

# Fall 2017 Midwest/Western LAMPAC

#### **Brian Wolff**

Executive Vice President, Public Policy and External Affairs

# Industry Priorities

- Comprehensive Tax Reform
- Infrastructure Investments
- Workforce Development



## **Industry Tax Reform Priorities**

- Preserve Interest Deductibility
- Preserve Deductibility for State and Local Taxes
  - Largely Property Taxes
- Retain Normalization
- Provide Excess Deferred Tax Transition Rule
- Maintain Low Dividend and Capital Gains Tax Rates and Rate Parity

## A Different Slant on Infrastructure

- Key elements of energy infrastructure projects:
  - Project ID & Funding
  - Siting and Permitting Process
  - Construction
  - Operations and Maintenance
- Near-term focus on process elements
- Meaningful improvements will require regulatory and legislative approaches

## **EEI's Perspective**

### Funding

 IOUs have access to private capital and securing financing for projects is fairly straightforward

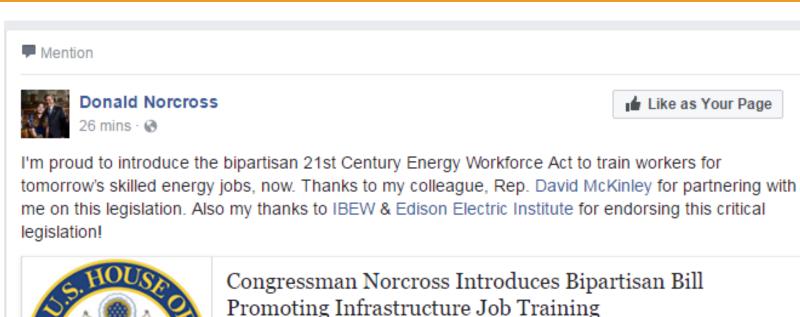
### Siting and Permitting Process

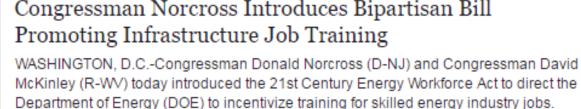
- Major challenges occur during siting and permitting phases
- Difficult to execute efficient environmental reviews and obtain timely authorizations
- Some infrastructure projects can take up to 10 years to permit or re-license

### Operations and Maintenance

 Difficult to obtain federal agency approvals for efficient and timely access to power line rights-of-way once project is complete; e.g. vegetation management to maintain reliability and reduce wildfire risk

## **Workforce Development**





NORCROSS.HOUSE.GOV

## **DOE Energy Grid Reliability Study**

#### Staff Report to the Secretary on Electricity Markets and Reliability



August 2017

## EEI STATEMENT ON THE U.S. DEPARTMENT OF ENERGY'S ENERGY GRID RELIABILITY STUDY

WASHINGTON (August 23, 2017) – Edison Electric Institute (EEI) President Tom Kuhn today issued the following statement on the U.S. Department of Energy's energy grid reliability study.

"EEI commends the U.S. Department of Energy (DOE) for undertaking this study to examine key factors that can enhance the resilience of the energy grid, our nation's most critical infrastructure.

"While we are still thoroughly reviewing the study, EEI has long advocated that our customers are best served by public policies that promote a balanced and diverse energy mix, which includes both traditional and renewable energy sources, and that also recognize the vital role 24/7 energy sources play in sustaining a secure, reliable, and resilient energy grid.

"We also believe it is important to value investments in more robust infrastructure, while maintaining a diverse energy mix that eliminates single points of failure. Whether to limit impacts from inevitable storms or natural events or to prepare for malicious cyber or physical attacks, supporting a resilient energy grid is an investment in national and economic security.

"As always, we look forward to working with DOE and the Administration to ensure the reliable delivery of electricity to all customers."



