

# IRP Study Status Report

City Commission Target Issues  
Workshop

3/15/06

# Today's Agenda

- Sensitivity Cases
  - TEC Power RFP Bids
- Renewable Resources
- DSM/Energy Efficiency Evaluation
  - Briefing from Navigant Consulting, Inc.
- Overall Study Schedule

# Sensitivity Cases

- Some delay in gathering & validating input data
  - Fuel prices
  - Unit data
  - DSM assumptions
- Staff and B&V decided to update some assumptions prior to beginning this phase
  - Load forecast
- Case runs are now underway
- Results should be available by the next status report
- Analysis will include consideration of TEC power RFP bids

# TEC Power RFP Bids

- Two responses received from Southern Co.
- RW Beck performing a bid requirements review & basic busbar screening
- Individual TEC partners may do further analysis
  - City has developed bid evaluation manual & scoring methodology
  - Qualified bids will be tested in the IRP Study

# Renewable Resources

- Consideration of biomass opportunities
  - Submitted application to USFS for grant to support development of biomass project
  - Working to host a workshop for potential partners/suppliers to discuss issues related to preparation of RFP for biomass
  - Review of possible purchased power agreement sourced from local biomass project (BG&E)
- Continuing to study potential for a solar thermal program (and deployment of solar PV)
- Sterling Planet working on a “clean power” plan that would provide 100MW of capability by 2016 using a mix of renewables and DSM/EE measures

# Navigant Consulting, Inc.

Navigant Consulting, Inc. (NYSE: NCI) is a specialized international consulting firm that assists clients in addressing the critical challenges of risk, uncertainty, and business model change.

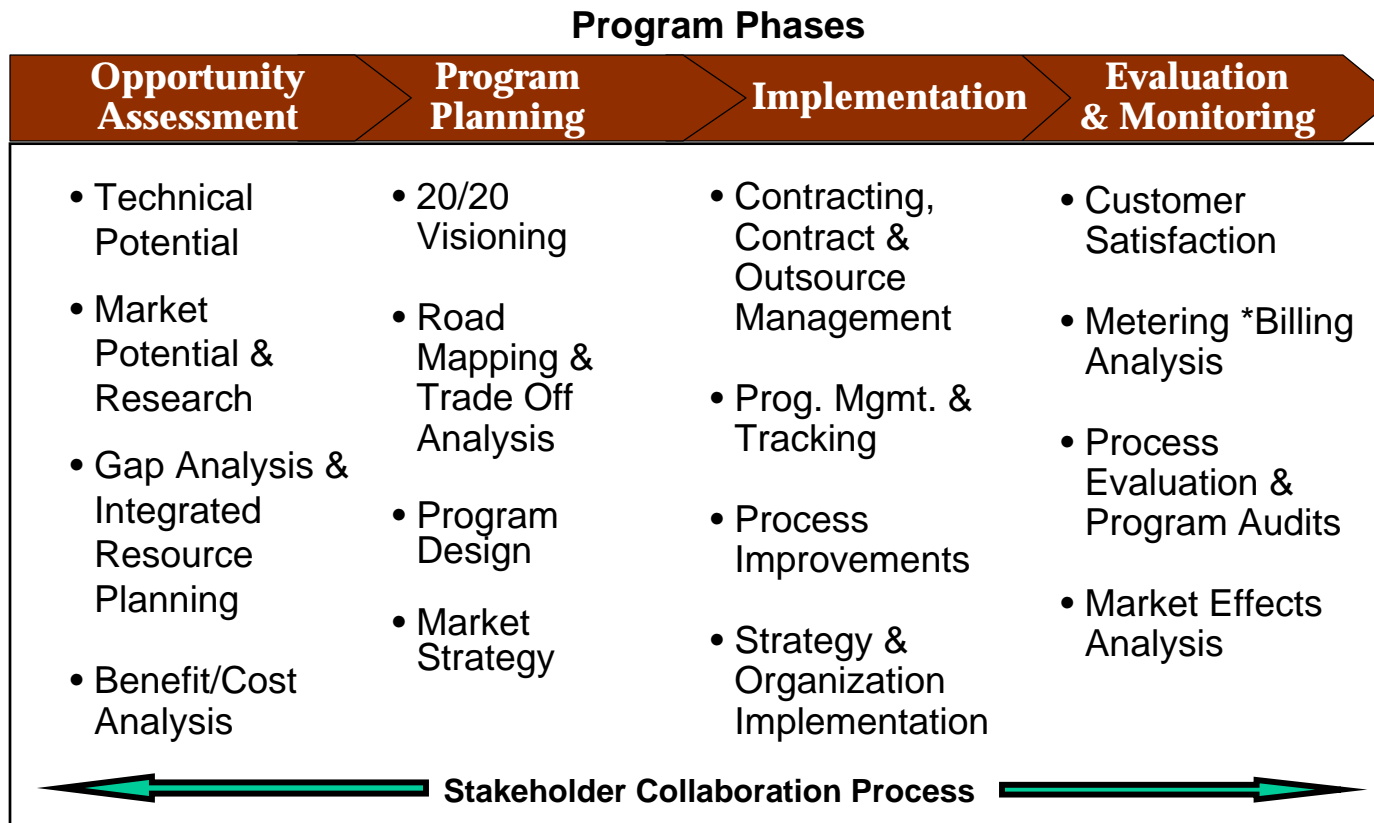
- Publicly Traded Professional Services Company
- 2005 revenues - \$ 575.5 million
- Approximately 2,300 employees
- Expanding geographic presence - now 42 cities
- International offices in London, Prague, Shanghai, Hong Kong, and Beijing
- Recognized in 2005 by Business Week, Forbes, and Fortune, as one of the Fastest Growing Companies



