Executive Order No. 111
“Green and Clean”
State Buildings and Vehicles

An Update

Matt Brown
January 18, 2006
Executive Order No. 111

• One of the most aggressive single Executive actions in the Nation addressing: efficiency, purchasing standards, sustainable design, renewable power, alternative-fuel vehicles and peak load

• Comprehensive nature is driving significant market change and penetration of sustainable practices
  – Also provides “cross fertilization” between issue areas

• EO111 supports goals of the Renewable Portfolio Standard, the State’s Integrated Energy Plan, as well as many other State and Federal goals
NYSERDA’s Roles

- Chair of the Advisory Council on State Energy Efficiency
- Facilitating Agency – Assist other agencies and authorities develop plans and implement projects
- Administer a portfolio of public-benefit programs
Advisory Council on State Energy Efficiency

- Governor designated 14 State agencies and authorities as part of the Order
- Meets twice a year to discuss progress, issues and continuing needs
- Instituted seven working groups to address critical needs and develop Guidelines
- Reviews and approves Guidelines and Annual Energy Report
Investments in Training

• EO111 is not just about the buildings and vehicles, its about people and training
  – Building Operator Certification
  – Commissioning
  – Green building
  – Renewable energy and distributed generation
  – Peak load
  – Presentations at meetings are routinely arranged for on specific topics
Challenges to Training

- Getting people to the sites
  - Budget issues and staff cutbacks – Hard to get out of the office
  - Free trainings work the best - Hardest to put together

- Overall, training and general outreach has been one of the most successful efforts
Overall Progress

- 215,000,000 square feet
- Reduced Energy Use Index of 10.22% - ~30% of goal for 2010
- Dozens of green buildings being constructed
- On-site and open market procurement of renewable energy – More than 13,200 MWh purchased in SFY 03/04
- More than 60% of new purchases were AFVs in SFY 03/04
- State Fiscal Year 2005/06 (this year) major evaluation year
Challenges

• Keeping focus on energy
• Not responding to issues in a “crisis”
  – New Commissioner or Governor Office request for information
  – Recent fuel price volatility
• Does not have a stick
• Does not have a dedicated budget of staff
• Decentralized system
  – Each agency and authority is autonomous in implementation
• Some agencies and authorities are actually increasing their energy use/SF
• Asks all agency staffs to incorporate into existing systems
Renewable Energy Purchasing

Renewable Energy Purchased by State Entities

We Are Here
Renewable Energy Challenges

• Combination of on-site and open market
• Still developing markets in NY
• Completely new to State agencies and authorities
• How to write and issue a bid
  – Cost vs. diversity
• Increased cost to agencies and authorities
• Concern over availability
• Concern over in-state vs. imported resources
• Some incorporated price hedging
Sustainable Design and Management

- Several design guidelines specific to agency needs
- Most LEED certified buildings in NY are State owned
- NYSERDA building completing PE certification for ENERGY STAR Portfolio Manager – Scored an 91 out of 100
- DEC rated 20 buildings with Portfolio Manager, 19 scored 75 or higher
Challenges and Experiences

• Integration of NYS Green Building Tax Credit
  – Not just LEED
  – IEQ testing

• First-cost vs. Life-cycle cost
  – Cx

• Was originally new for most design staff
  – Internal and external to State

• Several design and construction staff have reported back that they will never build a non-green building again if given the choice
Retro-commissioning and Commissioning

- NYCTA embarking on RCx initiative
- NYSERDA, DASNY and OGS provide RCx services
- New York hosted the 2005 NCBC in NYC
- Market expanding due to EO111 intervention
Challenges and Experiences

• Built off of experience of Cx in new construction and alteration

• Fit well with EO111 recommendation for low-cost/no-cost improvements
  – Way to defer capital projects

• Still under utilized, but improving market understand and more open to consideration
Peak Load

- 100 MW capacity within one hour
- Total peak demand approximately 525MW
- Assisted NY return from blackout in 2003
- Long-term load reduction resulting from efficiency projects and purchasing
- Packaged with mission critical reliability
- Agencies set own goals for 2005 and 2010
Challenges and Experiences

• Some agencies and authorities earned money from ISO programs

• Use of advanced meters helped them understand their loads, and save money by shifting or addressing issues

• Relatively easy sell to agencies and authorities
Purchasing and Plug Load

- All computers, faxes, printers, etc are ENERGY STAR
- Power save on all printers, copies and faxes
- Power management is enacted on computers
- Now investigating 80+ Program of PCs
- Purchasing standards being promulgated for 27 categories
Challenges and Experiences

- Hardest of all categories to quantify and monitor achievement
- Very decentralized purchasing
- Large numbers of equipment categories
- Purchasing officers have been one of the Order’s best allies
- Outreach to purchasing officer annual meetings is critical
Recognition for Excellence

• U.S. Environmental Protection Agency’s ENERGY STAR® Portfolio Manager
• U.S. Green Building Council’s LEED™ rating system
• Annual Energy Report
• Case studies and press events
Future Efforts

- Continue to support and organize training and presentations on relevant topics
- 5 Facilitating Agencies will continue to administer assistance programs to provide general information, specific project advice, and implementation funding
- NYSERDA will continue to submit proposals on behalf of New York for federal grants
- Support individual Affected State Entities and projects in planning, prioritization, and project development
Contact Information and Follow Up

• Matt Brown at:
  – (518) 862-1090 ext. 3336
  – mcb@nyserda.org

• Or generally at:
  – (866) NYSERDA
  – info@nyserda.org
  – http://www.nyserda.org/
  – http://www.nyserda.org/programs/exorder111.asp