Dept. of Energy Issues Report on the Future of the Energy Grid

August 30, 2017

# IHS Markit Report: Ensuring Resilient and Efficient Electricity Generation



# Ensuring Resilient and Efficient Electricity Generation

The value of the current diverse US power supply portfolio September 2017



IHS MARKIT STUDY FINDS BALANCED ENERGY MIX IS ESSENTIAL TO PROVIDING RELIABLE AND AFFORDABLE ELECTRICITY TO CUSTOMERS



**Ensuring Resilient and Efficient Electricity Generation** 

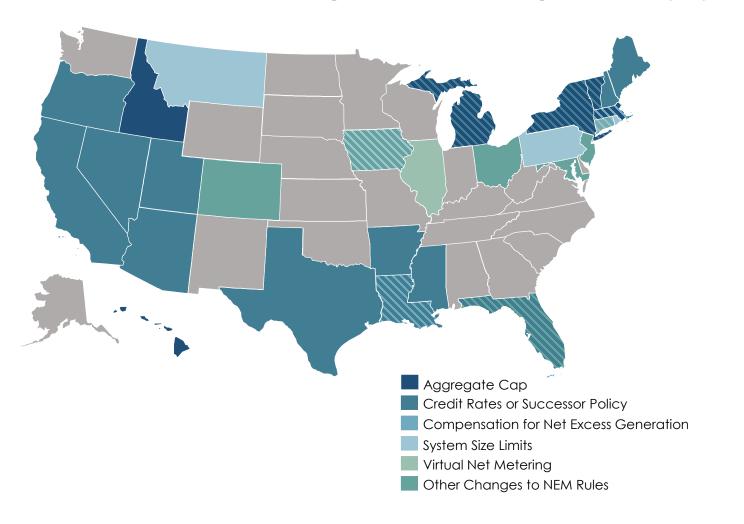
# State Activity

- Net EnergyMetering
- Smarter Energy Infrastructure
- Energy Storage
- SmartCommunities



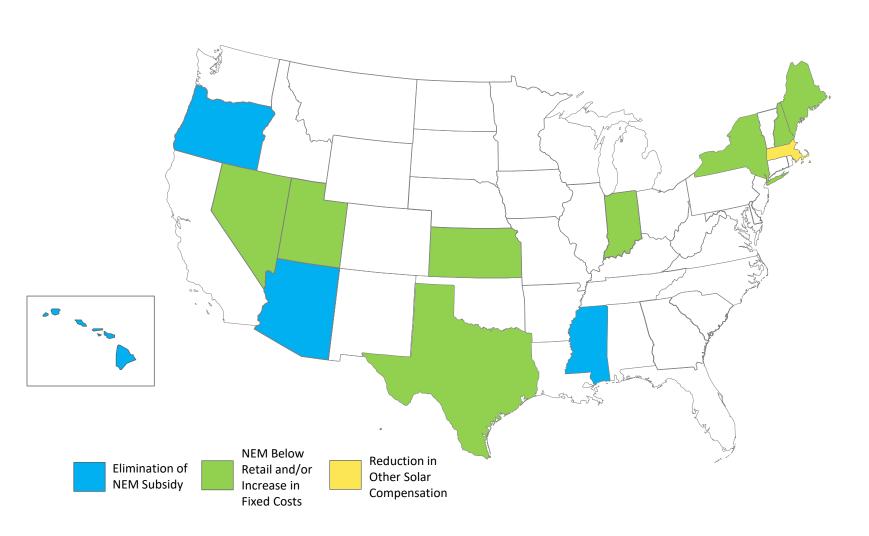
# **Net Energy Metering**

#### 2016 Proposed or Enacted Changes to Net Metering Policies by Type



# **Net Metering Action**

#### 2017 Changes to Solar and Net Metering (NEM) Compensation



## **Smarter Energy Infrastructure**

Businesses that support growing Missouri's economy through the MISSOURI ECONOMIC DEVELOPMENT AND INFRASTRUCTURE INVESTMENT ACT.

