

# National Transmission Congestion Study Was Released On August 8, 2006

by  
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The U.S. Department of Energy (DOE) issued the *National Electric Transmission Study* (the study) on August 8, 2006. The Study was issued with a 60-day comment period which closes on October 10, 2006. The study, authorized under the Energy Policy Act of 2005, analyzes electrical generation and transmission capacity across the United States and identifies areas that need attention to meet growing demand. DOE may designate areas as National Interest Electric Transmission Corridors (NIETC) based on the study. Designation of a NIETC will enable the Federal Energy Regulatory Commission (FERC) to exercise federal “backstop” siting authority in the corridor.

Congestion, for purposes of the Study, is defined as the condition that occurs when transmission capacity is not sufficient to enable safe delivery of all scheduled or desired wholesale electricity transfers simultaneously. The Study identified transmission areas that need federal attention and groups them into three classes:

**Critical Congestion Areas:** Areas where it is critically important to remedy existing or growing congestion problems because the current and/or projected effects of the congestion are severe.

- The Atlantic coastal area from Metropolitan New York southward through northern Virginia,  
and
- Southern California

**Congestion Areas of Concern:** Areas where this study and other information suggests that a large-scale congestion problem exists or may be emerging, but more information and analysis appear to be needed to determine the magnitude of the problem and the likely relevance of transmission and other solutions.

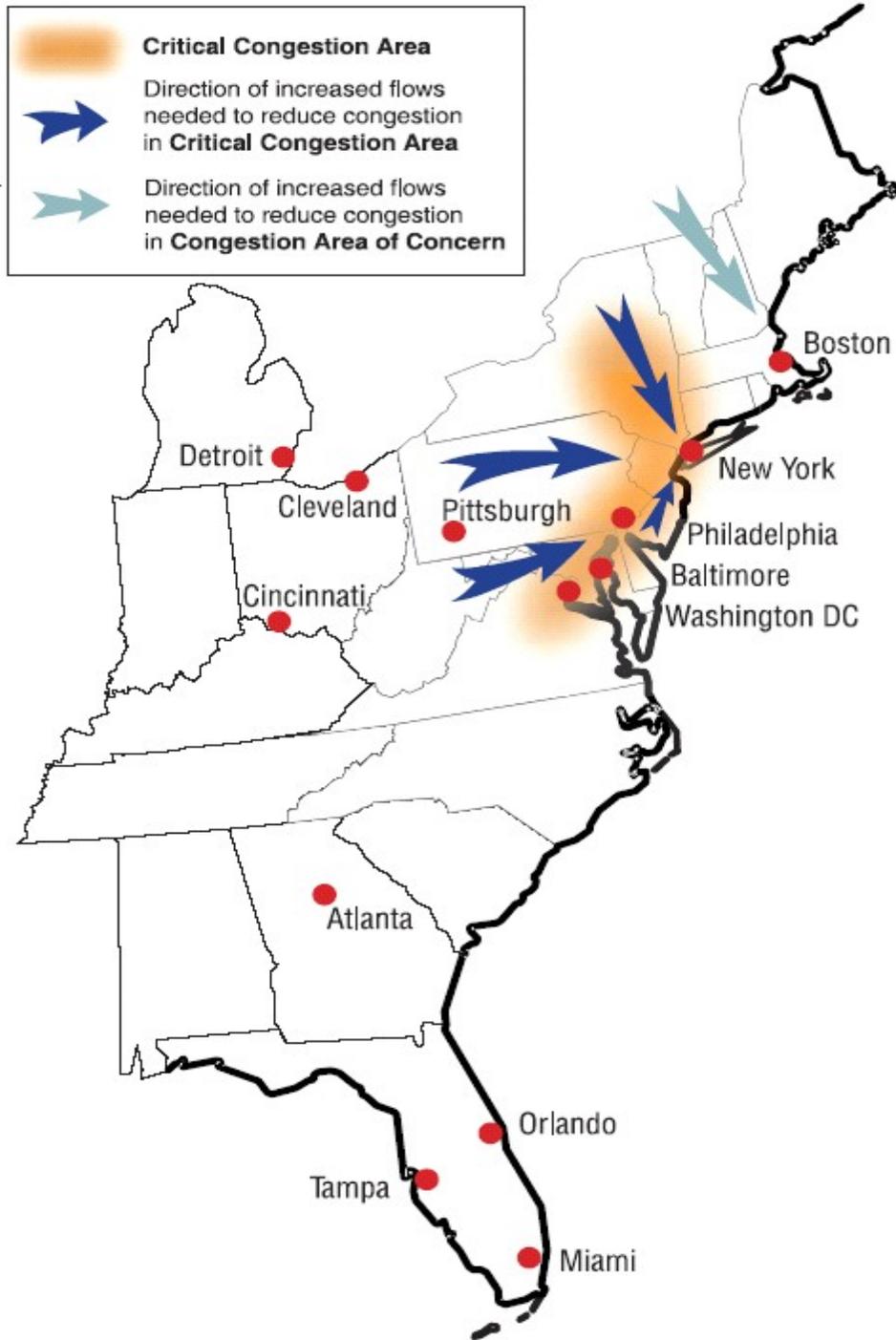
- New England
- The Phoenix-Tucson area
- The San Francisco Bay area
- The Seattle-Portland area

**Conditional Congestion Areas:** Areas where future congestion would result if large amounts of new generation resources were to be developed without simultaneous development of associated transmission capacity.

