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# Oglethorpe Power Corporation 2006 Top Strategic Issues

- 1. Air Quality Controls
- 2. Climate Control Legislation
- 3. Access to Capital, Credit Ratings Downgrade
- 4. Re-amortization of Debt Portfolio
- 5. Nuclear Decommissioning Trust Fund
- 6. Fuel Transportation
- 7. Capacity Increases
- 8. Vogtle License Extension
- 9. Nuclear Development Option
- 10. RUS Limitations
- 11. Environmental Litigation
- 12. SO2 Allowance Strategy
- 13. Nuclear Waste Disposal Yucca Mountain
- 14. Natural Gas Storage

The knowledge we gain from our EPRI investment directly impacts 11 of OPC's Top 14 Strategic Issues



### Issue 1: Air Quality Controls

Development of scientifically sound air quality management plans that achieve costeffective environmental performance and compliance by allocating emission reductions in a fair and equitable manner.

(Program 91 Assessment Tools for Ozone, Particulate Matter and Haze)

Development of a credible mechanism for informing the EPA on operational and regulatory procedures that

allow rational application of new monitors.

(Program 77 Continuous Emission Monitoring)



### Issue 2: Climate Control Legislation

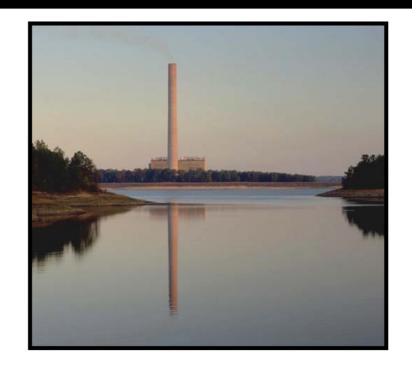
Analyses of the impacts of policy proposals, vulnerability of human health, adaptive capacities and potential costs and benefits;

(Program 102 Global Climate Policy Costs and Benefits Program).

Assessment and demonstration of the technical and economic feasibility of CO2 reduction options;

The provision of tools for supporting corporate GHG decision-making.

(Program 103 Greenhouse Gas Reduction Options)





## Issue 4: Re-amortization of Debt Portfolio

EPRI has contributed to the Vogtle license extension through work in achieving maximum plant useful life.

The license extension contributes to the reduction of OPC's Debt Portfolio



## Issue 6: Fuel Transportation

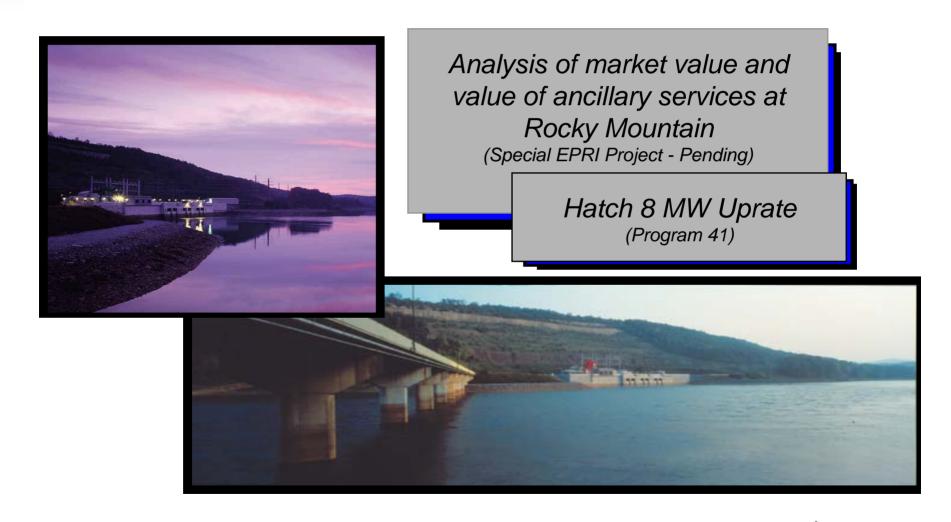
 An understanding of changing generation infrastructure and associated fuel markets (Program 67 Power and Fuel Markets and Generation Response)

 Guidance in optimizing generation portfolios to meet new fuel challenges

- Provide insight into:
  - Wholesale electricity markets
  - Energy market boom-bust dynamics
  - Gas supply risks and price forecasting
  - The forces behind skyrocketing coal and coal transportation prices
  - The implications for fuel procurement contracting
  - Operational planning and responses for achieving greater power plant flexibility.



## Issue 7: Capacity Increases



### Issue 8: Vogtle License Extension



# Nuclear Materials Degradation and Aging

- Achieving maximum plant useful life
- Achieving cost/risk-focused decision-making in regulation
- Develop technology to address materials degradation
- Improving plant capacity, reliability and availability
- Preclude safety event surprises

### Issue 9: Nuclear Development Option

### The Nuclear Program contributes through five sectors:

- Materials Corrosion
- PWR Steam Generator Management
- BWR Materials Management
- PWR Materials Management
- Water Chemistry Control



### Issue 11: Environmental Litigation



- A better characterization of PM composition, potential sources
- Guidance on implementation of regional haze rule
- Development of sound Air Quality

  Management models
- Use of tools for communicating results to lawmakers
  - Preserving the viability of coal as a generation option through interaction with policymakers.

