even 10% of those products for sale. For contrasting purposes, Champion Window has only 6 double hung windows tested and certified in the CPD, and we produce for sale every one of them. Accordingly, we believe that the data is still not reflective of reality and that a re-evaluation of the data supporting the 4.2.2 Technological Feasibility is warranted.

- As stated on page 30 & 31, the “IECC 2009 will be the dominant energy code in 2013”. Why is the SHGC requirement for Phase 1 in ES1 significantly lower (≤.25) than the ≤ .30 as proposed by 2009 IECC? Why is the SHGC requirement for Phase 2 in ES1 significantly lower (≤.20) than the ≤ .30 as proposed by 2009 IECC? If the proposal is not lining up with the 2009 IECC #s, at the least, consideration should be given to trade-offs in ES1 in Phases 1 & 2. Also, why are the U-factors for ES4 and ES5 in Phase 2 pushed so low? The proposed levels for the IECC 2009 are ≤ .35, yet the highest U-factor allowable for ES4 is .26 and ES5 is .28 respectively. Again, these minimum U-factors should be raised to allow for trade-offs on SHGC that are not “boxed in”. In addition, the U-factor for ES5 should be lower than the U-factor for ES4 as ES5 is further North where greater insulation is needed than ES4.

- We need to be careful pushing the envelope so far it falls off of the table. What we all have to remember is that replacement windows ARE a discretionary
purchase with a degree of price sensitivity. If the E* qualified windows are priced with too much additional margin, very many homeowners will say NO to E* windows and purchase non-E* windows - or worse yet, not wanting inferior windows, defer the purchase in total. Either way, E* and manufacturers with E* windows (and the environment) LOSE. Said another way, wouldn’t it be better to sell hundreds of thousands of very good windows rather than tens of thousands of exceptional performing windows each year?

- And for the record, although we cannot speak for new homes, not 100% of purchases of replacement windows are paid with funds from either 2nd mortgages or home equity loans (as mentioned so cavalierly at the stakeholder meeting by one stakeholder commenter). Many homeowners use bonuses earned from work, inheritances and money saved over the years to make their lives/homes more comfortable with replacement windows. For us, we estimate at least 33% of our windows are purchased with these “discretionary” dollars.

- On page 33, tables 17 & 18 include the Canada database in the listing of the # of qualifying products for Phase 2. Why was Canada included? Was it to ensure there was indeed a significant number of qualifying products? What do the tables look like without Canada’s database included?

- On page 19 and 31, why is the savings criteria (tBTU) established so high when compared to other products listed (over 4 x greater than dishwashers in Phase 1; over 5 x greater than dishwashers in Phase 2)? Again, we must remember that windows are competing against other products (including granite countertops) for discretionary $$ expenditures. If we set the bar too high, the homeowners may decide to “switch” to other products that will not provide significant savings tBTU like windows will.

- To base a 15% margin increase on just 2 manufacturers input (I believe that is what was stated) is a ludicrous decision. For organizations that use significant amounts of data and charts to back up recommendations, one would hope that they would have deduced that a baseline of just 2 manufacturers input is insufficient.

- On page B-4 of Appendix B, Table B-1, it is shown that Nationally 90% of all replacement windows are currently E* qualified. In the narrative on B-3 & B-4 it states “Scenarios represent anticipated market penetration during the criteria period.” And “In each division, one market share is assumed and the remaining market share is calculated.” Too many anticipations and assumptions allow for large margins for error. Again, we are making “life-changing” decisions on a lot of empirical data; manufacturers estimates used could be flawed, and Table B-1 is then assumptions based on estimates. How accurate is that?

- In calculating the window payback if there was an assumption made that energy costs would be flat in the future (pg B-12 “Annual energy expenditures are
calculated by multiplying each model’s annual energy consumption by the appropriate average residential fuel prices in selected cities. Fuel prices obtained from the Energy Information Administration represent average annual residential prices for each state”), this assumption needs to be changed to reflect a normal rise in energy costs based on historical experience.

- **ES5A** – Serious consideration should be given to eliminating this Zone in Phase 1. Giving in to special interests will encourage other regional organizations to propose similar considerations which will surely dilute E* integrity.

- We agree that a January 1, 2010 Phase 1 effective date is during manufacturers’ “off-season” and would thus allow ample time to have any required new samples and displays in place.

- We also agree that a January 1, 2015 implementation date for Phase 2 is necessary – manufacturers will need the additional time to complete extensive and exhausting research, testing and re-tooling of products to meet the more stringent criteria.