
POSITION STATEMENT ON SMART GRID

October 2010

The Smart Grid is a name being given to the modernization of the electrical transmission and distribution systems in the US, stemming from a February 2003 call from President George Bush to modernize our electrical delivery system for economic security and national security.

The National Academy of Engineering has called the North American power grid the “... supreme engineering achievement of the 20th century.” Essentially, the Smart Grid is the addition of a high speed data gathering and control system to the power distribution grid that allows information about the electric being transmitted. It provides near-zero economic losses from outages and power quality disturbances, a wider array of customized energy choices, suppliers competing in open markets to provide the world’s best electric services, and all of this supported by new energy infrastructure built on superconductivity, distributed intelligence and resources, clean power and the hydrogen economy.

The Smart Grid moniker itself was coined in a meeting, also in 2003, designed to create a vision for the future of North America’s electric system. Their major findings included:

- The electric system is aging, inefficient, congested and incapable of meeting of future energy needs
- Cancellation of many power plants and investment in distribution facilities are at an all time low, further impacting the ability of the electric system to meet future needs
- The regulatory framework, both at the federal and state is insufficient
- Many promising technologies are on the horizon
- Information technologies have yet to transform the electric system infrastructure.
- It is increasingly difficult to site new transmission lines, especially in urban areas, and solutions that allow more power flow through existing transmissions assets is required

It is INDIEC’s position that upgrading the electrical distribution system, both in terms of power transfer capability as well as information gathering and system control, should proceed, and is actually far overdue. It is the duty of both state and federal government to facilitate and oversee this transaction such that it minimizes the cost impact to all customers. Since this is a major investment in infrastructure, similar to previous upgrades in the system, traditional ratemaking practices should be utilized.

The “used and useful” standard should continue to be used to provide the utilities a fair return on their investments. The used and useful standard does not leave the customer on the hook if the utility fails to choose wisely or implement in a timely fashion. Utilizing a full rate case process insures that all costs and savings are considered. Trackers or riders are a “one-off” type of regulation that typically adds cost to the customer and revenue to the utility, but never considers the benefits of savings, or offsetting costs. Without a full rate case, utility rates have no checks and balances, utility company return soars and customers are left with higher rates.

Both state and federal legislation is required to insure compatibility and seamless integration of systems across the US. Oversight is required to determine the best network for the implementation of data collection and control of the electric grid. The new infrastructure which may be installed in connection with Smart Grid has the potential to bring enormous revenues to the utility company not related to the provision of electric service; however without proper legislative or regulatory oversight, the costs may be borne solely by the electricity customers. Electric customers should not be forced to solely pay for infrastructure that will benefit utility shareholders and purchasers of other network services.