

Energy Affordability



NARUC Energy Regulatory Partnership Program

*The Energy Regulatory Commission of the Republic of Macedonia
and*

The Vermont Public Service Board

by

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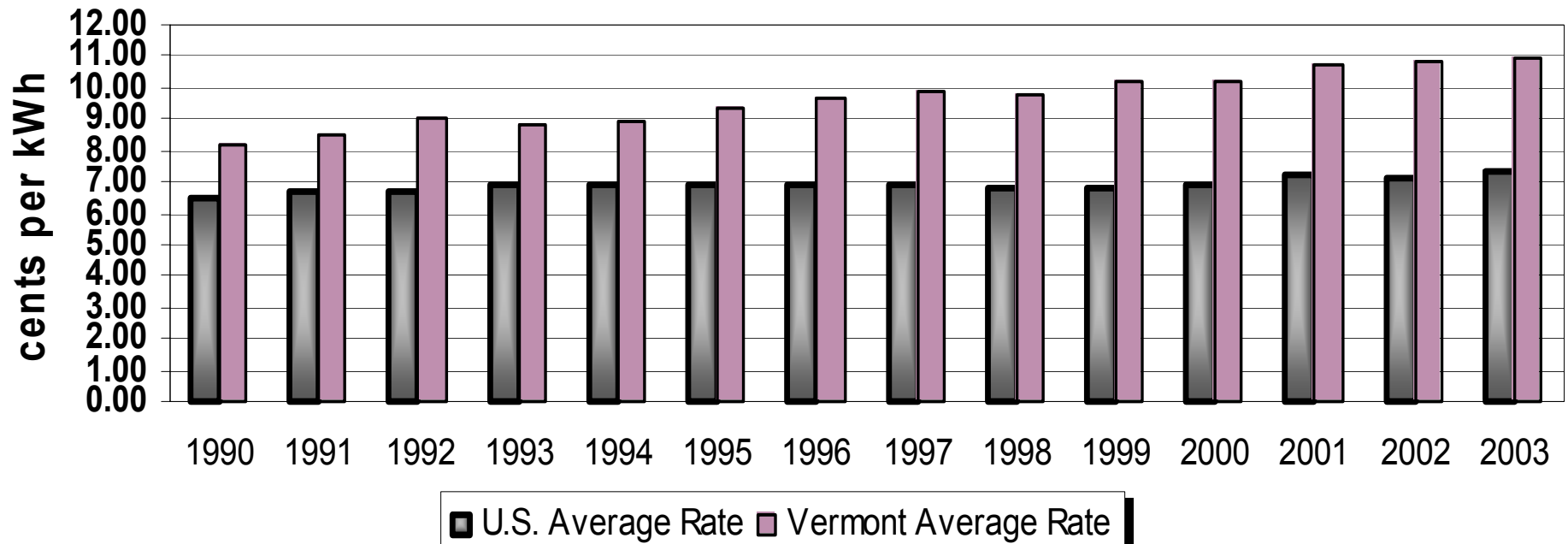


Overview of Presentation

- ❖ Vermont and US electric rates
- ❖ Vermont residential consumption
- ❖ Typical residential bills
- ❖ Energy affordability
- ❖ Low income energy assistance in Vermont
- ❖ Models of low income assistance in other states

