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Protecting the Midwest's Environment and Natural Heritage

# Solar Energy Deployment


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# The U.S. solar market is booming…

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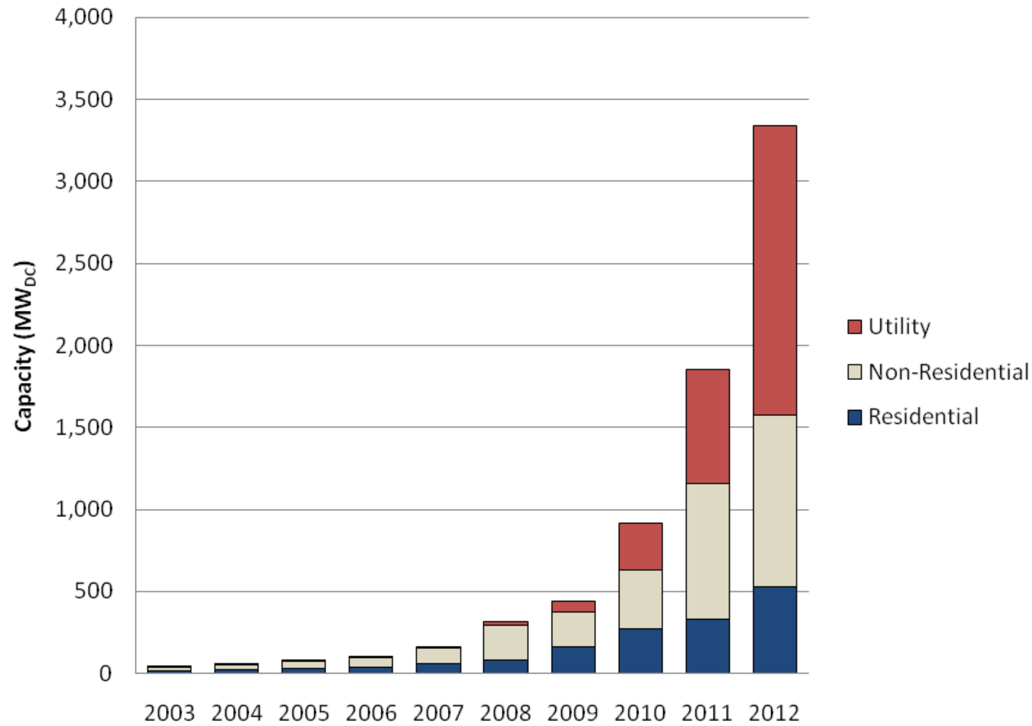
- **There are nearly 10 GW of solar electric in the U.S. (enough to power more than 1.5 million homes)**

- **Over 5 GW are projected to come online in 2013 alone.**

Source: SEIA (2013)

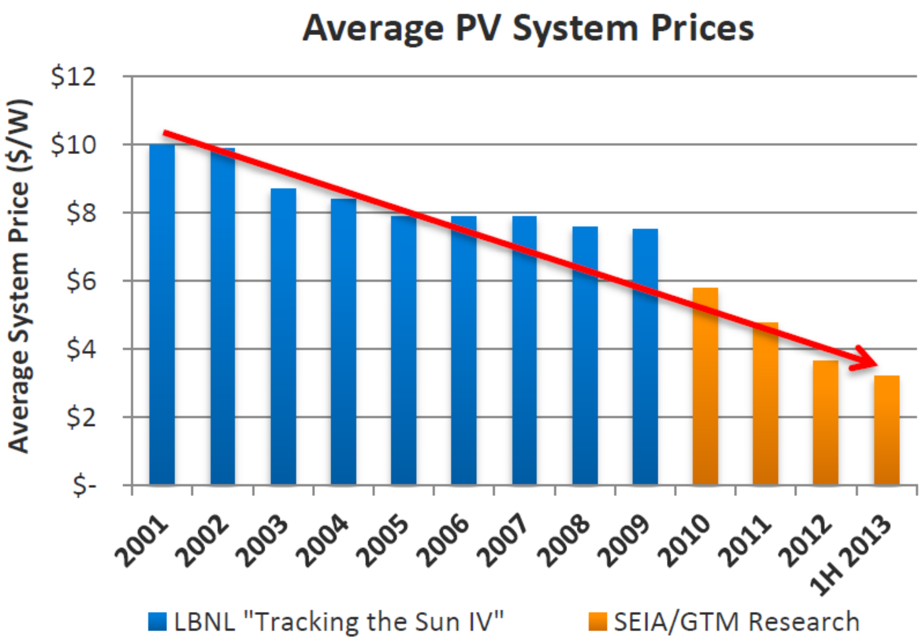
**Annual Installed Grid-Connected PV Capacity by Sector**

