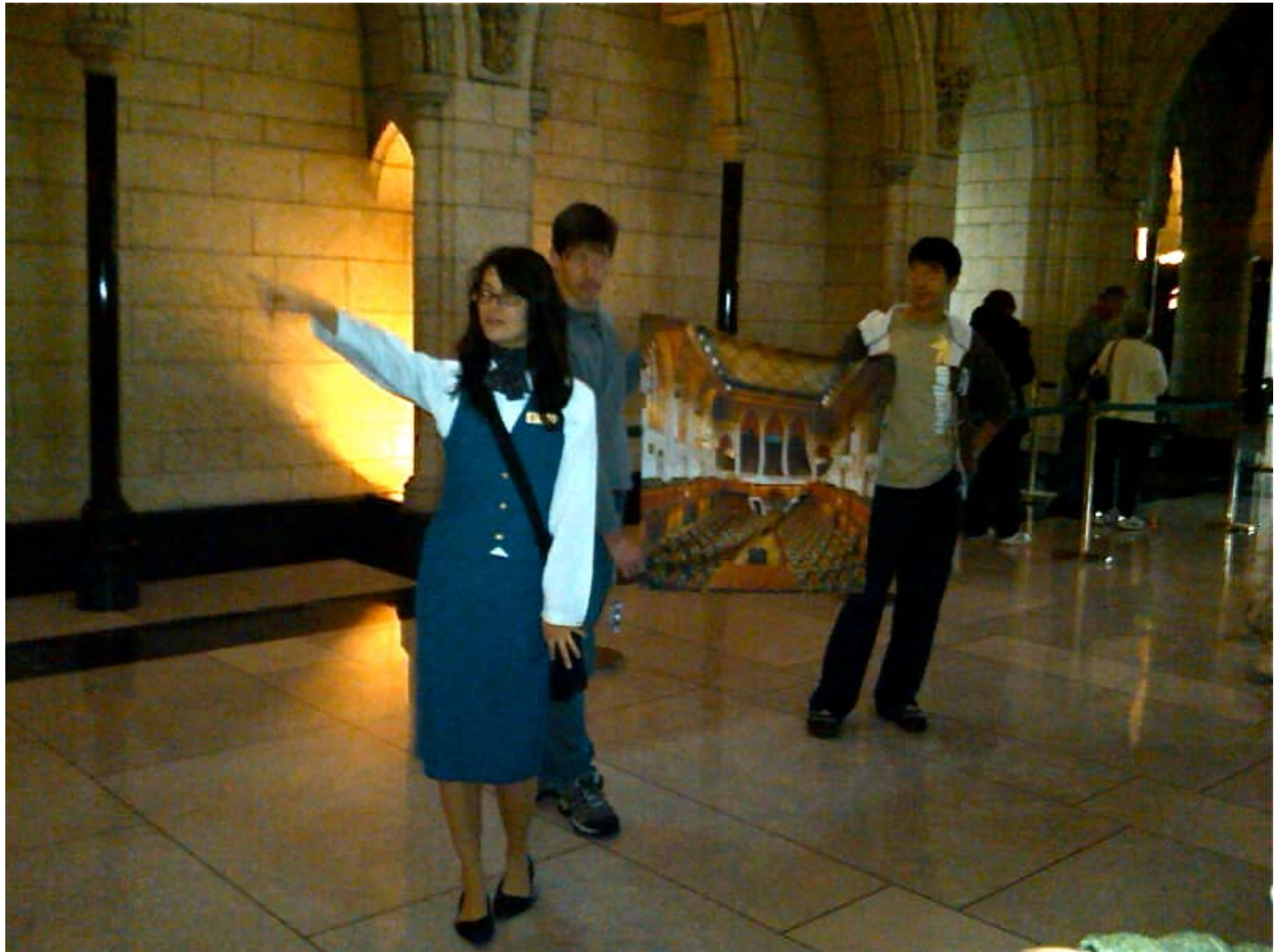




Voices From America on Canadian Hydro

TRACY NAGELBUSH

Canadian Hydropower
Association Forum 2010



Resources are Available



- ~80,000 Dams in the US
 - 4,000 Federally Owned (5 percent)
 - 2,400 Used to Generate Electricity

- The experts say....
 - Potential to Double Generating Capacity by 2025
 - 4,000 to 9,000 MW of New Capacity Available Through Expansion and Efficiency Improvements at Existing Facilities

What's stopping the development of new hydro?