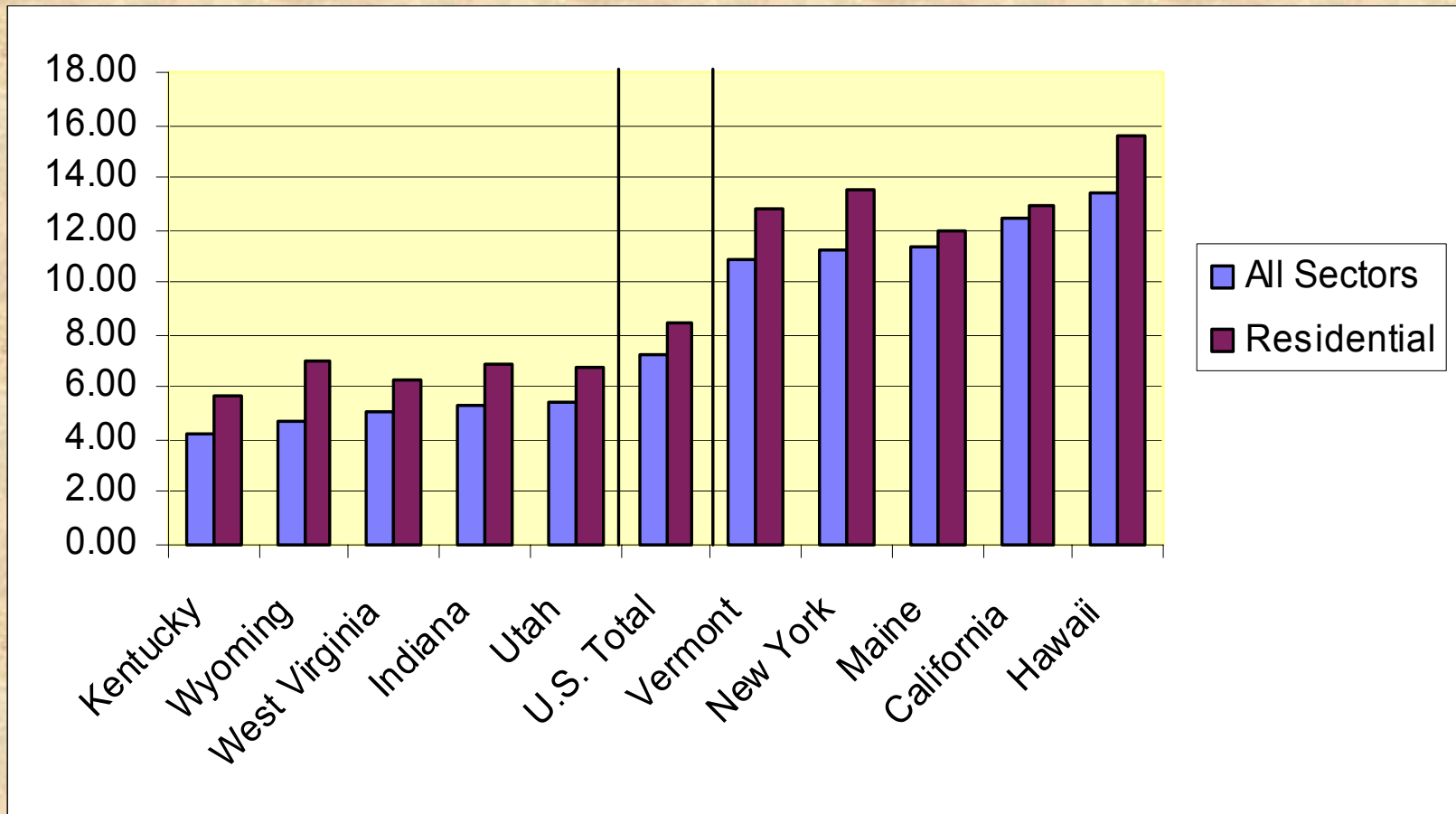


Average Vermont Rates v. U.S. Average (1990 – 2003)