## IBEW Local 1439 Insulators Local 1

## IBEW Local 1455

**SB 190** 

The electric grid is the backbone of Missouri's economy and by working together we can spur economic development as we build a smarter, stronger energy grid for Missouri consumers!

That is why we support making minor adjustments to our energy regulations, but by making these small changes, Missouri can update 100 year-old policies in order to boost economic development, support Missouri's future energy needs, create jobs building the next generation of smart grid infrastructure, and keep energy costs stable and predictable.

Further, a minor policy adjustment can unlock \$1 billion of additional infrastructure investment over the next five years. These investments will create more than 3,000 jobs and provide consumers and Missouri businesses a host of benefits and efficiencies. These benefits include smart grid technologies to improve reliability and prevent some power outages, and investments to further protect the grid from physical and cyberattacks. In addition, updated policies will encourage cleaner and more renewable types of power, especially home-grown biomass; a fuel source which can boost the economy in rural Missouri.

Currently, SB 190, the Missouri Economic Development and Infrastructure Investment Act is consistent with this policy statement.

My company/association/organization supports this policy statement and by so doing, supports legislation that is consistent with this policy statement.



Energizing NJ'S FUTURE

Monmouth County
RELIABILITY PROJECT

New Jersey International Brotherhood of Electrical Workers Local Trade Unions Offer Joint Support for Jersey Central Power & Light's Monmouth County Reliability Project

By NEW JERSEY INTERNATIONAL BROTHERHOOD OF ELECTRICAL WORKERS LOCAL TRADE UNIONS

December 1, 2016

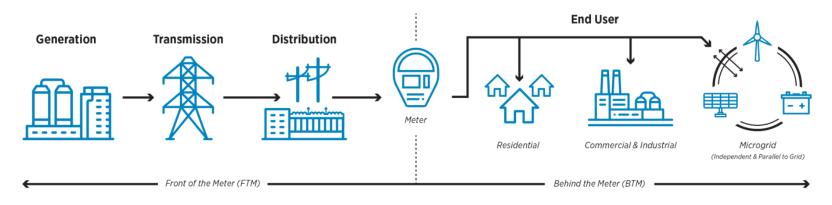
https://www.tapinto.net/articles/new-iersev-international-brotherhood-of-electrica-2

"The MCRP represents a significant investment in critical infrastructure to serve Monmouth County residents," said Joe Egan, IBEW Local 456 Business Manager. "We should all support projects that upgrade, modernize and grow our state's infrastructure. A robust electric system supports New Jersey's economy by ensuring that homes and businesses have the electricity they need when they need it."

"Infrastructure investment is vital to our entire state and cannot be overlooked or ignored," said Peterson. "Transmission projects of this nature exist throughout New Jersey and the entire country to deliver customers the services they expect and rely on."

# **Energy Storage: Why Now?**

Energy storage can be deployed in all parts of the energy grid, and has applications in all parts of the value chain.



### **Enhance Electric Company Operations**

- Alleviate high energy prices through time shifts
- Reduce the need for new generation

#### **Provide Grid Support**

- Regulate frequency
- Reduce spinning, non-spinning, and supplemental reserve requirements
- Voltage support
- Black start electricity restoration

