



AGA's Sustainable Growth Forum

**Economic and Environmental
Challenges being faced by the
Natural Gas Industry**

**California Public Utility Commission
Commissioner Timothy Alan Simon
April 12, 2010**



Challenges & Opportunities

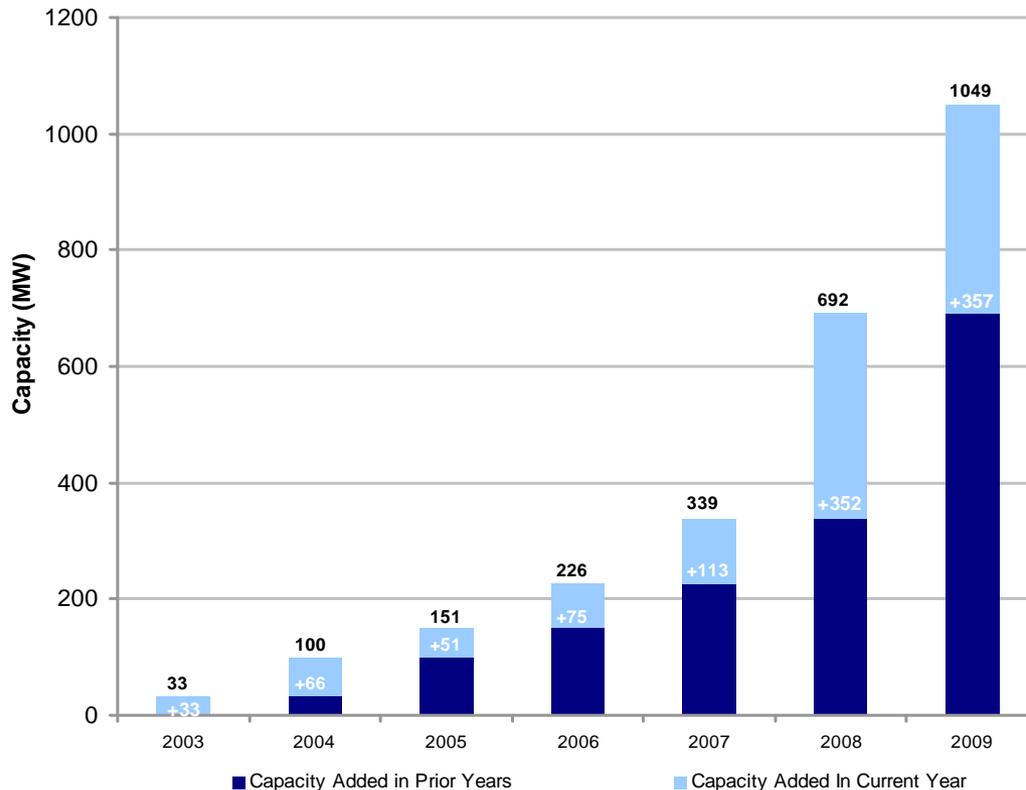
- **Smart Meters –AMI**
- **The push to do all cost-effective energy efficiency applies to gas**
- **Initiatives for Renewables Development**
- **The Importance and Costs of DIMP Implementation**
- **The need for New Infrastructure**
- **RD&D Opportunities**



Smart Meters & Energy Efficiency

- AMI is a Smart Investment
- User Interface Web Tools will have a big Impact
 - Customers will receive near-real time pricing
 - Enhanced conservation and changed behavior
- Need to push hard for an effective Customer Education Program

