

### Liability regime

VS

Scale of liability





(Mis)calibration of physical/legal/financial instruments to a shifting physical risk environment





If the liability is large enough, the PUC is no longer the appropriate place to handle it.





### How can utilities respond?

First step: new approach to risk management/reduction.

What can be socialized depends on magnitude of loss/liability.





Quality is not something PUCs regulate effectively (Kahn).

Safety is an important aspect of quality (Demming).

Lessons from other industries





Most effective implementation of modern risk management techniques in electricity has been INPO.

Is there the possibility of an INPO for western wildfire?





#### **A Western Wildfire INPO**

- Better information sharing
- Better awareness of early warning signs
- Productivity enhancing
- Far less transparent
- Requires "hostages of each other" dynamic





### Obligation of utilities to provide "safe and reliable" service in exchange for "just and reasonable" rates.

- Are different safety-reliability tradeoffs appropriate depending on the circumstances?
- · Who decides?
- How does adjustment occur for low-income customers?





# Fully "working" the problem of liability may require getting outside of traditional utility silos/business model thinking

- Different mixes of quality?
- Locational value of risk management vs system optimization?
- Partnerships with others?





### How can utilities respond?

Second step: Socialization

Key here is trust with all stakeholders. Nothing is more precious or more easily forfeited.





## Different socialization approaches have different distributional consequences.

Ratepayers

VS

Homeowners

VS

**Taxpayers** 





### How socialization occurs may depend on ex-ante conditions

- How many people or customers or businesses are already "exposed?"
- How much "space" in rates as opposed to other socialization channels?





## How socialization occurs may depend on ex-ante conditions

 What unintended are created by a "fix" that socializes liability in a new way?





### **Conclusions**

Scale of liability matters for if/how it can be socialized

The first step is to accurately assess risks before they are liabilities and take effective action to mitigate them.





### Conclusions

Abnormally large liabilities exceed the delegation of authority to PUCs. Legislative input is needed. Maintaining trust is key.

Socialization of liabilities can be accomplished via multiple paths and choice of path matters