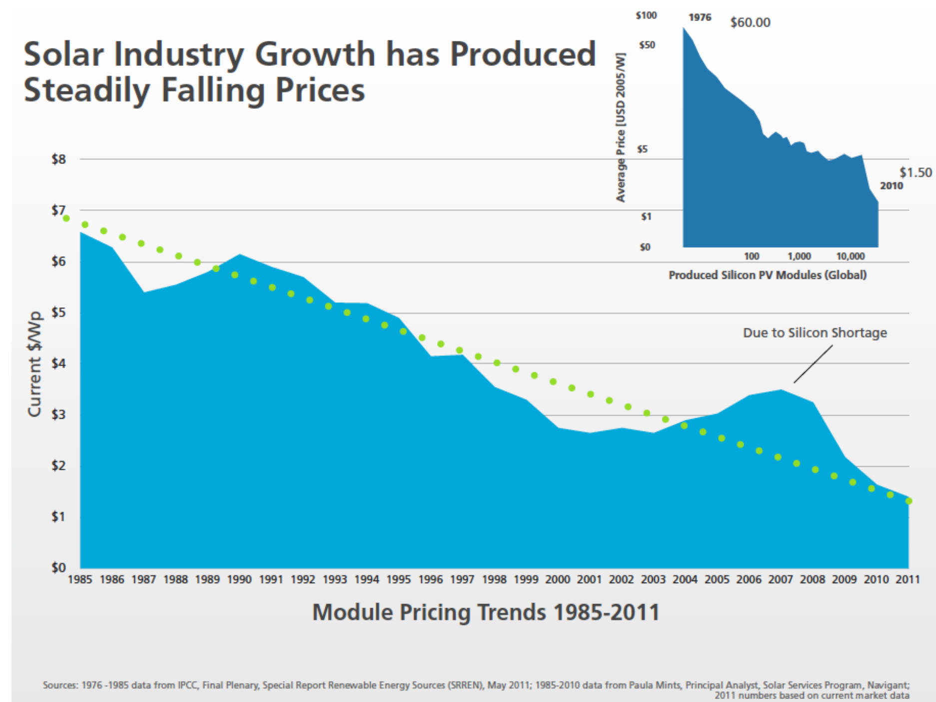



Source: IREC (2012)