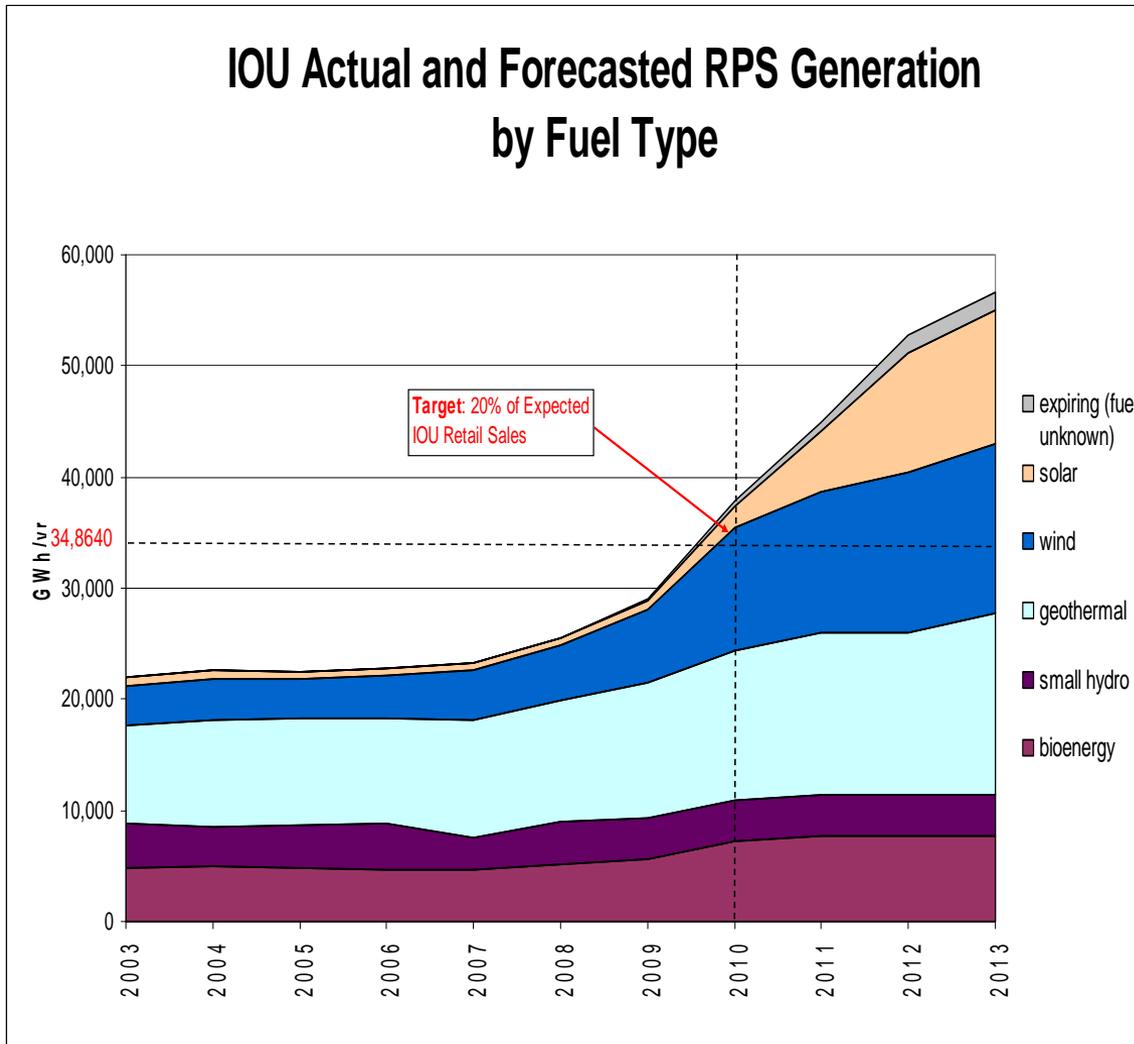
Renewable Power Capacity Development



Source: California Public Utilities Commission, 1st Quarter 2010

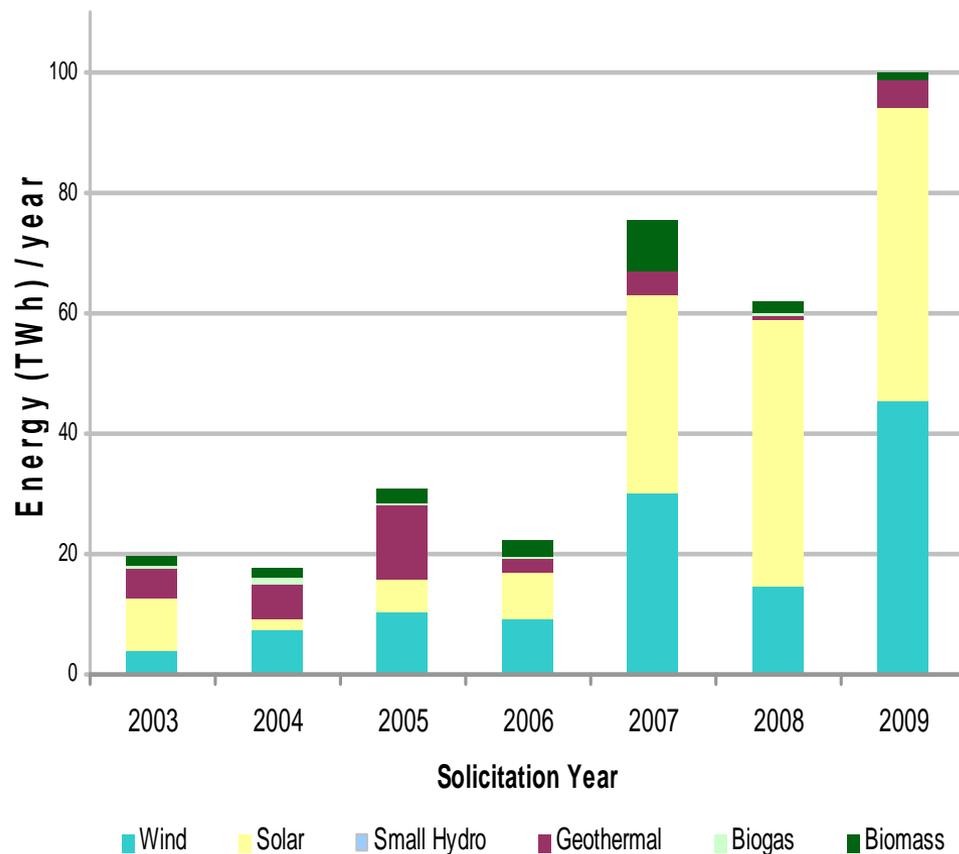
- In 2003, 33 MWs added
- In 2009, 357 MWs added
- **Resulting in a total of 1049 MWs in 2009**
- New capacity added in recent years was almost entirely **wind**

Renewables by Fuel Type



- Wind and geothermal will be the largest contributors to RPS generation in 2010.
- All the new intermittent energy (wind) has created the need for fast ramping and dispatching natural gas units for integration onto the grid and for grid support

