A satellite with large solar panels is shown in orbit above the Earth. The satellite is oriented vertically, with its solar panels extending downwards. The Earth is visible in the background, showing continents and oceans. The text is overlaid on the image.

GOES (End) Users:
Who They Are, ***How*** They Matter,
What They Need, ***Why*** They'll Pay

William H. Hooke
American Meteorological Society

GOES (End) Users: *Who* They Are

- *Not* the people in this room
- *Not (necessarily)* meteorologists, oceanographers, hydrologists, space physicists
- *(almost) invariably*, individuals and institutions who do not see themselves as users

drilling down...

these end users contribute to

- **Public health and safety**
- **Economic growth**
- **Protection of the environment and ecosystems**
- **Geopolitical stability**

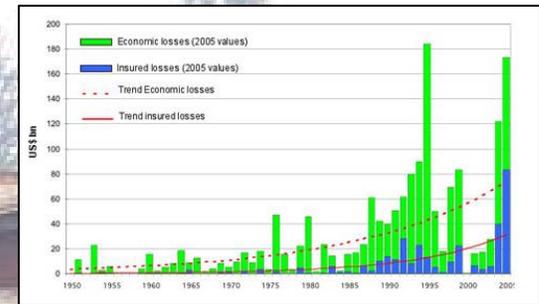
they identify with these roles

GOES (End) Users: *How* They Matter

(in a word) the ways in which they use, or misuse, or fail to use GOES-based products and services determine the value proposition for GOES.

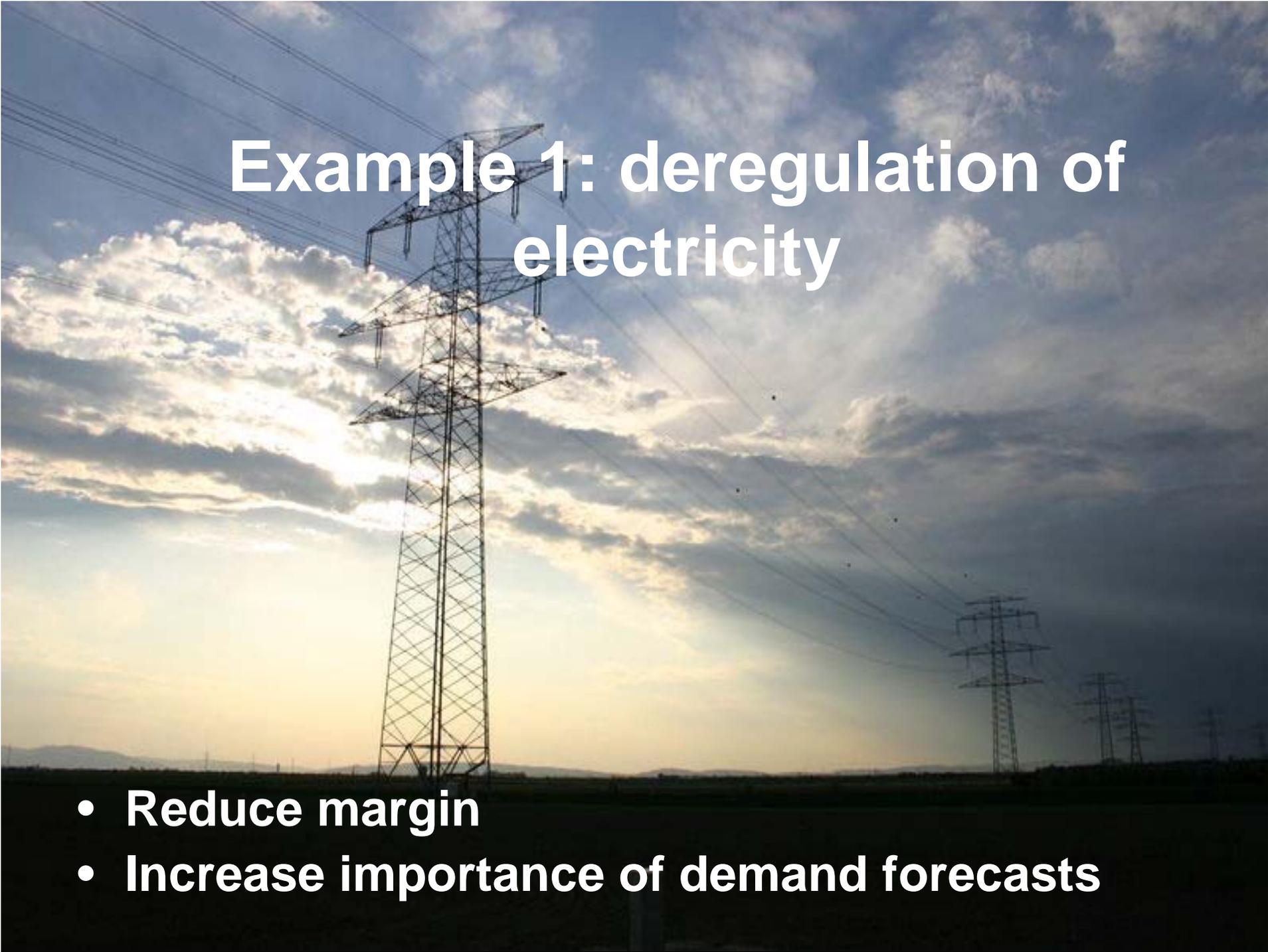
End users are today losing the battle in each arena