■ GOVERNMENT

- Complex Political Infrastructure Slows Incentives
- Complex Regulatory System Slows Investments
- Incentives Aimed at other Generating Resources
- Limited Fiscal Resources

■ LOGISTICS

- Location of Existing Resources
- Initial Capital Cost
- Public Perception

Location, Location, Location



Transmission

- Loan Guarantees
- Expedited Permitting

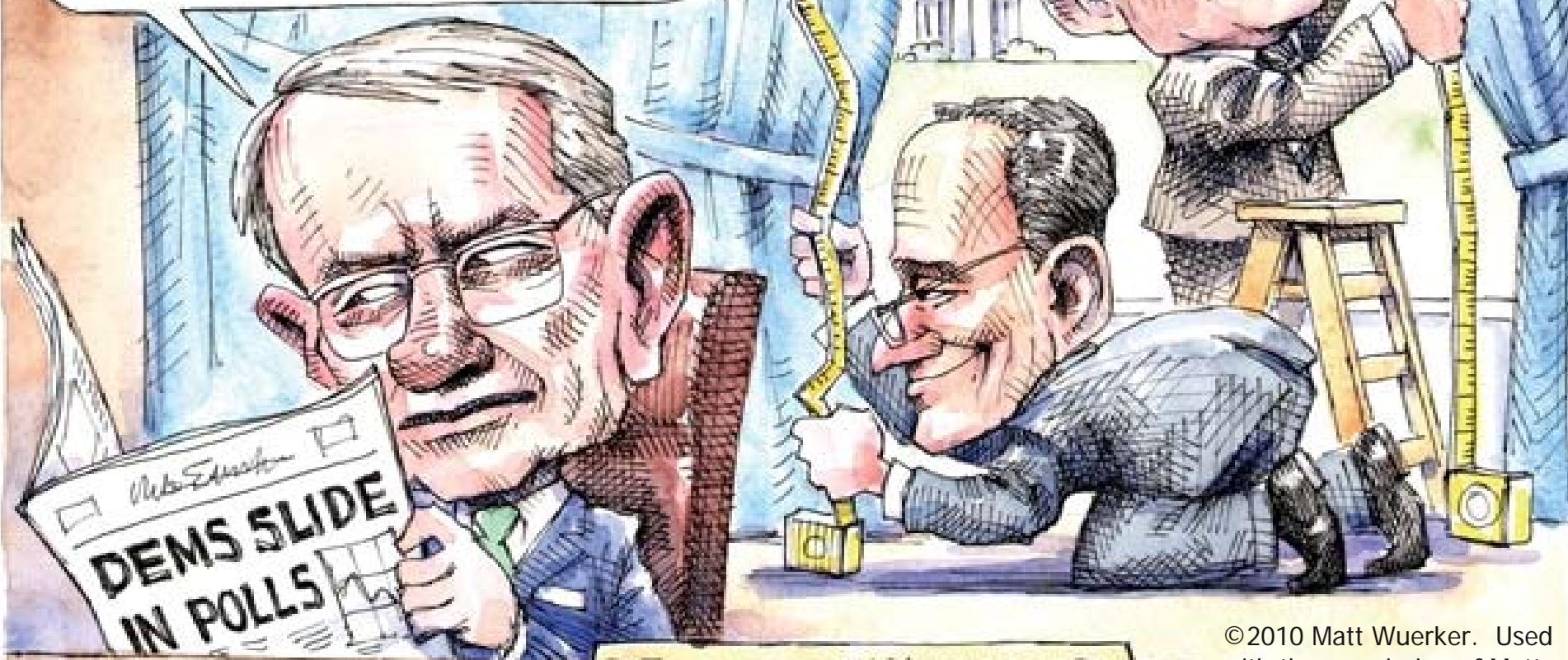
U.S. Power Authorities

- Bonneville
- Tennessee
- Etc

Pumped Storage

- Information on Geological Surveys
- Cost allocation

THE GOP'S MEASURING THE
DRAPE IN PELOSI'S OFFICE!
CAN YOU BELIEVE THE GALL?
... CHUCK? ... DICK?



MAJORITY LEADER

M. WUERKER

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POLITICO

Paths forward for the U.S. Government



Congressional Action

Administration Initiatives

Regulatory and Permit Streamlining

Funding

Federal Incentives



■ Existing (Money)

- Research and Development
- Tax Incentives
 - Investment Tax Credit
 - Production Tax Credit
- Grants

■ Potential (Mandates)

- Market for Carbon Emissions
- Renewable Electric Standards (formerly known as Renewable Portfolio Standards)

Tax Incentives



- Renewable Electricity Production Tax Credit (PTC)
- Renewable Energy Investment Tax Credit (ITC)
- Modified and Accelerated Cost Recovery System (MACRS)
- Clean Renewable Energy Bonds (CREBs)
- Qualified Energy Conservation Bonds (QECCBs)
- Qualifying Advanced Energy Manufacturing Investment Tax Credit (Section 48C)

