

Appliance Standards: Potential contributions to “15 by 15”

Andrew deLaski
Appliance Standards Awareness Project

Presented at Albany, NY
July 19, 2007

ASAP Steering Committee

- American Council for an Energy-Efficient Economy
- Natural Resources Defense Council
- Consumer Federation of America
- Pacific Gas and Electric Company
- California Energy Commission
- Alliance to Save Energy
- Energy Foundation
- National Environmental Trust
- Northeast Energy Efficiency Partnerships

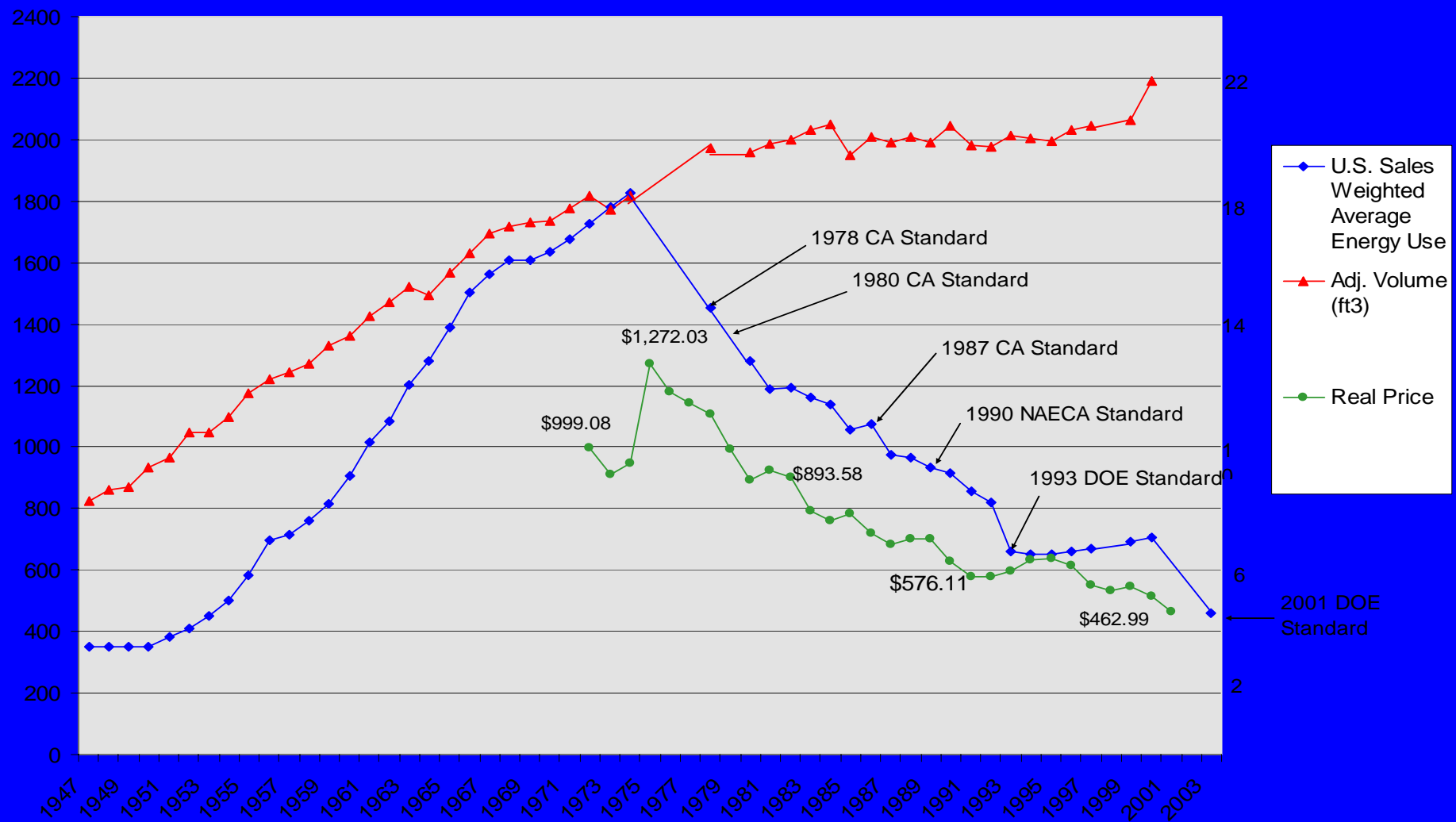
“Standards remove the most inefficient products from the market while retaining a broad array of consumer choice.”

- at the national level, standards apply to the manufacture or import of products
- at the state level, to their sale or installation

- Standards can make a big, direct contribution to the “15 by 15” commitment.
- Standards are *essential* for locking in program benefits at lowest possible cost.

- 1970s and '80s: States establish energy efficiency standards including:
 - Arizona, California, Connecticut, Florida, Kansas, Massachusetts, Minnesota, New York, Rhode Island, Washington and Wisconsin.
- State policy leads to consensus federal legislation.
 - Federal laws 1987, 1988, 1992 and 2005
 - Federal standards cover about forty common products.
- State standards have historically led to strong national standards.

