

**Statement Abstract
Of
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**Before the QER Stakeholder Meeting
Portland, Oregon
July 11, 2014**

For over 100 years, utility planners have compared load forecasts to available resources, and developed transmission plans to ensure adequate energy was delivered to load centers. But the grid of the past is quickly being replaced by a new construct, wherein utility-grade and consumer-owned renewable power sources are shaping energy supply and consumption in unprecedented ways. Even more impactful is the evolution of the grid from a one-way model to a two-way network, in which communications and energy flow bi-directionally. Consumers are no longer simply recipients of power; they are also becoming generators. And thanks to local storage systems, consumers may soon choose to be partially insulated from the grid. This represents new challenges to grid planners, as we adapt transmission plans to account for distributed generation and storage resources. Going forward, transmission planning programs must become more comprehensive, to ensure that we do not inadvertently strand assets, as consumer-owned energy resources increase in their prominence.