# … and costs are falling.





# This is creating jobs and economic growth.

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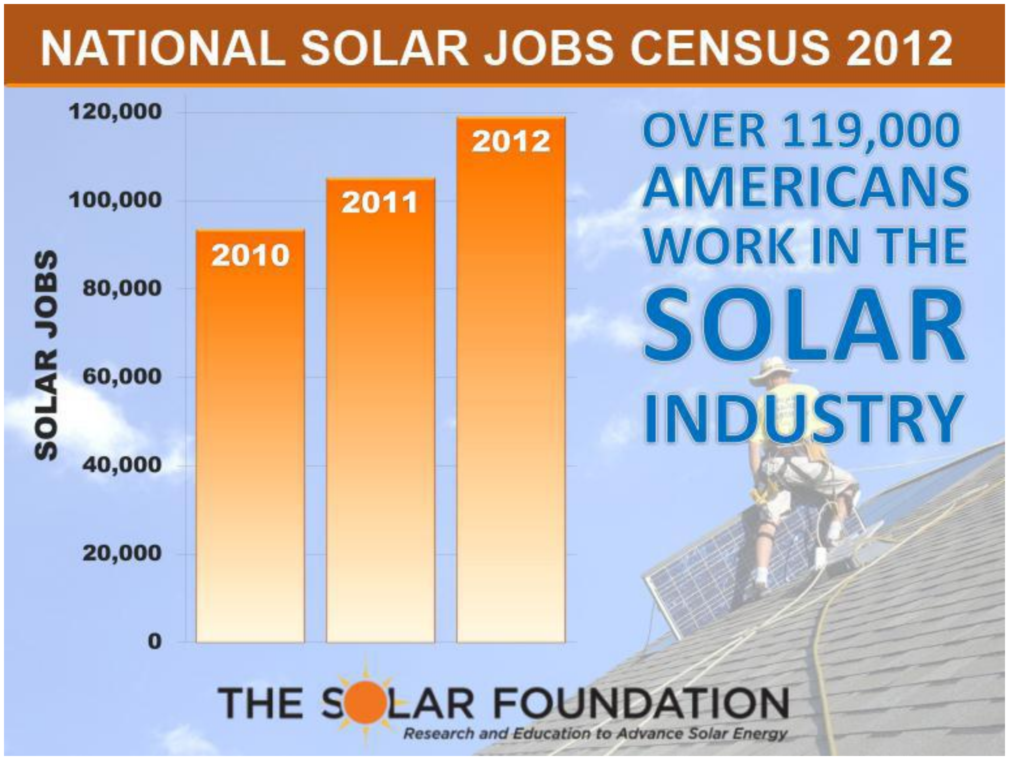


Value of the U.S. Solar Market in 2012

**$11.5 BILLION**

Number of Solar Businesses in the U.S.[3]

**5,600**

Source: SEIA (2013)

# But market growth is not distributed equally …

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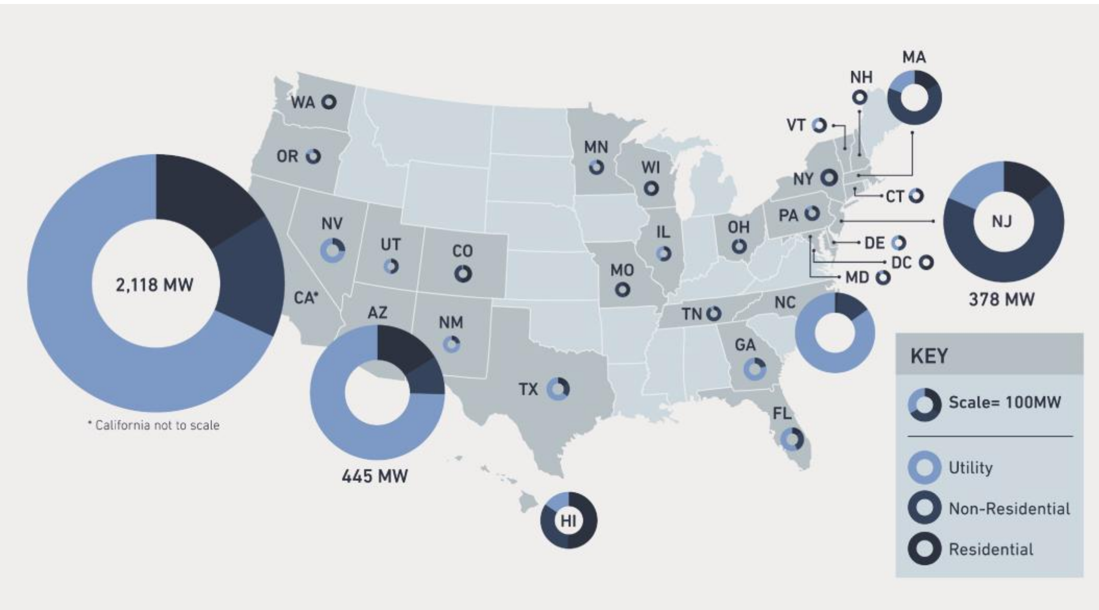
## U.S. PV Installation Map (Year End 2013 Forecast)




