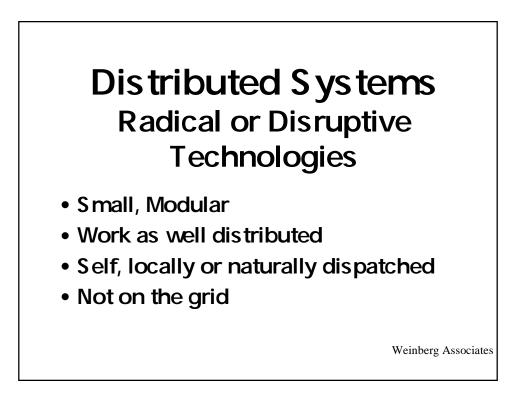




Situations for Consideration of Distributed Systems

\$G+\$T+\$D <<	\$DU Centralized planning based on central generation (large load centers). Cost of central generation plus the cost of T&D is much less than the cost of distributed resources.
\$G+\$T+\$D > >	\$DU Distributed planning based on distributed resources (islands/villages). Cost of distributed resources is less than the cost of generation, transmission, and distribution.
\$G+\$T+\$D -	\$DU A mix of resources depending on localized costs and conditions (niches). Cost of distributed resources is approximately equal to the cost of generation, transmission, and distribution.
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Technologies

Radical or Disruptive - "Brave New World" New Customers / New Values Evolutionary - Better ,Cheaper, faster Traditional Customers/Traditional values

"Radical or Disruptive Technologies never introduced by Market Leader"

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Radical or Disruptive Technologies

- Don't satisfy revenue needs of large firms
- Markets hard to estimate
- Lack of quantitative data
- Cannot pass through established decision gates
- Require new organizational structure and culture

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The Challenge

- Village Power requires
 - the use of radical technologies
 - business not project financing
 - innovation in organization not just technology
- Utilities cannot change nor deliver systems economically

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Require New Organizational Structures