



RAP

Energy solutions
for a changing world

The Evolving Distribution System

Center for Strategic and International Studies

Presented by Richard Sedano

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The Regulatory Assistance Project

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Introducing RAP and Rich

- RAP is a non-profit organization providing technical and educational assistance to government officials on energy and environmental issues. RAP staff have extensive utility regulatory experience. RAP technical assistance to states is supported by US DOE, US EPA and foundations.
 - Richard Sedano directs RAP's US Program. He was commissioner of the Vermont Department of Public Service from 1991-2001 and is an engineer.



- AC



CAMPUS BUILDINGS

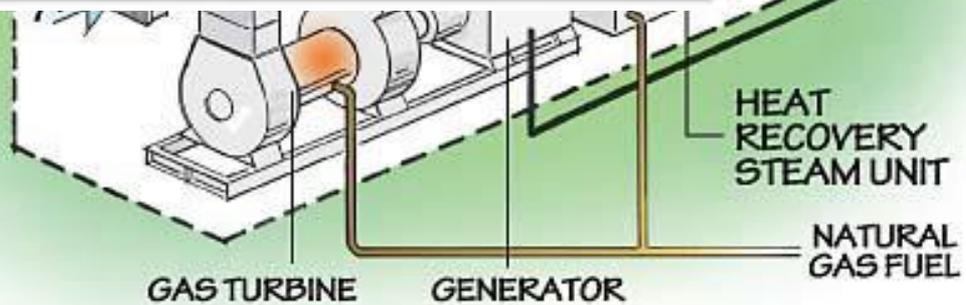
POWER

MASSACHUSETTS MICROGRIDS: OVERCOMING LEGAL OBSTACLES



HARVARD LAW SCHOOL
Emmett Environmental
Law & Policy Clinic

September 2014



Key Considerations

- Value
 - Retail Rates
 - Compensation for DG
 - Distribution System Planning
 - Connection of retail and wholesale markets
- Access
 - Gateway technology
 - Physical grid access for DG
 - Connecting innovation with customers

Utility Motivation

- Defensive
 - Recovery of embedded costs
 - Stranding of embedded costs
 - Attention to fairness (participants/non-participants)
 - Threat to rate base and associated return
 - Technology challenges
 - Control room operation challenges
 - Human factor challenges

Utility Motivation

- Opportunistic
 - Performance regulation, reward
 - And acceptance of experimentation
 - Managing upward cost pressure, risk
 - Plus environment imperatives
 - Embracing customers as a resource
 - And innovation throughout the territory
 - For resilience
 - Revenue from services

Closing Thought

- Exponential Growth of DG, new technology
 - Hard to appreciate
- Role of government
 - Protect interests
 - Stimulate innovation
 - Enable, not obstruct
 - The evolving distribution system can be a manifestation of good government, but in just the same way as government is challenged in all areas, legacy interests and short-sightedness can limit the pace and outcomes of evolution

REGULATION THAT PRIZES
VALUE AND ACCESS
SERVES THESE OBJECTIVES

About RAP

The Regulatory Assistance Project (RAP) is a global, non-profit team of experts that focuses on the long-term economic and environmental sustainability of the power and natural gas sectors. RAP has deep expertise in regulatory and market policies that:

- Promote economic efficiency
- Protect the environment
- Ensure system reliability
- Allocate system benefits fairly among all consumers

Learn more about RAP at www.raonline.org

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