Comments of the American Wind Energy Association in response to the Department of Energy's solicitation for comments on the upcoming National Electric Transmission Congestion Study

I. AWEA strongly believes that the Department of Energy (DOE) should permit transmission developers to propose "project-specific" corridors, which would allow DOE to designate corridors upon request at any time anywhere in the Lower 48 states if a developer can demonstrate that its proposed corridor meets the criteria for such a designation.

This would be an additional improvement beyond the process that has been publicly discussed as DOE's plan, in which DOE would take the lead in identifying any areas where power flows are constrained by lines or equipment. According to reports of that plan, once those areas have been identified, DOE will invite "interested parties" -- utilities, transmission owners, investors -- to make proposals for resolving areas of congestion. These will be considered "statements of interest." Based on that, the Secretary would then decide whether or not to designate any specific transmission corridors under the provisions of the 2005 Energy Policy Act. While we welcome this improvement in that it allows transmission developers or other industry participants to propose transmission congestion solutions that would be incorporated into DOE-designated corridors, we believe even more freedom should be provided to transmission developers to propose corridors and ask for DOE designation of those corridors.

II. DOE's congestion analysis should continue to recognize conditional congestion, particularly that which would occur if renewable energy development were to occur in specific geographic areas. As America's electricity resource mix is changing in response to new policies, improvements in the economics of renewable resources, and changes in the economics of other resources, the need to access new generation resources will continue to be a major driver of transmission development.

III. DOE's congestion study should be informed by the results of the DOE-funded Interconnection-Wide Transmission Planning exercises. In particular, these planning exercises have found that large amounts of wind energy development will occur under nearly all likely scenarios, and that transmission development to transmit higher quality wind resources to load is likely to be a cost-effective solution under these scenarios.

IV. New types of data inputs should be used in the congestion analysis, including:

- Wind curtailment, which occurs when there is insufficient transmission capacity to carry wind energy to load and wind projects must reduce their output to below what they could have produced, is a good indicator of transmission congestion. Wind energy curtailment has become increasingly commonplace in many parts of the country as transmission development has failed to keep up with wind development. The Midwest ISO's wind curtailments in 2010 amounted to about 4.4% of total potential wind output, or 781 GWh, while ERCOT's wind curtailments

totaled 7.7% or 2,067 GWh in 2010.[1] Curtailing zero cost, zero emission wind energy is a highly inefficient outcome that is detrimental to both consumers and wind power development. Assuming a conservative $35/MWh value for curtailed wholesale energy would put a value of over $100 million on the wind energy that was curtailed in 2010 alone.

- Interconnection queues, the lists of projects that have applied to interconnect to the grid but have not yet been able to do so, are an excellent indicator of conditional congestion for new generation resources and should be incorporated into assessments of conditional congestion. While not all proposed generation projects in the interconnection queue are likely to be built, the queues are a good indicator of the relative interest of generation developers in connecting to the grid in certain geographic locations and thus where future generation is likely to be built.

- Economic modeling techniques that capture the benefits transmission provides to consumers by providing them with access to lower cost generation and reducing the potential for the exertion of market power in energy markets are also an important congestion analysis tool. Historical data showing how electricity market Locational Marginal Prices (LMPs) differ from location to location are an excellent indicator of where congestion exists on the transmission system, and this data can be used to calculate the potential economic benefits of building transmission. Production cost modeling that simulates the relative economics of different generation resources can also be used to analyze future transmission congestion that would result under different scenarios.

V. DOE should request that utilities, generating companies, independent transmission companies, ISOs/RTOs, transmission planners, and others provide data and other input that helps document transmission congestion, including but not limited to interconnection study results, generator curtailment data, transmission path flow data, and information on transmission costs. This would both supplement and serve as a reality check on congestion data the DOE develops.

[1] http://eetd.lbl.gov/ea/emp/reports/lbnl-4820e.pdf, page 54