U.S. Refrigerator Energy Use v. Time with Price



- Total savings from existing standards in 2000:
 - 2.5% of U.S. electricity use
 - 21,000 MW of peak power demand – equivalent to about 70 mid-sized power plants.
 - \$50 billion in net consumer savings
- Total savings from existing standards by 2020:
 - 7.8% of projected U.S. electricity use
 - 120,000 MW of peak power demand – equivalent to about 400 power plants
 - \$186 billion in net consumer savings

➤ Among most effective policies for saving energy

Recent New York State Actions

- 2005 law established standards or directed agencies to set standards for five product categories.
 - *2015 SAVINGS POTENTIAL*
 - *1,530 GWh*
 - *310 MW*

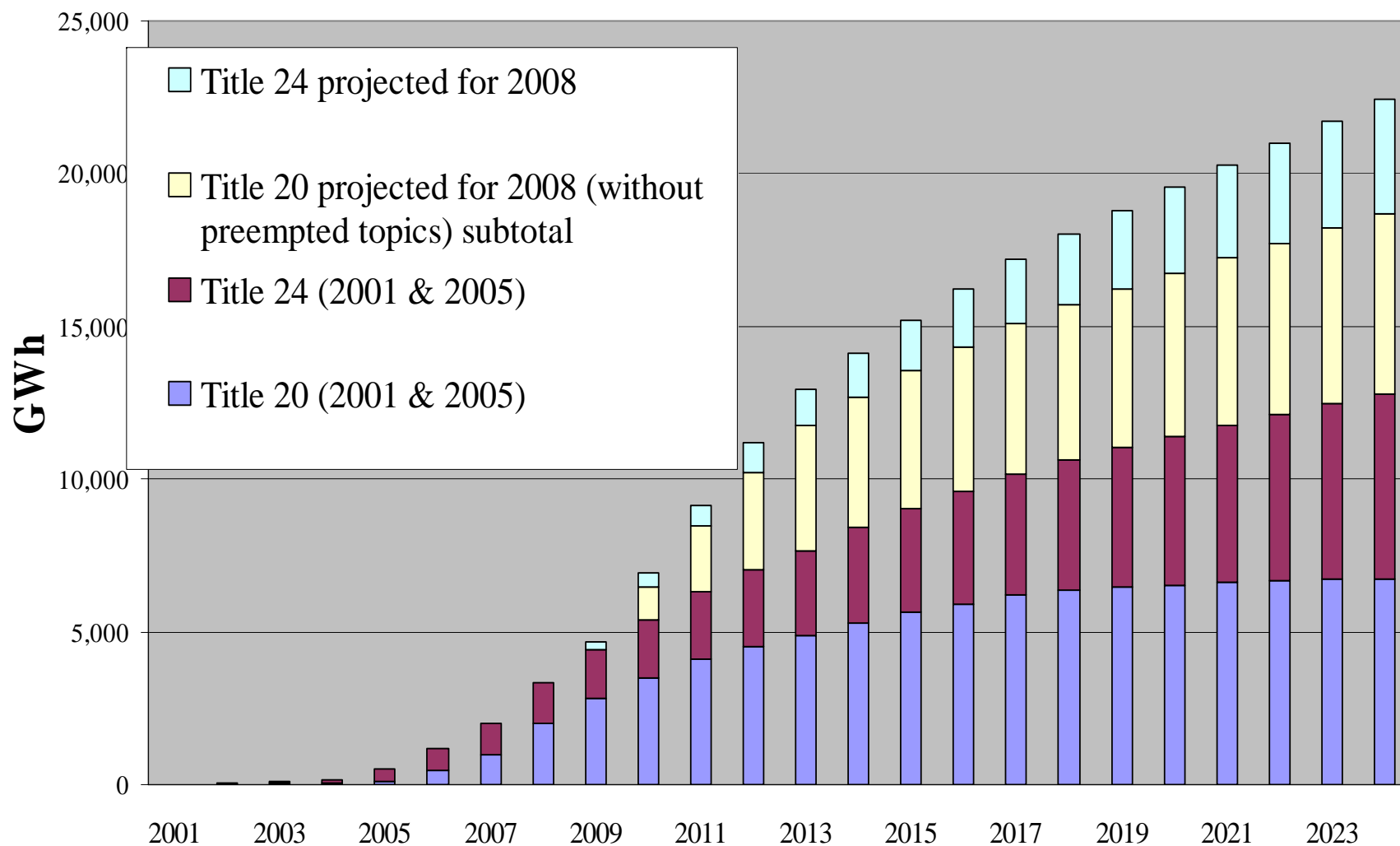
NY pushes the Feds

- 2001 New York/ NRDC led lawsuit preserved strong central AC standards
 - *Impact: 200 GWh & 300 MW in 2015*
- 2005 New York/ NRDC deadline lawsuit
 - IMPACT: DOE under court order to update 22 overdue standards between 9/2007 and 6/2011.*