One of the 100 fastest-growing companies in 2005 – Fortune

# NCI Experience

**Navigant Consulting, Inc. has broad experience in all phases of Energy Efficiency, Demand Response and Distributed Generation**



# NCI Experience

## Past Client Examples

### End Users

Equity Office Property  
First Union  
IBM  
Kodak  
Marathon Oil  
Sky Chiefs

### Utility Companies

Duke Power  
Georgia Power  
Sacramento Muni. Util. Dist.  
Long Island Power Authority  
Puget Power  
Southern California Edison  
Pacific Gas & Electric  
Peoples Gas

### Energy Service Companies

Con Ed  
DTE Technology  
Honeywell  
Progress Energy  
Select Energy  
WPS Energy Services

## Government Agencies

U.S. Department of Energy, Ontario, NY Energy Research & Development Authority, NARUC, California Energy Commission, California Public Utilities Commission

# Sample Engagements

- **Puget Sound Energy** – Optimized mix of EE, renewable, and conventional generation.
- **California PUC** – Developed and managed 6 EE programs in partnership with local governmental agencies. Produced a guidebook for local governments.
- **US EPA** – Help state regulatory agencies develop policies to encourage utilities to develop energy efficiency and renewable energy objectives
- **Long Island Power Authority** – Oversaw development of initial Clean Energy Portfolio, provide on-going evaluation, strategy updates, including: (1) ran 75 MW energy efficiency RFP; (2) developed 100 MW wind energy RFP; and (3) developed distributed generation rate
- **Connecticut Class III Portfolio Standards** – Developed process for certifying, issuing, and trading credits from EE and DG state's Renewable Portfolio Standards

# DSM Measure Descriptions

NCI reviewed documentation from a wide variety of sources to identify and “characterize” a set of DSM measures.

## Types of Measures

- Heating & Cooling
- Lighting
- Water Heating
- Motors
- Appliances
- Photovoltaics
- Other measures