- Disaster losses rising
- Economic pricing has yet to internalize environmental costs, unsustainable practices
- World's 6th mass extinction underway
- Complex emergencies are on the rise



GOES (End) Users: *What* They Need

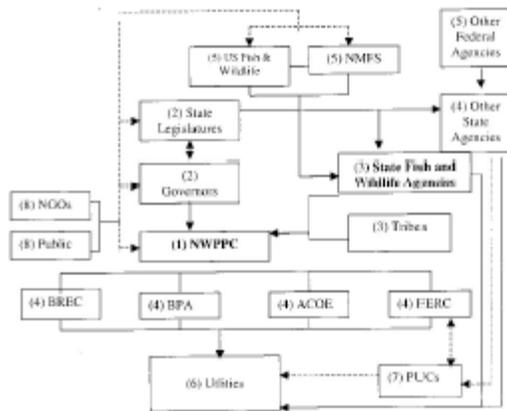
- **On the input side?**
 - More parameters
 - More accuracy
 - More spatial/temporal resolution
 - Accessibility/flexibility/continuity
- **On the output side?**
 - A policy framework that makes their GOES-based decisions/actions valuable



Example 1: deregulation of electricity

- **Reduce margin**
- **Increase importance of demand forecasts**

Example 2. water resource management



ORGANIZATIONAL KEY:

(1) NWPPC, created through NPPA 1980

(2) Makes appointments to the NWPPC Board

(3) Organizations given special significance by NPPA

(4) Organizations required to comply with NWPPC plans

(5) Organizations not required to comply with plans, but must coordinate responses to other rules, regulations, and legislation

(6) Organizations which rely on hydropower and subject to NWPPC plans

(7) PUCs oversee utilities, but are limited in their power by FERC

(8) Organizations from whom NWPPC must elicit input

----- Indirect Influence

———— Direct Influence

Figure 2.4 INFLUENCE MAP FOR COLUMBIA RIVER DECISIONS

McNary Lock & Dam

Example 3: natural disasters



key points:

- The gap between our S&T advance and society's ability to use it is widening
- The key to closing the gap is getting the policies right
- ***Benefits*** of science (though they can be characterized) are not fundamental constants, but vary considerably, ***depending upon the prevailing policy framework*** at all levels of government
- We are currently underinvesting in this S&T

How/why are we under-investing? On the benefits side

- Benefits, value difficult to measure**
- Many benefits non-monetizable**
- Many benefits are public goods**
- Policies constrain benefits**
- We frame benefits in ways that downplay their value**

How/why are we under-investing? On the costs side

- **We base allocations on previous budget levels versus future needs**
- **We skimp with respect to**
 - **uninterruptibility**
 - **risks of new technology**
 - **building in flexibility, margin**
 - **continuity across the information chain, and over time**

GOES (End) Users: *Why* They'll Pay

- **Stakes, urgency are rising**
- **Dysfunctional outcomes increasingly visible**

The AMS is working to redefine the value proposition

- **Valuation studies**
- **Transition documents**
 - **Improve infrastructure/quality of science and services**
 - **Build public-private partnerships for action**
 - **Develop leadership and coordination**
 - **Engage constructively in the policy arena**
- **Hill briefings**
- **A new journal on socio-economic impacts and policy**

**Want to join in? Get in touch with us
or check out our**

- **website**
- **Congressional science fellowship**
- **AMS Summer Policy Colloquium
(June 1-10, 2008)**