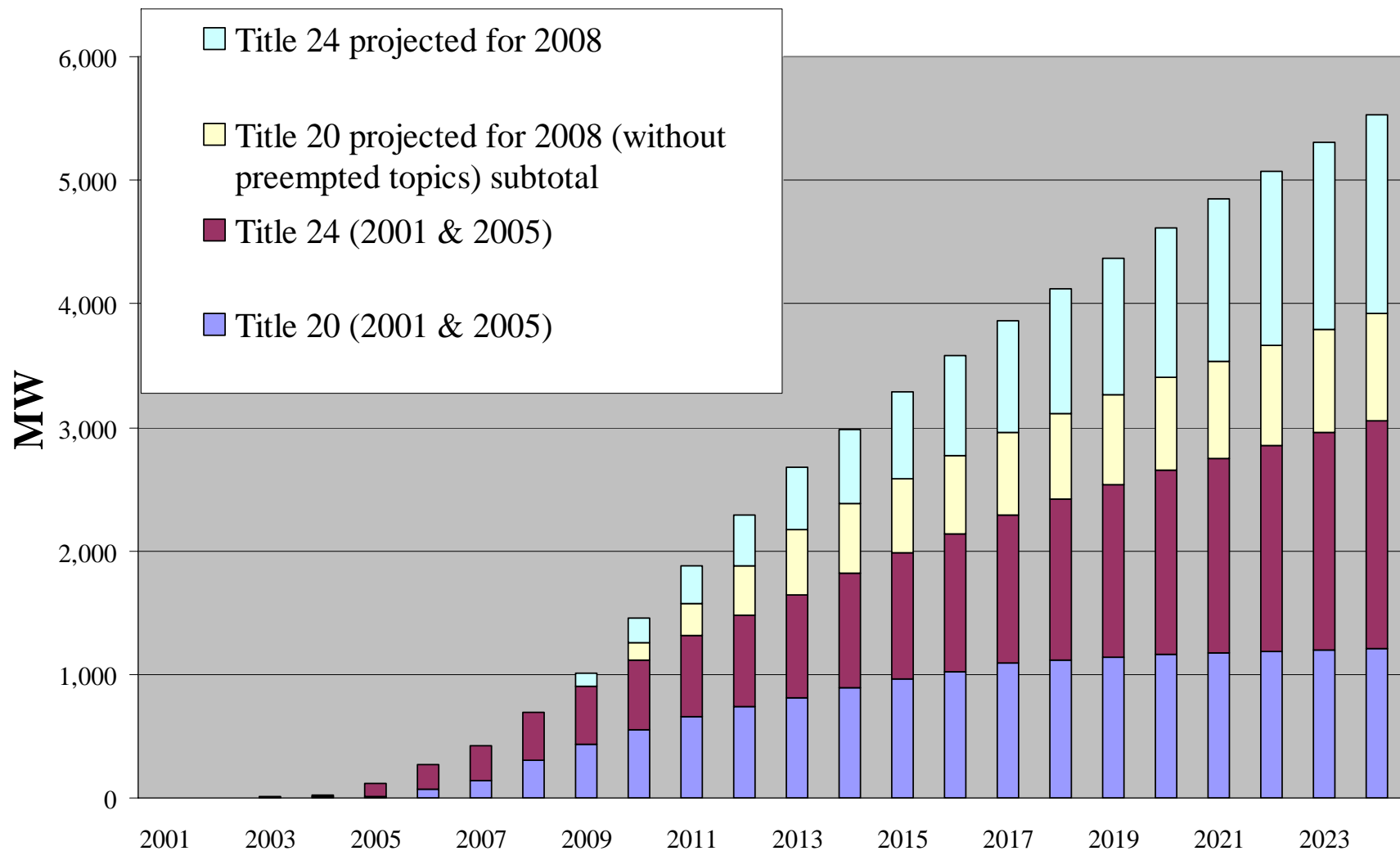
Potential new state standards

- General service light bulbs
- The California model
 - Broad agency authority
 - New standards must pass benefit cost test
 - Must save energy
 - Annual budget of around \$2 million

Annual CA Electricity Savings from Title 20 and Title 24 (standards combined)



CA Peak Demand Reduction from Title 20 and Title 24 (standards combined)



Potential Impacts

- General service light bulb standards
 - *Potential 2015 impacts*
 - ~ 5,000 to 7,400 GWh
 - ~ 1,360 MW to 2,000 MW
- CA-style state standards program
 - *Potential 2015 impacts*
 - ~ 2,500 GWh
 - ~ 250 MW

Federal standards

- 25 new standards to be completed between 2007 and 2011, effective 2009 to 2015.
- State analysis and active participation in federal process can help shape these standards.
 - *Potential impacts in 2015: ~ 2,000 GWh*
 - *Long term annual potential: ~ 10,000 GWh*

Recommendations

- Act soon to establish general service light bulb standards.
 - *Potential impact: ~ 5,000 to 7,400 GWh in 2015*
- Establish robust state agency authority for new appliance standards.
 - *Potential impact: ~ 2,500 GWh in 2015*
- Actively participate in federal rulemaking processes.
 - *Potential impact: ~ 2,000 GWh in 2015*