## Sources

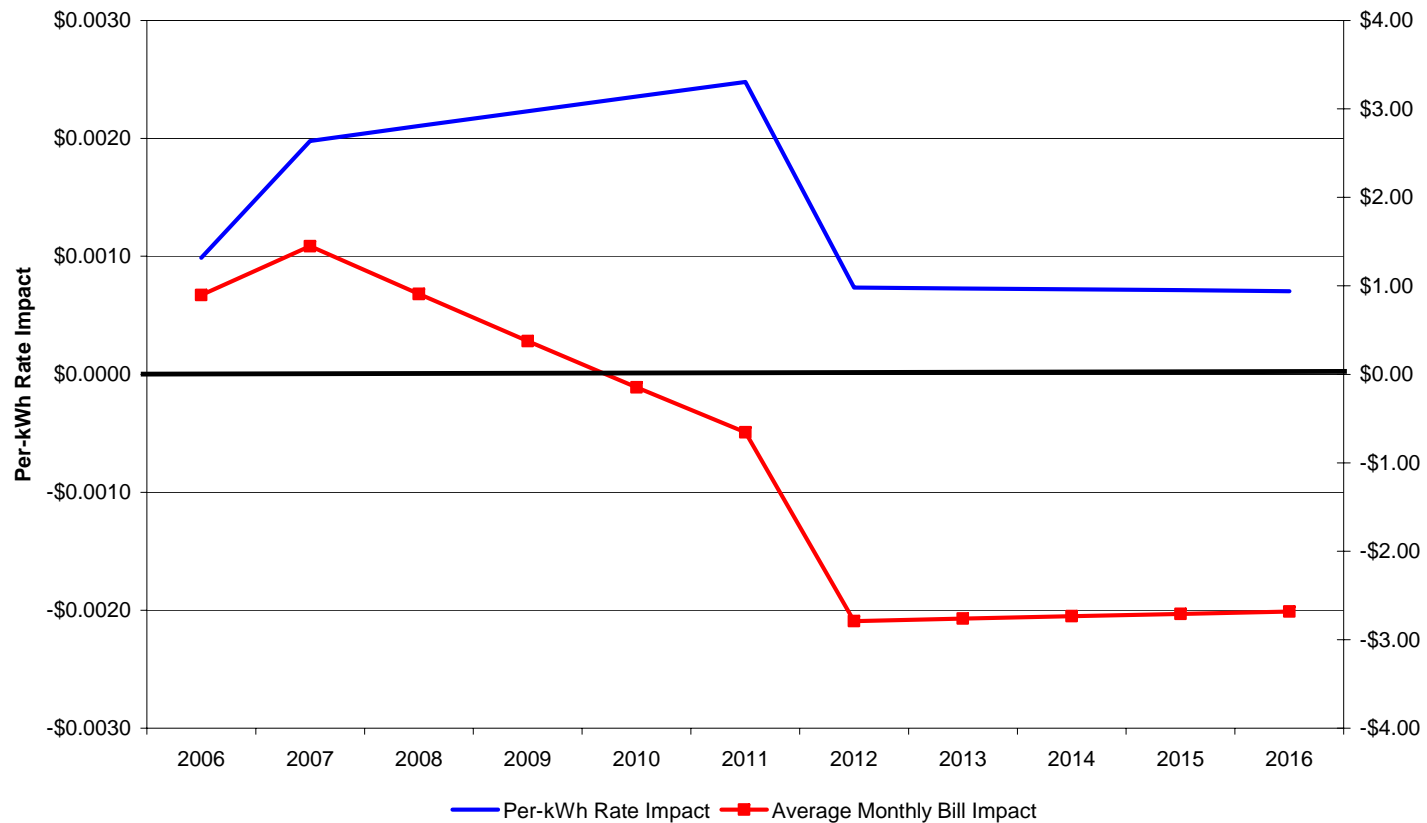
- DSM Potential Studies from Other Jurisdictions
- CA DSM Measure Database
- Florida Solar Energy Center
- Florida Power & Light Filings
- Interviews with Other Utilities (Austin Energy, SMUD, Osage Utilities, GA Power, Lakeland Electric, FPL)
- Consortium for Energy Efficiency
- NCI Internal Data Sources

# Cost-Effectiveness White Paper

- Let policy objectives drive methods
- Use TRC test for cost-effectiveness screening
- Calculate rate impacts of DSM program options
- Consider DSM options & associated benefits and rate impacts – decide on acceptable combination
- Maximize cost-effective DSM within City facilities
- Consider support community-driven “sustainability” initiatives that include EE element
- Consider funding DSM from bond proceeds

# Cost-Effectiveness White Paper

Rate and Monthly Bill Impacts for  
Hypothetical \$1-2 Million/Year Residential DSM Program



# DSM/EE Next Steps

- Compare cost/kWh – each measure vs. generation
- Screen bundles (programs) of measures
  - Screen programs for cost-effectiveness, with incentive and administration costs
  - Include only measures meeting cost/kWh threshold
- Forecast bundle penetration in market through 2025
- Translate bundles into load adjustments for IRP model

# Study Schedule

- Existing schedule projected a decision point for adopting of the 20-year plan on May 24
- Based on review of certain tasks, the overall schedule should be extended by about one month (decision point moved to June 28)
- This delay is the result of several factors
  - More effort to develop new base cases
  - More time required to update data and assumptions
  - More time needed to integrate DSM/EE
  - General workload issues





# Upcoming Status Reports

- On April 19 – presentation by B&V on sensitivity cases and risk analysis; presentation by Sterling Planet on “clean power” case
- On May 17 – final results of sensitivities and risk analysis; focus group summaries & report from Synapse Energy Economics on ranking/evaluation methods
- On June 14 – final workshop on 20-year plan results