(Program 91 Assessment Tools for Ozone, Particulate Matter and Haze), (Program 42 Air Toxics Health and Risk Assessment), (Program 92 Assessment of Air Quality Impacts on Health and the Environment)

## Issue 12: SO2 Allowance Strategy

### Integrated Environmental Controls Program focuses on:

- Managing the interactions of control systems to improve overall capture rates
- Providing guidance for choosing the optimal combination of technologies for reduction of emissions
- Facilitating state-of-the-art FGD systems and reducing FGD O&M costs.

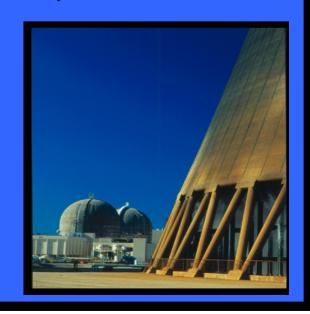
(Program 75)



## Issue 13: Nuclear Waste Disposal

#### Yucca Mountain

- EPRI study estimates Yucca Mountain Storage Capacity can provide sufficient capability for both current spent fuel and new plant needs
- EPRI supporting NEI for the industry to effectively engage in DOE/NRC Yucca Mountain Licensing
- New EPA (Million Year Dose Standard) being worked by EPRI to be usable by Government/Industry
- EPRI supporting transportation plans for High Burn-up fuel by engaging the NRC review process



### Issue 14: Natural Gas Storage

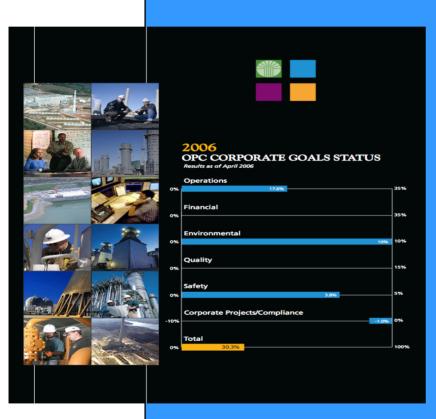
The "Understanding Power and Fuel Markets and Generation

Response" Program addresses risk and opportunity in fuel markets.

- Developing gas storage for reliable delivery
- Improving fuel supply chain management to reduce costs
- Improving our ability to make more informed plant and fleet asset management decisions
- Understanding the power sector as an agent of change. (Program 67)



# Oglethorpe Power Corporation 2006 Corporate Goals

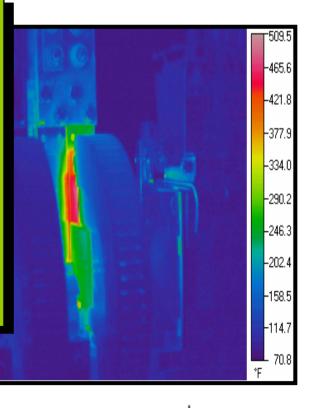


The knowledge we gain from our EPRI investment also directly impacts every OPC Corporate Goal.

### Operations Goal

# CT and Chattahoochee Availability and Start Reliability contribute 18.5% to Corporate Goals

- Operations Management & Technology contributes to the reduction of forced outages (Program 108)
- Combustion Turbine and CC O&M Program contributes to the reduction of forced outages and life cycle cost of CT and CC plant O&M (Program 79)
- Heat Recovery Steam Generator Dependability Program addresses Chattahoochee Availability (Program 88)



### Financial Goal

### Risk Reduction Measures contribute 5% to OPC Goals



- All of the Environmental Programs OPC participates in contribute to the reduction of risk.
- The Power and Fuel Market Program helps improve fuel supply chain management and understanding of risk and opportunity in fuel and power markets. Value services include developing gas storage and avoiding extreme gas imbalances. (Program 67)

## Environmental Compliance Goal



# Environmental Compliance accounts for 10% of OPC's Corporate Goal

- Combustion Performance and NOx Control Program helps minimize forced outage rates by controlling fireside corrosion, slagging and fouling and helps implement least-cost NOx control. (Program 71)
- The Integrated Environmental Controls Program identifies least-cost mercury controls, improves compliance planning, lowers assessment costs and reduces FGD O&M costs. (Program 75)
- The Particulate and Opacity Control Program identifies and demonstrates technologies to meet particulate emissions and opacity limits. (Program 76)

### Quality Goal

The Quality Goal measures OPC's skill in managing assets.