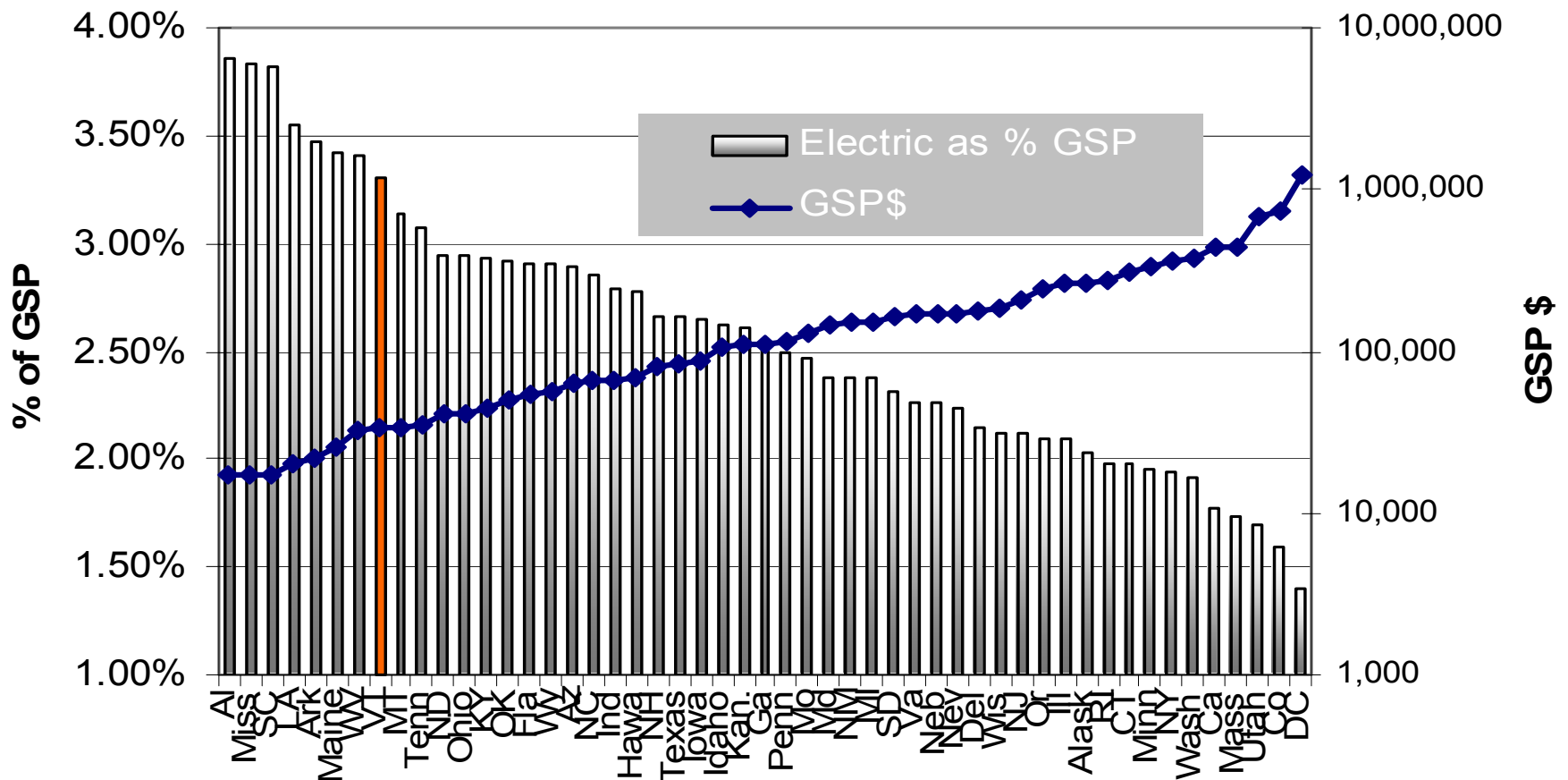


2002 Residential and Overall Electric Prices -- lowest & highest states and US Average





Electric Cost as Percent of GSP by State





Average Residential Electricity Prices (2000)

- ❖ Average US rate
 - 8.24 cents/kWh
- ❖ Average New England region rate
 - 11.3 cents/kWh
- ❖ Average Vermont rate
 - 12.1 cents/kWh
 - 7% > New England
 - 46% > US

Sources: Energy Information Administration, US Dept. of Energy, & Edison Electric Institute.



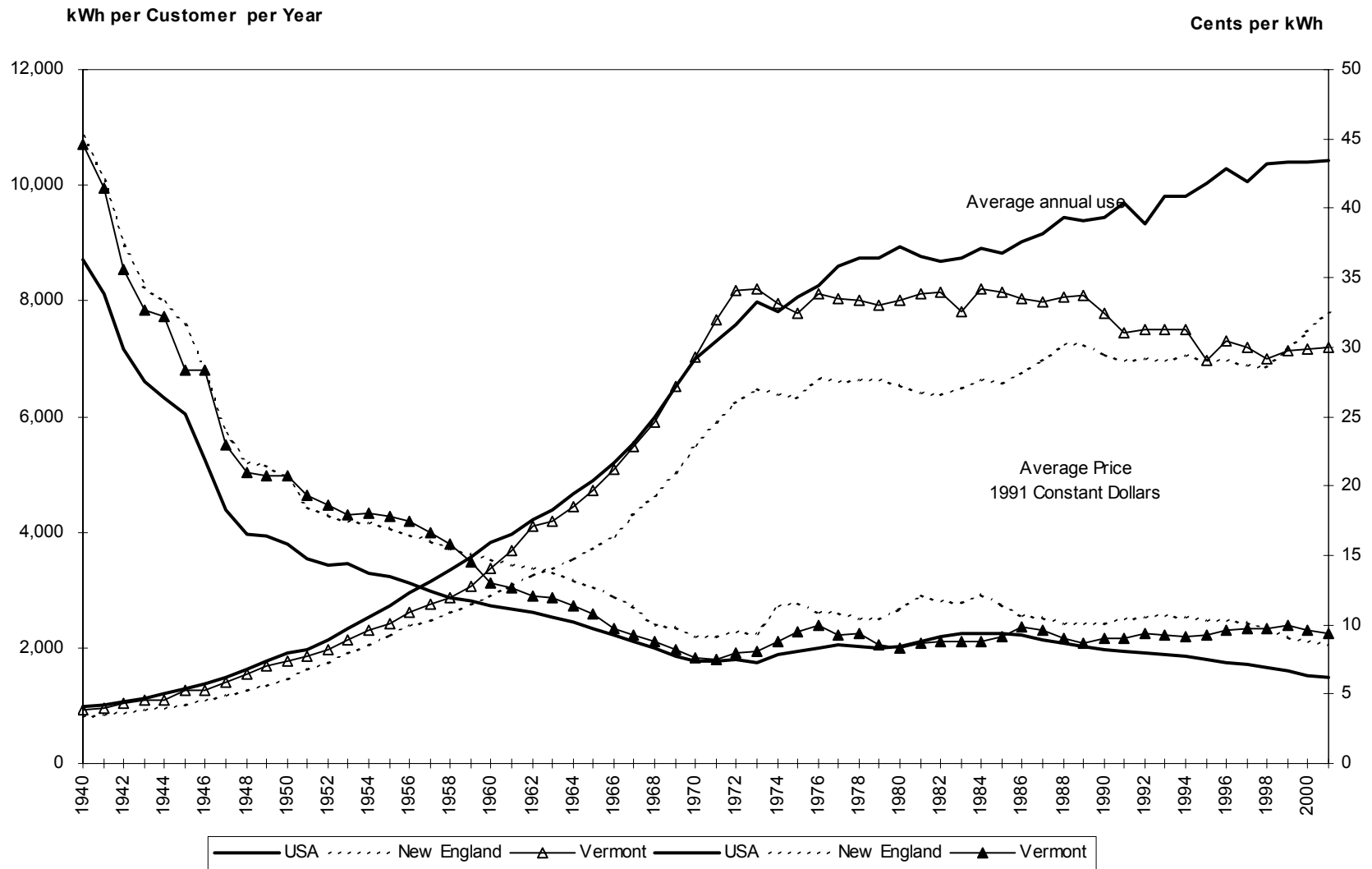
Average Annual Residential Electricity Consumption and Bills (2000)