Renewable Electricity Standard

- Federal Proposals
- State Proposals
 - Regional and individual states establishing standards

Yukon:
1 MW of wind
increase by 2006

**Northwest
Territories:**
10% by 2010
and 25% by
2025

Nunavut:
increases in one
or two community
projects by 2008

British Columbia:
10% of all new
generation by
2012

Alberta:
3.5% by
2008

Manitoba:
1,000 MW of
wind by 2014

Quebec:
3,000 MW of
wind by 2013

Newfoundland:
25 MW by 2006

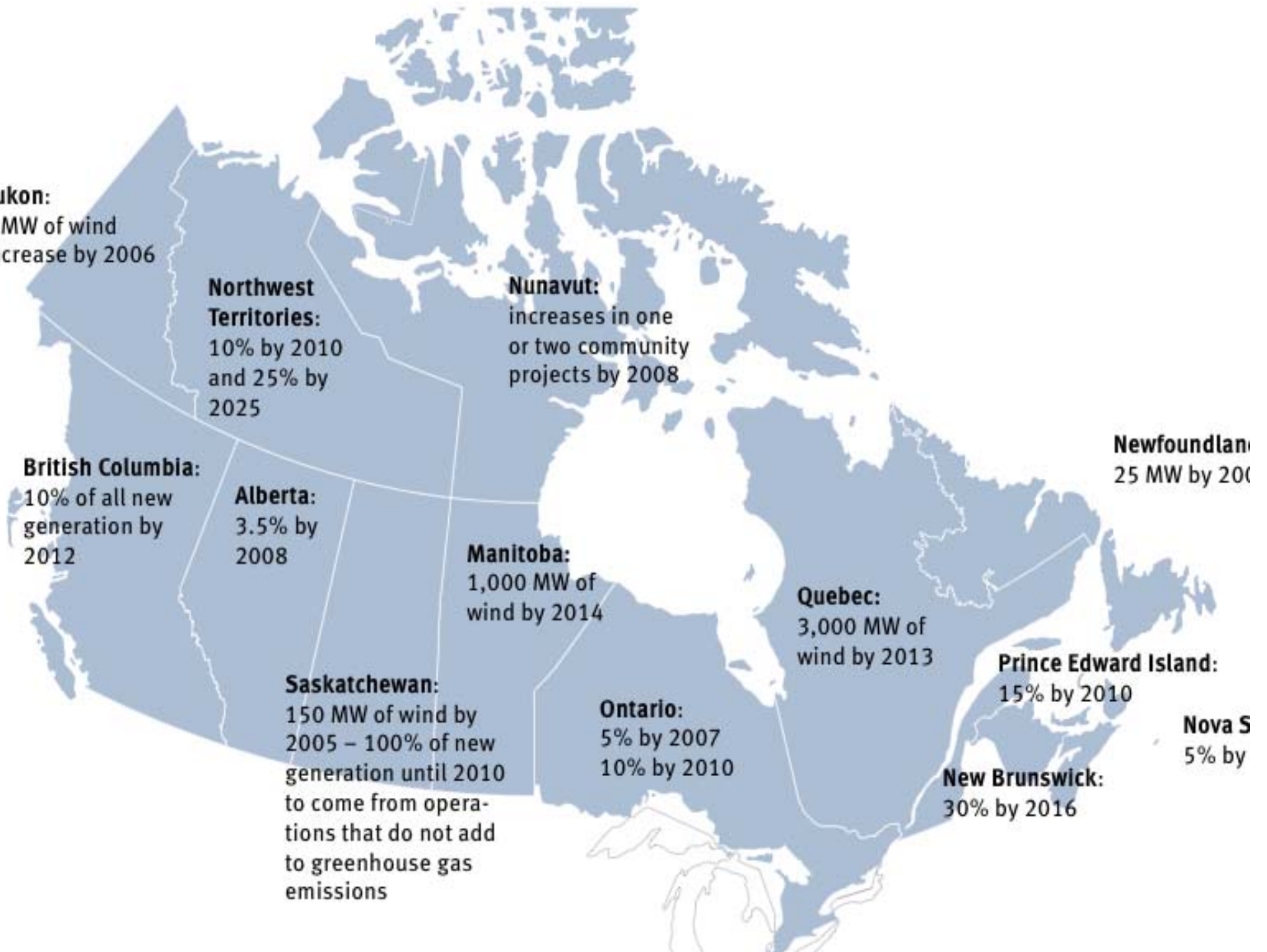
Saskatchewan:
150 MW of wind by
2005 – 100% of new
generation until 2010
to come from opera-
tions that do not add
to greenhouse gas
emissions