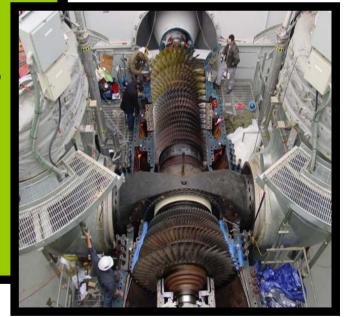
Every EPRI Program that OPC contributes to has a direct impact on the improvement of our Asset Management Skills.



### Safety Goal

# Several EPRI Programs that OPC participates in contribute to plant safety.

- Program 63 helps improve plant safety by developing new NDE techniques. (Boiler Life and Availability Improvement Program)
- The Fossil Maintenance Applications Center (FMAC) Program addresses plant maintenance safety issues. (Program 104)
- Our EPRI Nuclear Program contributes to safe manhours: Hoisting, Rigging, Crane Usage Group; Riggers Handbook and Field Guide Manuals. (Program 41)

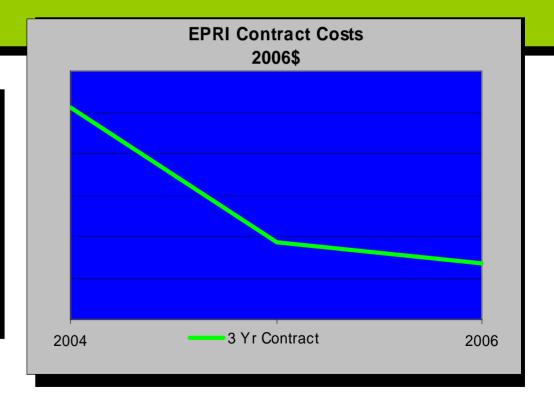


### Current EPRI Investment

OPC spends about \$X million per year on EPRI Products of which \$X are non-discretionary funds to support the Nuclear program.

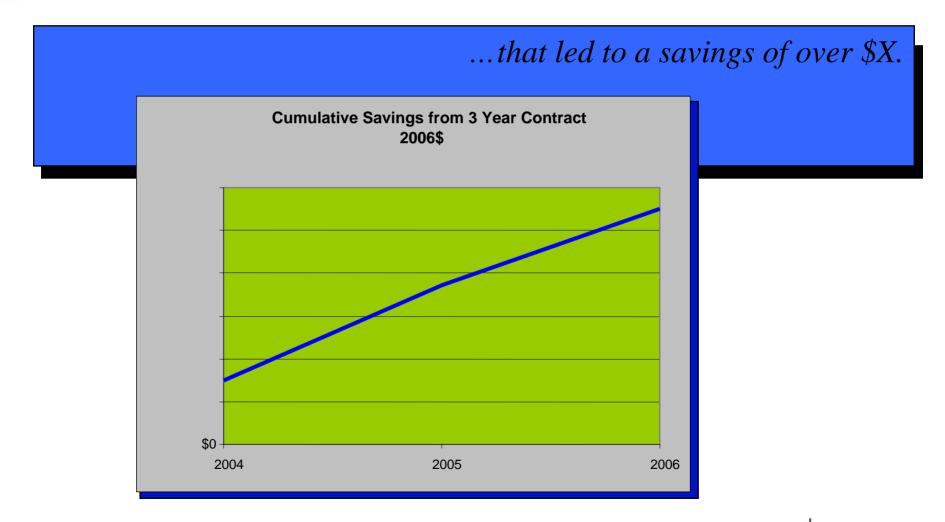
We have a \$X spending floor for EPRI costs.

If we spend less than \$X, Southern Company will pass their costs on to us.



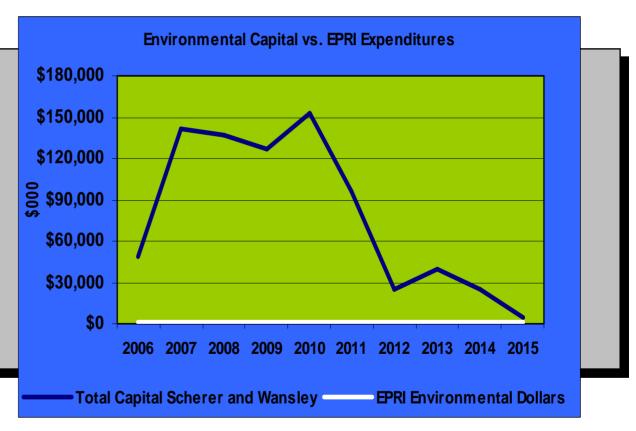


### OPC signed a 3 year contract with EPRI in 2004...



### Environmental Investment in EPRI

Environmental
expenditures are
OPC's highest-dollar
risk. The dollars we
spend to prepare
ourselves for
future compliance
should reflect the
enormity of that risk.



### Leveraging our EPRI investment

- Members, by virtue of their \$X million contribution, leverage over
   \$150 million of collective Utility dollars invested in EPRI achieving benefits not otherwise affordable.
- OPC's co-ownership of Scherer and Wansley allows us to leverage more than \$X million worth of EPRI programs from Southern Company.

