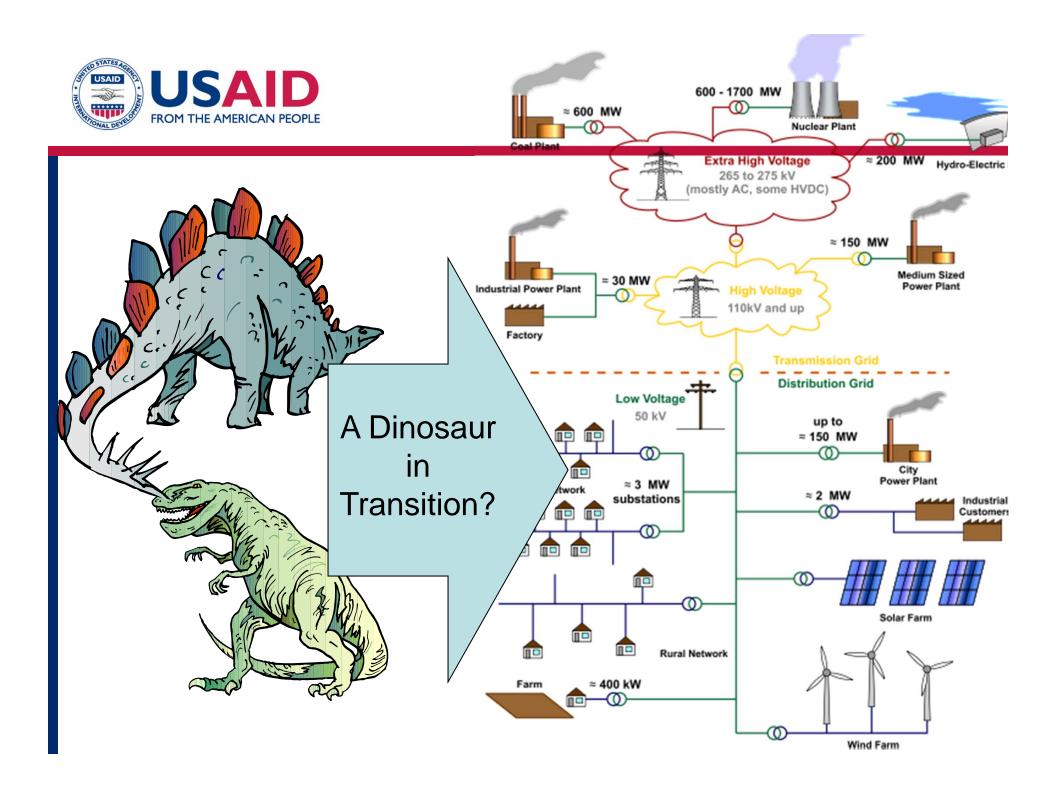


USAID's Energy Division Thoughts on Transition to Clean Energy

Allen Eisendrath,
Energy Division Chief
Office of Energy & Infrastructure





Challenges of the Future Utility

- Intermittency
- Cost pressures
- Building smarter grids and DSM
- New role of consumers: competitors?
- Supplier of last resort?
- The Trade Imperative



Utility Capital Planning & Budgets

New Ancillary Markets

Energy Storage

Renewable Generation Capacity

2012 >> >> >> 2042

Smart Grid

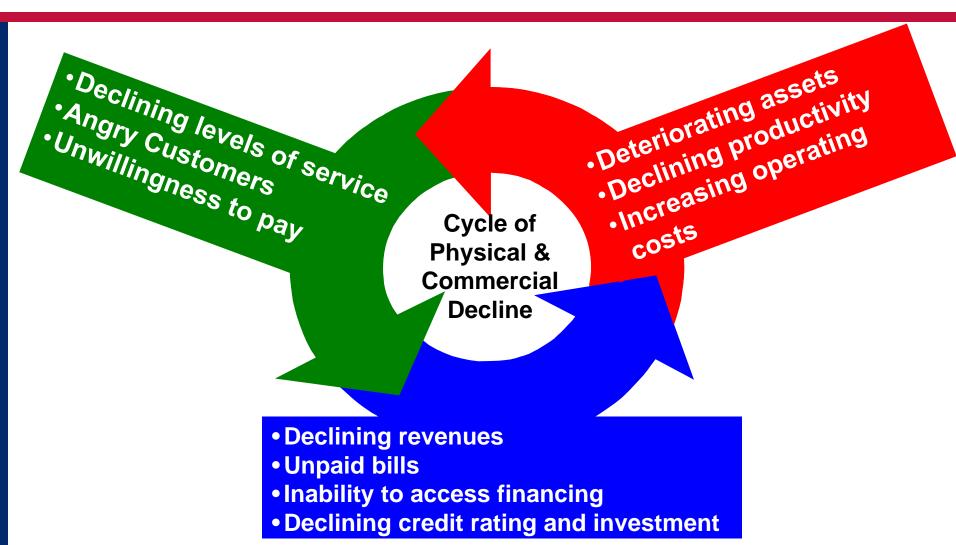
DSM

Upgrading Regional Grid

Expand Balancing Arrangements

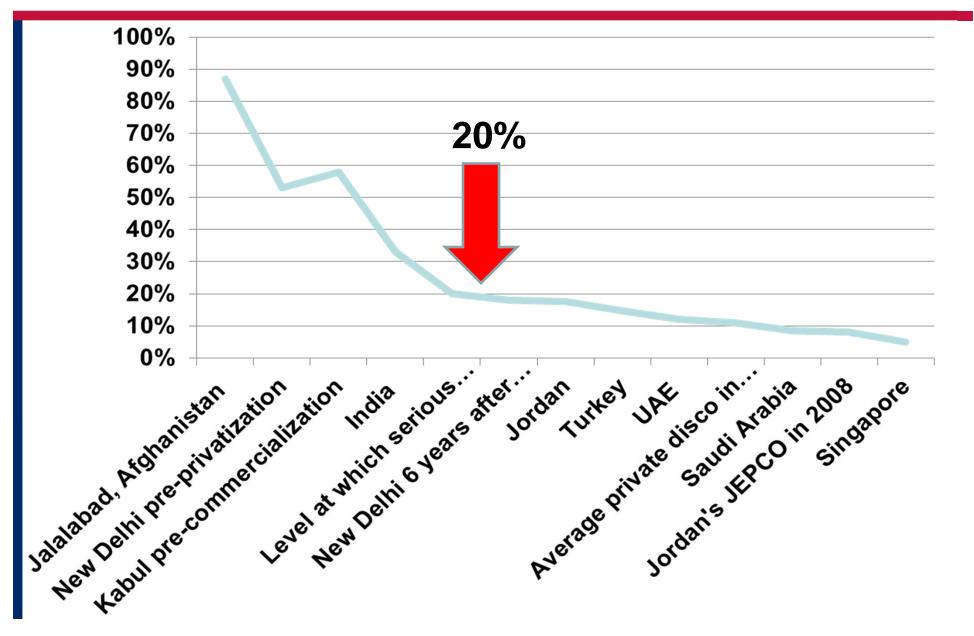


Special Challenges related to Energy Sector Reform





Comparison of Aggregate Technical & Commercial Losses





Now, on to the challenge of transitioning to a low carbon utility system!

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