Source: SEIA/GTM Research (2013)

## State Ranking by Cumulative Solar Capacity

1 California - 3,761 MW
2 Arizona - 1,250 MW
3 New Jersey - 1,119 MW
4 Nevada - 408 MW
5 North Carolina - 332 MW
6 Colorado - 298 MW
7 Massachusetts - 272 MW
8 Hawaii - 270 MW
9 Pennsylvania - 214 MW
10 Florida - 202 MW

**Illinois has only about 50 MW *total* installed PV capacity.**

## So what's going on in Illinois?

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- **Aggressive renewable targets, but implementation challenges at the IPA.**
- **Flood of retail switching is creating challenges and opportunities.**
- **"Smart Grid" investments could enable more DG, but questions remain regarding implementation.**

# Illinois Renewable Energy Standard

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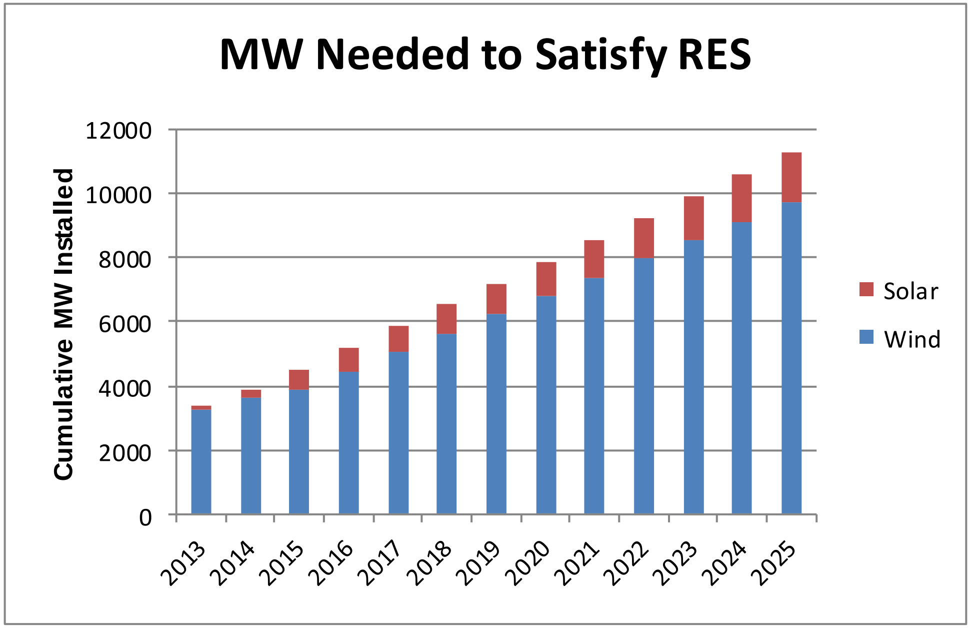
**Illinois' RES requires 25% by 2025, 6% of which to be solar**