Solicitation Bids



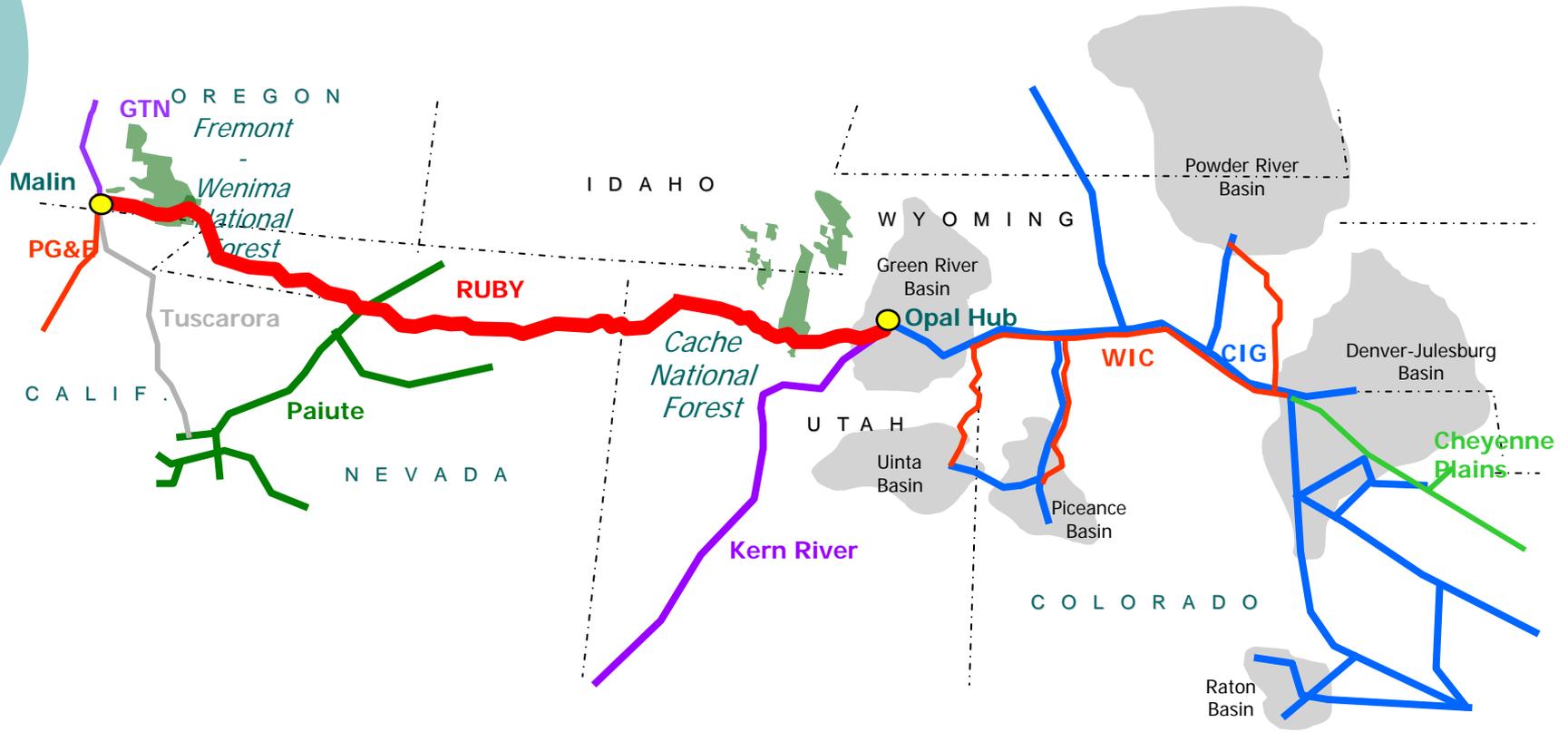
- While there has been substantial wind development -- **looking out in the future solar development will grow substantially**
- In 2009, IOU solicitation bids resulted in more proposed renewable generation than any other solicitation in RPS history

Source: California Public Utilities Commission, 1st Quarter 2010

Natural Gas Infrastructure Development; Ruby Pipeline

- **A key driver for infrastructure development in CA is recent Legislation which mandates an Emissions Performance Standard** for new long-term contracts of 1100 lbs of CO₂/MWh (natural gas combined cycle benchmark)
- In 2008 the CPUC approved major PG&E Anchor Tenant contracts for the Ruby Pipeline resulting in a 1.5 Bcf/d FERC Application by El Paso

Ruby Pipeline



Natural Gas Storage

California currently has 224 Bcf of storage

| <u>Storage Project</u> | <u>Bcf</u> <small>(est)</small> |
|-------------------------------------|--|
| Gill Ranch/PG&E | 20 Bcf |
| Wild Goose Storage | 21 Bcf |
| Honor Rancho Expansion, SoCalGas | 7 Bcf (84 Bcf Current) |
| Aliso Canyon, SoCalGas | Per settlement - compressor upgrades expected |
| Lodi Storage | 34 |
| Central Valley Storage | 5.5 Bcf |
| Sacramento Natural Gas Storage | 7.5 Bcf |

Pipeline Safety

- Another major driver is the constant attention to Safety & Reliability of the Pipeline System,
- The Distribution Integrity Management Program or DIMP is a current key driver;
- in making our industry and those who interact with us safer

Other New Developments

NARUC: “Resolution Supporting Pipeline Quality Biomethane Development as a Renewable Gas Resource in the Clean Energy Economy”

It was resolved that the NARUC board...

- Supports pipeline quality biomethane as a renewable energy source
- Supports federal incentives for the development of biomethane
- Urges the Senate and the House of Representatives to approve legislation as a means to provide unequivocal support for biomethane development



Thank you!

Note: This document reflects the opinions of Commissioner Timothy Alan Simon, and does not in any way represent the opinions or policies of the CPUC