- Montana-Wyoming (coal and wind)
- Dakotas-Minnesota (wind)
- Kansas-Oklahoma (wind)

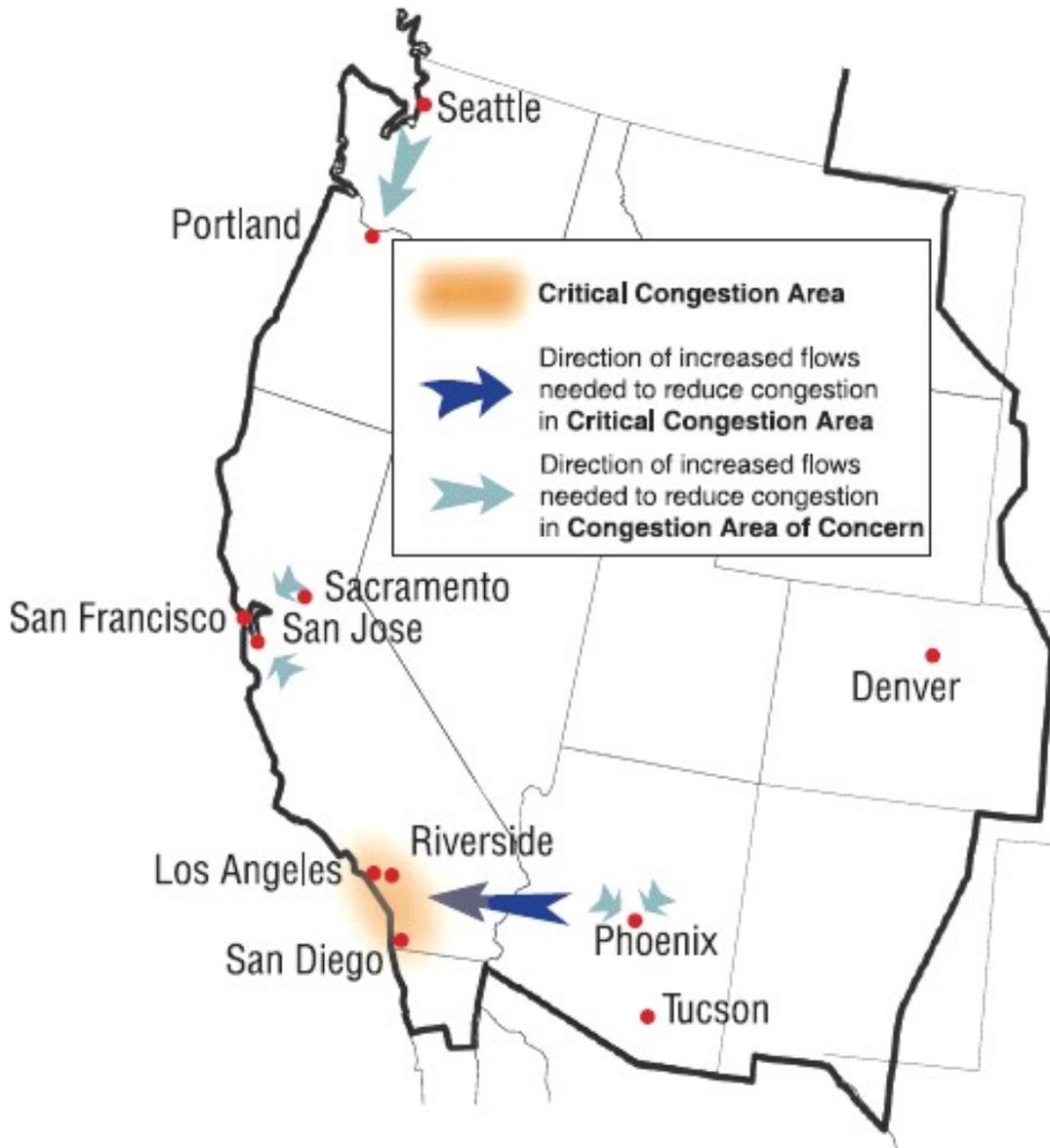
- Illinois, Indiana and Upper Appalachia (coal)
- The Southeast (nuclear)

Figure 1. Critical Congestion Area and Congestion Area of Concern in the Eastern Interconnection



