

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

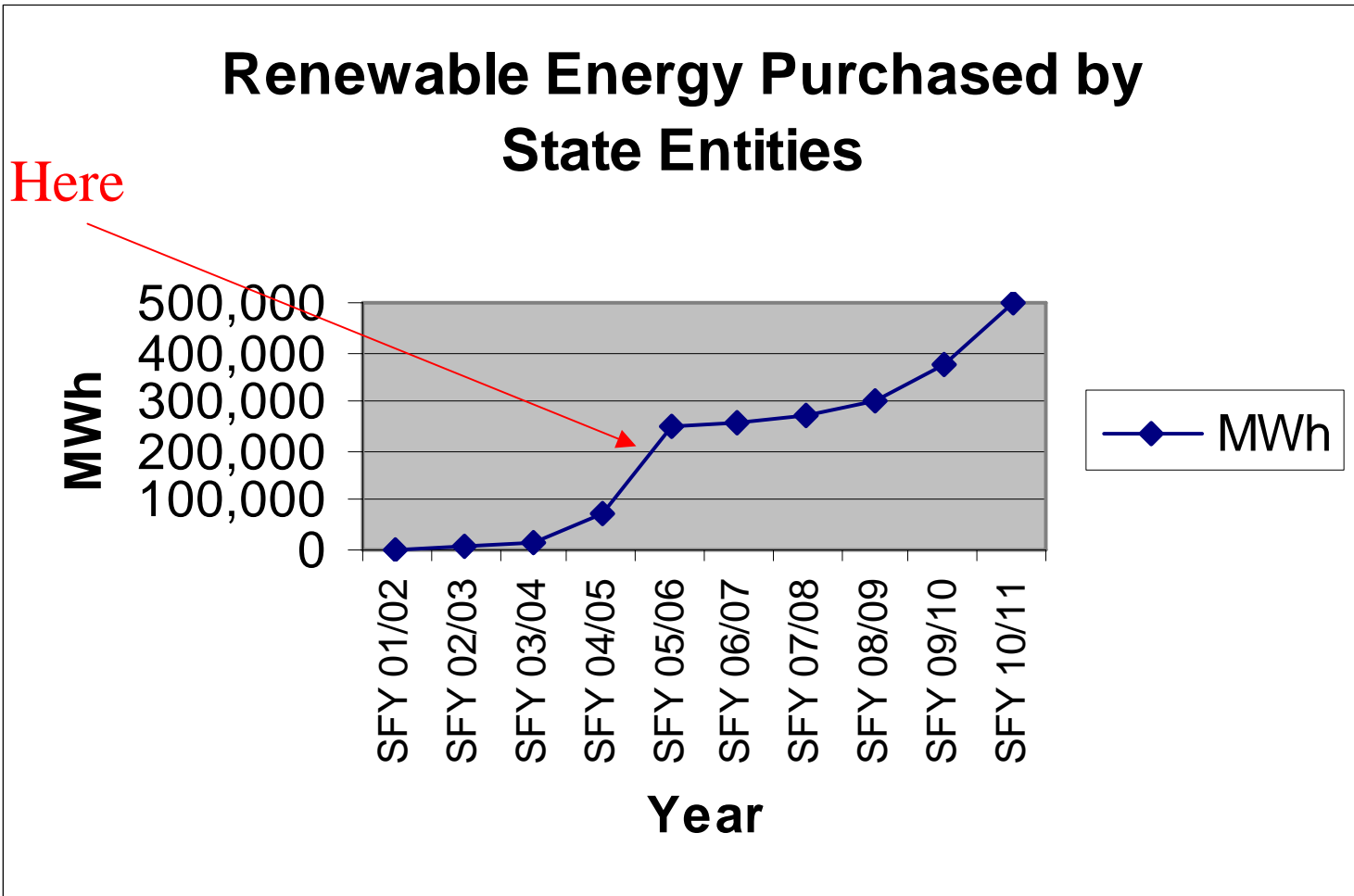
- 215,000,000 square feet
- Reduced Energy Use Index of 10.22% - ~30% of goal for 2010
- Dozens of green buildings being constructed
- On-site and open market procurement of renewable energy – More than 13,200 MWh purchased in SFY 03/04
- More than 60% of new purchases were AFVs in SFY 03/04
- State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

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

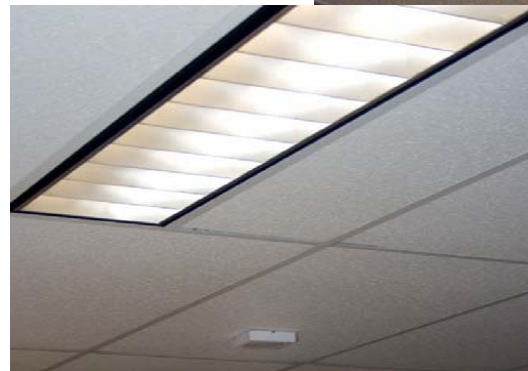


Challenges and Experiences

- 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>