### Net Energy Metering: Policy and Controversy in Nevada

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#### Power Utility Economics 101: Why should there be any cost shifting?

 Utility gets a REGULATED monopoly status and in exchange they provide

- Universal access
- Generation + Transmission + Distribution Capacity
- Reliability
- Aate cases
- Compliance with other regulations, RPS etc.







## Other Concerns Regarding NEM

- ♦ \$\$\$
  - Large scale costs less per Watt installed capacity
  - Generate more per installed capacity
- (Intermittency)<sup>2</sup>
  - Has not been a much of an issue in Nevada
  - Likely to get better with smart grid and home batteries
- Residential solar gets extra RPS credit

# Potential Public Benefits of DG Avoided transmission losses Avoided need for infrastructure investments









## Potential Private Benefits of NEM

• Warm glow

- Conspicuous consumption
- Freedom from the utility

Policy Recommendations	
<ul> <li>Ambitious environmental goals</li> <li>Reach them in the least cost manner</li> </ul>	
Difficult to design a single rate to accurately capture all the costs and benefits for everybody	



### Other Policy Concerns and Future Research

Carbon credits

- Economics of energy storage
- Improving forecasting tools to mitigate intermittency
- Possibility of giving up control