Source: [http://www.oe.energy.gov/DocumentsandMedia/Congestion\\_Study\\_2006-9MB.pdf](http://www.oe.energy.gov/DocumentsandMedia/Congestion_Study_2006-9MB.pdf) / September 2006

Figure 2. One Critical Congestion Area and Three Congestion Areas of Concern in the Western Interconnection

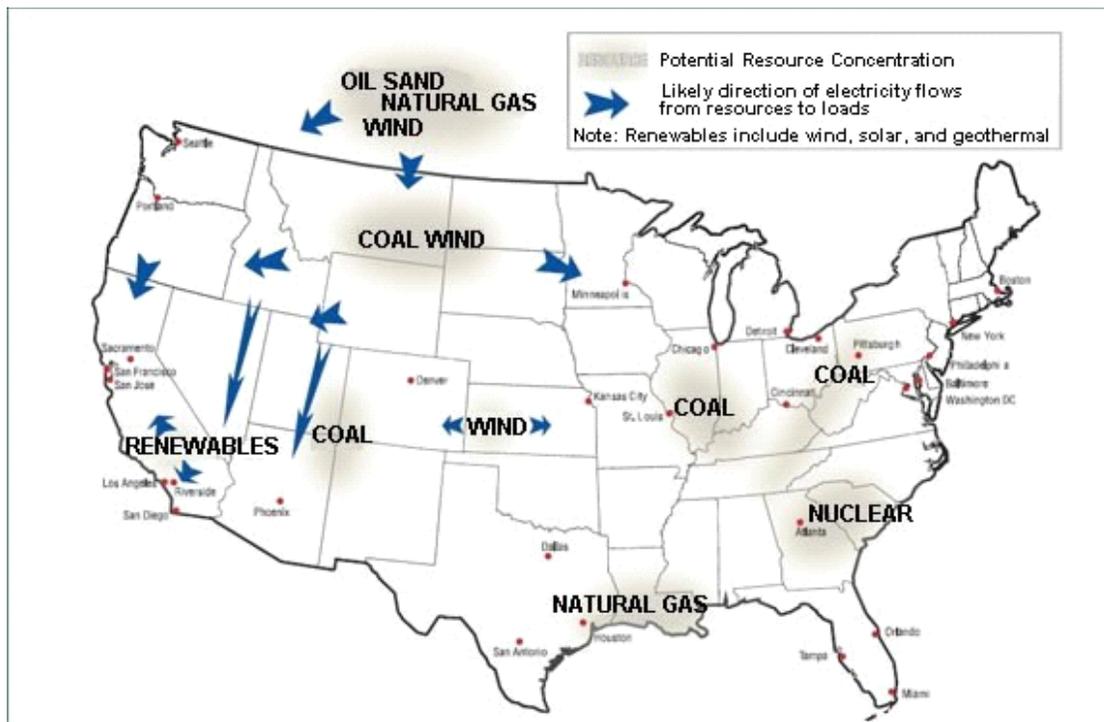


Source: [http://www.oe.energy.gov/DocumentsandMedia/Congestion\\_Study\\_2006-9MB.pdf](http://www.oe.energy.gov/DocumentsandMedia/Congestion_Study_2006-9MB.pdf)/September 2006

DOE is considering designating NIETCs in the critical congestion areas and is inviting comments to respond to the following three questions.

- Would designation of one or more National Corridors in these areas be appropriate and in the public interest?
- How and where should DOE establish the geographic boundaries for a National Corridor?
- How would the costs of a proposed transmission facility be allocated?

Figure 3. Conditional Congestion Areas



Source: [http://www.oe.energy.gov/DocumentsandMedia/Congestion\\_Study\\_2006-9MB.pdf](http://www.oe.energy.gov/DocumentsandMedia/Congestion_Study_2006-9MB.pdf) / September 2006

Transmission congestion prevents delivery of electricity from a less expensive source and forces a more expensive source to be used instead, resulting in a higher cost. It is not always cost effective, however, to make the investments necessary to relieve congestion because generally some combination of the following is needed.

- Build new generation
- Build or upgrade transmission capacity
- Reduce electricity demand through some combination of energy efficiency, demand response, and distributed generation

Generation and transmission are costly and take time to build and often face opposition to their proposed location. The options to reduce demand are also sometimes costly with results that are hard to control. DOE published the Study with the intention of opening a dialogue with stakeholders in areas where congestion is a problem in order to focus on relieving the congestion.

DOE intends to issue annual reports that monitor progress on relieving transmission congestion. The first progress report is scheduled for August 8, 2007. The full national congestion study is scheduled to be updated every three years.

The full text of the Study report can be found on the Department of Energy website (URL: [http://www.oe.energy.gov/DocumentsandMedia/Congestion\\_Study\\_2006-9MB.pdf](http://www.oe.energy.gov/DocumentsandMedia/Congestion_Study_2006-9MB.pdf)).