Ontario:
5% by 2007
10% by 2010

Prince Edward Island:
15% by 2010

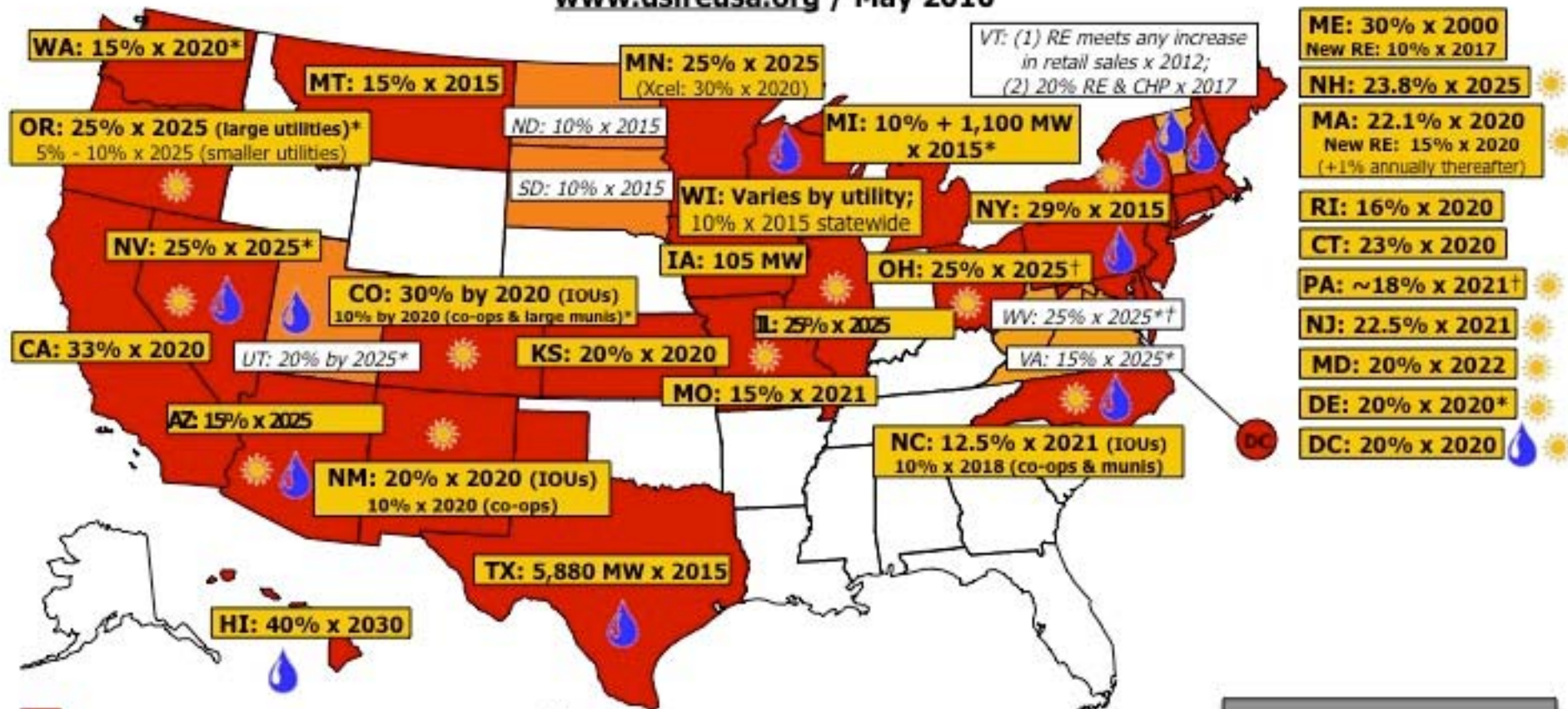
New Brunswick:
30% by 2016

Nova Scotia:
5% by 2010



Renewable Portfolio Standards

www.dsireusa.org / May 2010



- State renewable portfolio standard
- State renewable portfolio goal
- 💧 Solar water heating eligible

- ☀️ Minimum solar or customer-sited requirement
- ✳️ Extra credit for solar or customer-sited renewables
- † Includes non-renewable alternative resources

29 states + DC have an RPS
(6 states have goals)

U.S. Treatment of Hydropower Systems



- Reluctance to build new structures
 - Cost
 - Environmental impacts
- FERC efforts to encourage hydrokinetic and small hydropower development

What can be done to bring on new hydropower resources?

- JOBS, JOBS, JOBS
- Cap on carbon emissions
- Continued Research and Development
- Collaboration with invested advocacy groups

...coordinated federal plan for development of new systems and efficiency gains in existing systems



For more information

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