





OPTIMÁL		
The Goal: Modernization of the Power System		
Encourages and maximizes clean, green, end-user support		
<ul> <li>Removes classic restrictions of traditional "one-way" power grid to allow for numerous, new, typically small, generators to use the grid in the greenest and most efficient and cost effective manner.</li> <li>Traditional grid systems cannot accept "back-flow" of power from end-users and therefore cannot accept many small generators such as from solar or wind.</li> </ul>		
<ul> <li>Works within present Utility control paradigms</li> <li>Easy integration into traditional centralized dispatch methodology.</li> <li>Offers new de-centrally managed distributed control under centralized hierarchy.</li> </ul>		
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OPTIMAL		
Smart Grid: What Does it Do?		
A Smart Grid provides for optimized local and system-wide:		
<ul> <li>Bi-directional power flows where power is sent from any-size generator to end-users using the greenest approach.</li> </ul>		
<ul> <li>Allows for easy integration of small and renewable energy resources.</li> <li>Changes one-way distribution systems into two-way distribution systems for plug &amp; play interconnection at any point in the network.</li> <li>Uses tools that allow smaller generating units to be visible/controllable by operators.</li> <li>Uses tools that allow for the addition of millions (or more) distributed energy resources.</li> <li>Uses tools that optimize the local and system-wide operation of these units.</li> <li>Provides direct feedback and ranking as to the locational benefit/value of each device in the system, regardless of size, so as to encourage open and robust markets.</li> </ul>		
• Bi-directional information flows where information sent to the		
<ul> <li>System operator can be used with scale and accuracy.</li> <li>End-user is automatically actionable.</li> <li>Every point provides value data that can be used to optimize the electric system or any subset thereof.</li> <li>End-users are engaged toward smart power system actions (e.g., demand response)</li> </ul>		
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	OPTIMÁL
Smart Grid: What Does it Enable?	
SUPPLY SECURITY	
<ul> <li>Maximum availability.</li> </ul>	h formation
<ul> <li>Maximum reliability.</li> </ul>	confidentia
<ul> <li>Maximum power quality requirements.</li> </ul>	A to Proprieting and C
<ul> <li>Maximum integration of renewables.</li> </ul>	This Documen
Maximum integration of Demand Respo	nse.
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## AEMPFÁST







