Many large complex systems seem to exhibit evidence of self-organized criticality. Examples range from the much-studied sand-piles to the Internet. The minitrack includes five papers focused on such behavior in the bulk electric power system. Two of the papers analyze data for large disturbances in the power system gathered by the North American Electric Reliability Council (NERC) for the years 1984 through 1999. The authors conclude that the data is consistent with the power system being a self-organized critical system. Three of the papers introduce Markov processes or models into the power network environment to capture the process of self-organization or occurrence of cascading outages.

Although the availability of the NERC data makes the bulk power system a convenient exemplar for major system events it is assumed that these models will form a basis for the study on major disturbances in many networks. The ultimate goal is the design and operation of large networks so they are more immune to such failures.

- Evidence for SOC in Electric Power System Blackouts
- A Markov Model for SOC in Electric Power System Blackouts
- A Model For Power Transmission Disturbances In A Simple System
- Network Models: Growth, Dynamics, and Failure
- Analysis of Electric Power System Disturbance Data