Presentation of Arjun Makhijani to the Maryland Public Service Commission

December 9, 2016 (not verbatim)

In the Matter of Transforming Maryland’s Electric Distribution Systems to Ensure that Electric Service is Customer-Centered, Affordable, Reliable and Environmentally Sustainable in Maryland, Public Conference No. 44 (PC44). The Grid Transformation Proceedings

Mr. Chairman and Commissioners:

I deeply appreciate that you have extended the agenda today to accommodate these comments. My name is Arjun Makhijani; I am president of the Institute for Energy and Environmental Research. I want to make four points:

1. First: Nuclear energy is not renewable. The Intergovernmental Panel on Climate Change (Fifth Assessment) defines Renewable Energy as:

   Any form of energy from solar, geophysical, or biological sources that is replenished by natural processes at a rate that equals or exceeds its rate of use.

   Uranium and thorium are the natural resources for nuclear energy; they are primordial materials and are not renewed by natural processes. I want to recommend that the Commission adopt the IPCC5 definition as the working definition for the proceedings to prevent unnecessary argumentation.

2. Second: Regarding baseload and the future grid: I think the view of a member of the Board of Governors of the California ISO, David Olsen, should be carefully considered in this proceeding. He has been quoted as follows:

   Having a 24/7 nuclear plant, from a grid operator’s standpoint - that is a real problem. Dealing with 2,200 MW coming in at every minute - we have to design our grid around that inflexibility. ‘Baseload’ refers to an old paradigm that has to go away. (As quoted in Renewable Energy World, October 2016.)

   This issue is discussed further in an IEER report, Prosperous, Renewable Maryland, which I would like to submit for the record.

3. Third: I appreciate and endorse the excellent reasoning behind the PSC’s order last year to include non-energy benefits in the EmPOWER program.

   The principle is generally applicable. The non-energy benefits of an affordable energy program should be included in the present proceeding, especially given that they are huge. The non-energy benefits of
reducing homelessness and associated medical costs to taxpayers was estimated in a report prepared by IEER, *Energy Justice in Maryland’s Residential and Renewable Energy Sectors*; I would like to offer it for the record.

4. Fourth: I suggest that the principle of limiting low-income households' energy bills to a percentage of income be adopted early in the proceeding (6 percent was adopted in the NY REV process); this will open the entire process to a wider array of reforms for everyone because the issue of preventing harm to low-income households will have been addressed integrally and early.

Thank you again for your kind consideration. I'd be happy to answer any questions.