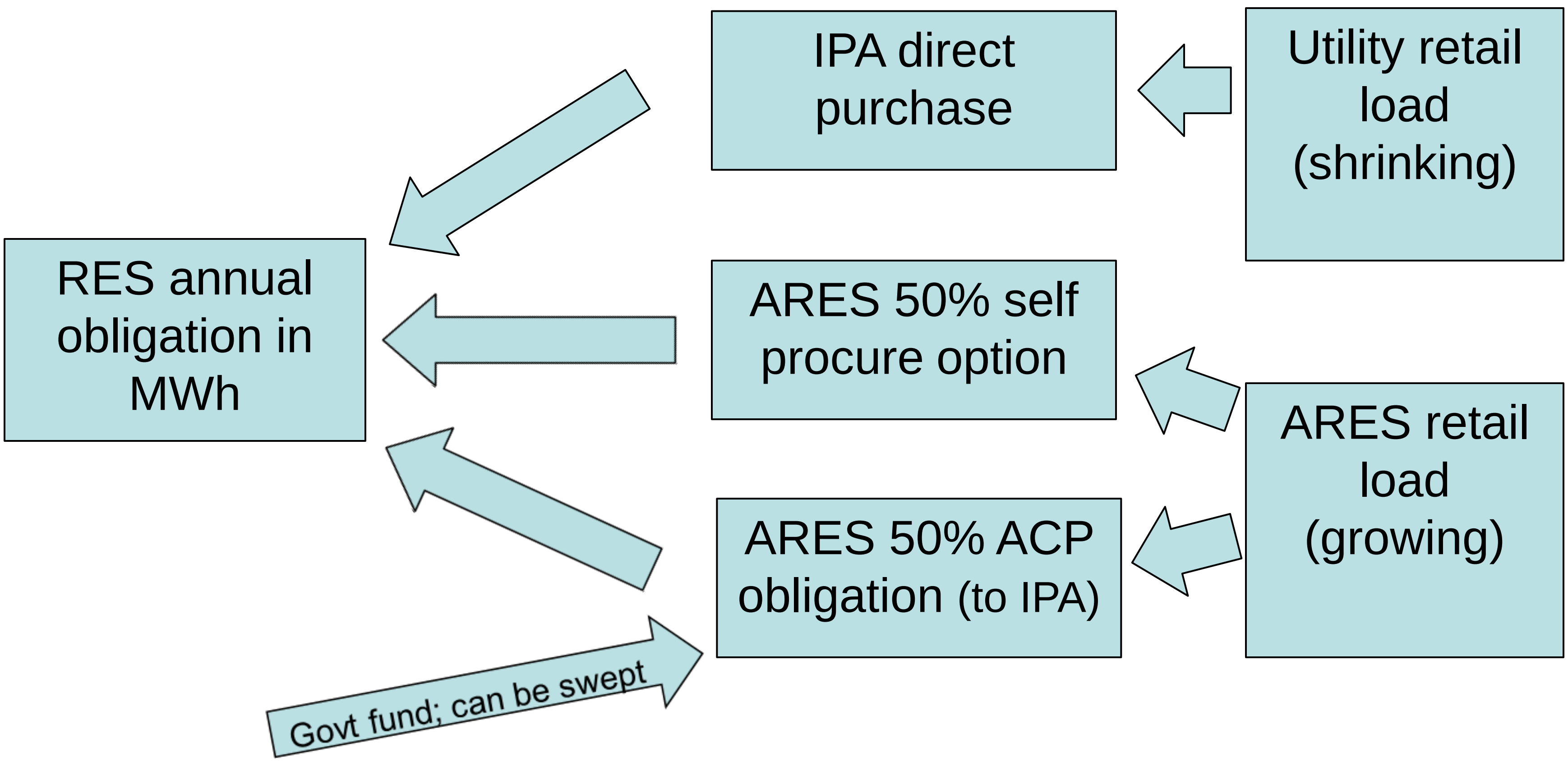



| Year | Overall Standard (% from Renewables) | Solar Requirement (% of the Standard) | Solar Requirement (cumulative MW) |
|---|---|---|---|
| **2012** | 7% | 0.50% | 36 |
| **2013** | 8% | 1.50% | 123 |
| **2014** | 9% | 3% | 278 |
| **2015** | 10% | 6% | 617 |
| **2016** | 11.50% | 6% | 710 |

