



*An Energy-Efficiency Workshop and
Exposition*

Orlando, Florida

Alternative Financing and Energy Security

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August 19, 2003



Presentation Content

- Discussion of Energy Security
- Self-Generation
- Alternative Financing Solution
- Case Studies



Energy Security

- **National**
- **Regional**
- **Local**
- **Site Specific**



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- **Fuel Source**
- **Fuel Supply**
- **Shipment**
- **Processing**
- **Storage**



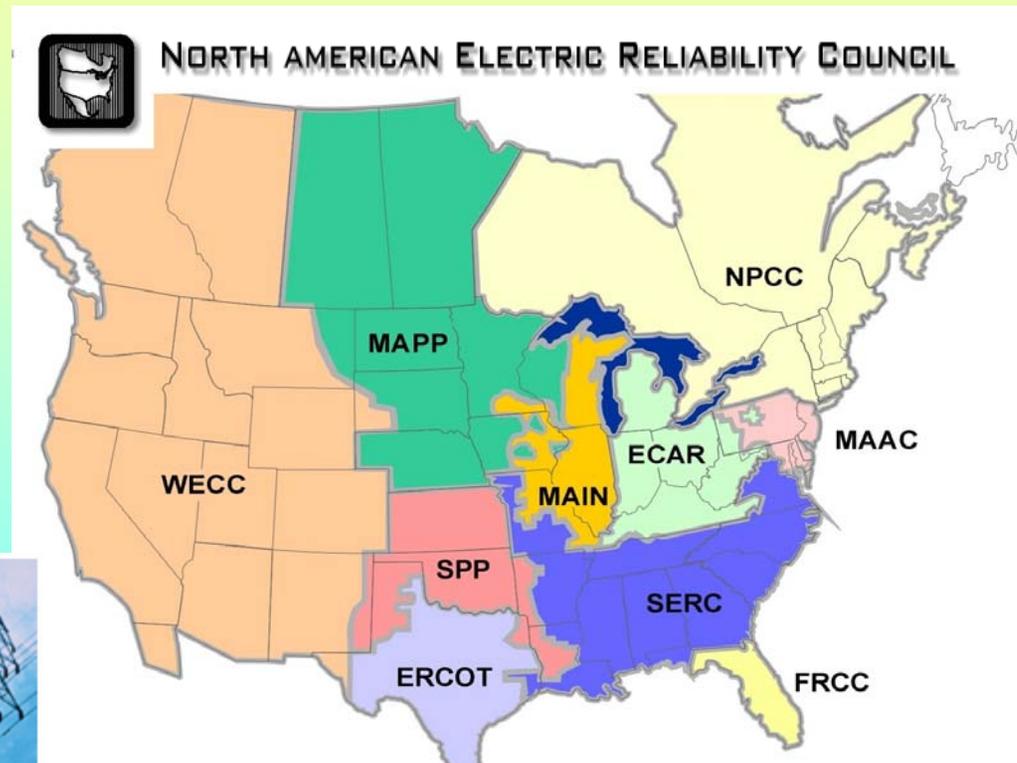
National





Regional

- **Tie Points**
- **Production**
- **Critical Paths**



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Local

- **Utility system Integrity**



- **High Voltage Backbone**
- **Transmission Load Service Loops**



National



Regional



Local



Site Specific



Site Specific

- **Fuel Supply**
- **Delivery Disruptions**
- **Processing Disruptions**
- **Distribution Disruptions**
- -----
- **Terrorist Activities**
- **Poor Planning**
- **Acts of God**



Site Specific



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Solution



- **Self Generation**
 - Separation from Utility Service
 - Parallel Operation (full or partial)
- **Stand-by Generation**



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Solution

Benefits

- **Self Reliance - power production capabilities
“Inside the Fence”**
- **Increased Flexibility for Substation Maintenance**
- **Meets Presidential Directive**
- **Future Buying Options**
- **BRAC Protection**



Solution

Alternative Financing:

Third Party Financed Performance Contracts can be used to provide for the addition of back-up generation systems protecting the federal installation from unexpected outages.



Solution

EPAct of 1992 **Subtitle F- Section 546**

(c) Utility Incentive Programs.-

(1) Agencies are authorized and encouraged to participate in programs to increase energy efficiency and for water conservation or the **management of electricity demand** conducted by gas, water, or electric utilities and generally available to customers of such utilities.



Solution

42 USC § 8287

Sec. 801. Authority to Enter into Contracts.

(a) In General. (1) The head of a Federal agency may enter into contracts under this title solely for the purpose of achieving energy savings and benefits ancillary to that purpose. . .

Sec. 804. Definitions.

(2) The term "energy savings" means a reduction in the cost of energy, . .



Stand-by Generation

$$\left(\$ \begin{array}{l} \text{Non-Firm} \\ \text{Rate Savings} \end{array} \right) = \left(\$ \begin{array}{l} \text{Debt} \\ \text{Payment} \end{array} \right)$$

Budget Neutral !!!



Stand-By Generation

Considerations

- **Utility Non-Firm Rate Offerings**
- **Utility Interconnection Requirements**
- **State Regulatory Situation**
- **Mission longevity**



**Patrick Air Force Base, FL
6.6 mW power plant**

Kennedy Space Center
11 mW power plant



Cape Canaveral Air Force Station 7.5 mW power plant