- ❖ Average US usage and bills
 - 10,392 kWh = \$856/year
- ❖ Average New England usage and bills
 - 7,164 kWh = \$810/year
- ❖ Average Vermont usage and bills
 - 7,113 kWh = \$861/year
 - 31% < US usage
 - .6% < New England usage

Sources: Energy Information Administration, US Dept. of Energy, & Edison Electric Institute.



Residential Revenue per kWh and Use per Customer 1940-2001





Sample Residential Bills at 500 kWh (Nov. 2002)

CVPS (Investor owned)

Customer charge	\$11.38
Rate \$.11746/ kWh	58.73
<u>EEU Charge @ 2.1%</u>	<u>1.47</u>

TOTAL \$71.58

Stowe (Municipal)

Customer charge	\$ 7.61
Rate \$.05085 1 st 150kWh	7.63
Rate for 151-500	39.80
(avg of peak and off peak)	
<u>EEU charge @ 2.72%</u>	<u>1.50</u>

TOTAL \$56.54



Energy Affordability

- ❖ Energy affordability defined:
 - 6% of household income spent for heating and electricity
 - 2% of household income spent for heating alone
- ❖ Vermont affordability ranking among states and DC
 - 50th for all low income consumers (<185% of federal poverty standard)
 - 51st in affordability for households below 50% of poverty
- ❖ Households below 50% of poverty spend an average of 61.3% of household income on energy
 - Consequences for individual, other ratepayers, and society



Rising Disconnection Rates Show Increased Impact of Unaffordable Bills

❖ Disconnections per 1000 residential customers 1998-2003:

◆ 1998	18.9
◆ 2000	21.6
◆ 2001	25.8
◆ 2002	27.5
◆ 2003	34.6



Energy Protections in PSB Rules:

- ❖ PSB Rules provide rights to:
 - Flexible payment arrangements
 - Budget plan for levelizing bills
 - Temperature restrictions on winter disconnections
 - Physician certificate for “immediate & serious health hazard



Low Income Energy Assistance

- ❖ Low Income Home Energy Assistance Program (LIHEAP) provides (primarily) federal funds for heating to households below 185% of poverty
 - FY2002 Vermont LIHEAP = \$9.9 million
 - FY2002 Vermont LIHEAP fell short of “affordability” by estimated \$67 million
- ❖ Crisis Fuel Assistance provides limited LIHEAP funds to pay electric bills
 - Less than 5% of Vermont homes heated with electric
- ❖ Utilities raise charitable contributions: Share Heat, Warmth programs
- ❖ No publicly-funded electric assistance program is available in Vermont except crisis fuel



Weatherization: A Bright Spot

- ❖ VT Weatherization Trust Fund helps low income reduce heating bills through home insulation, and heating systems upgrades and replacement
 - Funded by .5% tax on non-transport fuels plus federal monies
 - \$4.5 million annually
 - 81% state, 19% federal
 - 1990-2001: 13,790 homes weatherized
 - Administered by NGO: Community Action Agencies



Models of Low Income Electric Assistance: Other States' Approaches

- ❖ Tariffed discounts to qualifying low income
- ❖ Waiver of fixed monthly customer charge
- ❖ Inverted block rates (unit cost goes up with power use)
- ❖ Percentage of income payment plans
- ❖ Arrearage forgiveness plans
- ❖ Direct vendor payments



Approaches to Public Funding of Low Income Electric Assistance

- ❖ Discounted rates built into rate structure
- ❖ System benefits charge: all ratepayers contribute
- ❖ Appropriation of public support for program funding: general revenue