**Illinois' robust RES drives demand for solar power:**

- **700 MW by 2016**
- **Preference for Illinois-based projects**

# MAJOR PROBLEM: Structural complexity and retail switching have locked up the IPA's budget …



# Legislation needed to streamline RPS implementation.

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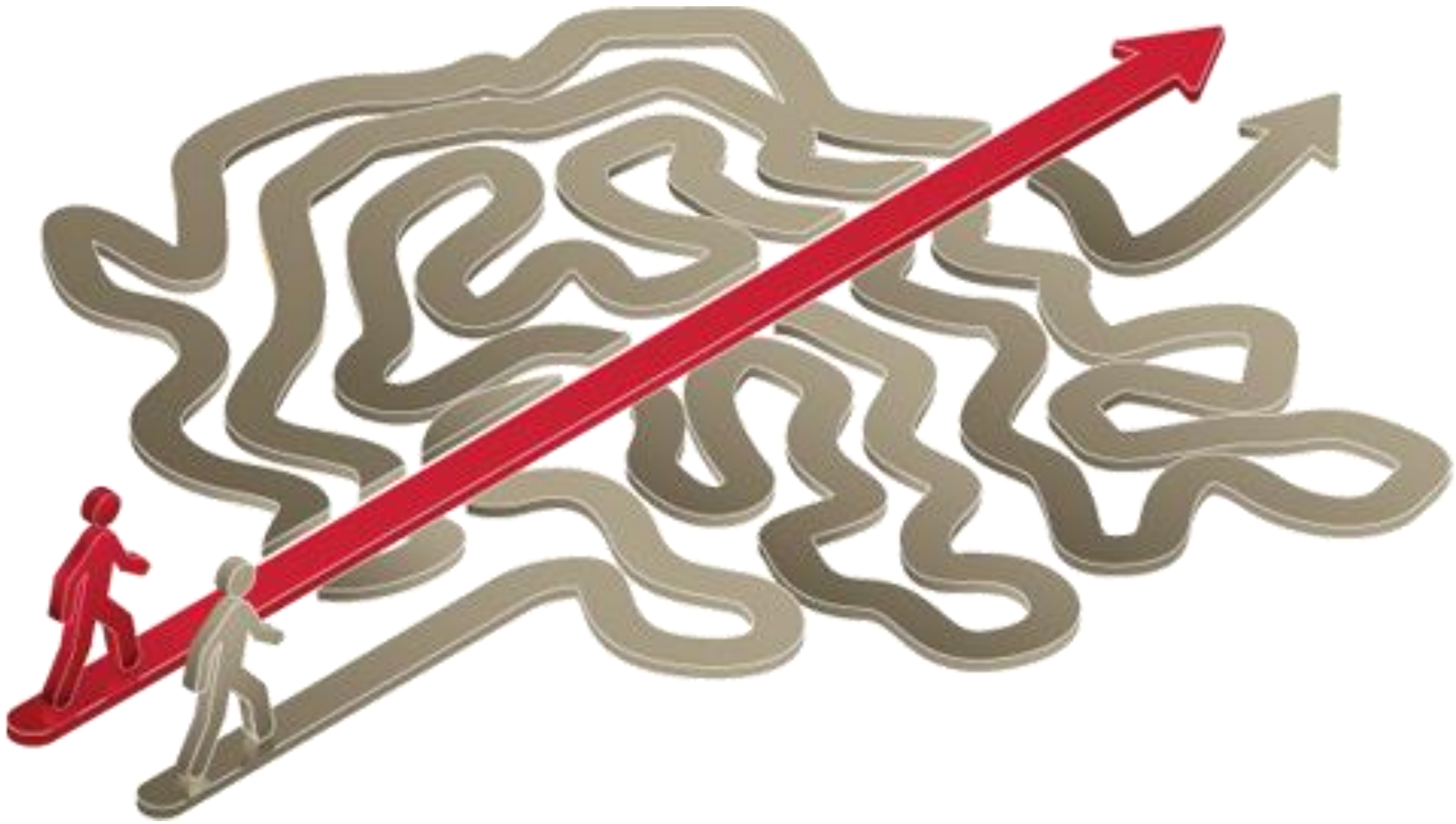

# "Advanced Metering Initiative" offers promise, if implemented well…

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- **EIMA requires customer benefits  of AMI investments (including greater access to DG) to exceed costs.**

- **ComEd and Ameren are tracking renewable energy metrics.**

- **More focus needed on DG implementation activities.**