### Optimize Power System

- Defer transmission and distribution upgrades
- Relieve electricity congestion

### Enhance Customer Experience

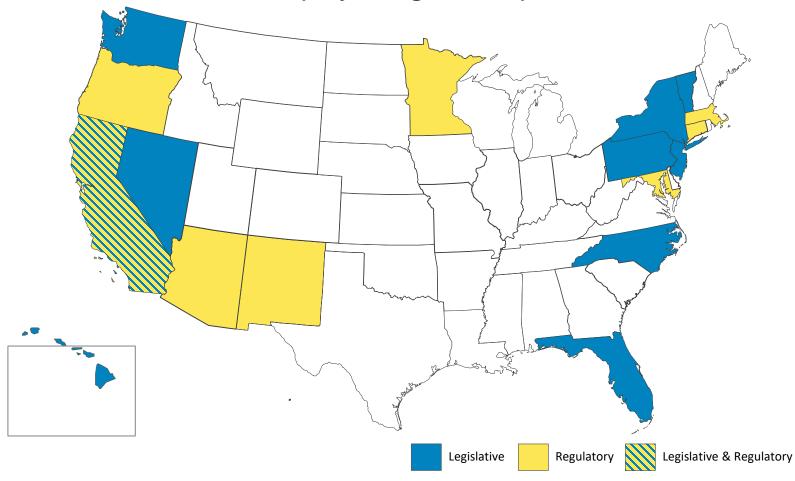
- Higher power quality and reliability
- Retail electric energy time shift

FERC REGULATED STATE REGULATED T&D

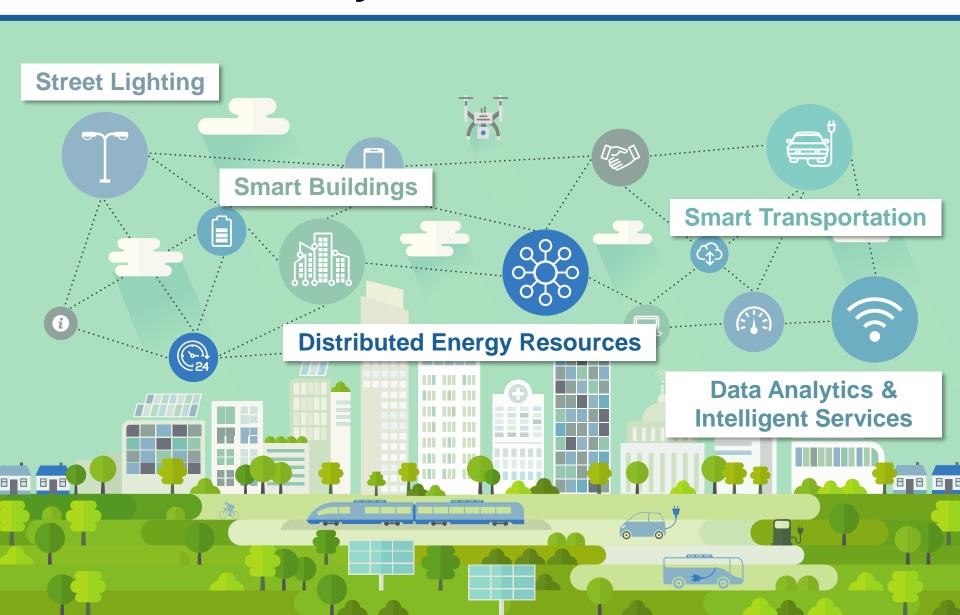
END USE

## **Energy Storage Proceedings**





# **Smart Communities Powered by Smart Connections**



# The Energy Grid Powers Smart City Technologies



#### **Street Lighting**

Smart street lighting helps cities save energy, lower costs, and reduce maintenance—all while better serving citizens and reducing carbon emissions. Networked street lighting built on a scalable platform can also help a city to reduce crime and to make parking lots and roadways safer through improved visibility.



## Distributed Energy Resources

Distributed solar and wind, small natural gas units, electric vehicles, energy storage, and energy management technologies—all connected by the energy grid—are helping cities to become more efficient and more sustainable.



## Smart Transportation

Smart transportation integrates electrification and digitization with existing city systems to improve safety, enhance mobility, and address climate change. This includes automated and electric vehicles, EV charging infrastructure, and technologies that improve traffic flow.



#### **Smart Buildings**

Smart buildings reduce energy waste and operational costs by measuring energy use, pinpointing problems, and increasing energy efficiency. This improves sustainability, reduces energy use, and helps create a better environment for occupants.



#### **Monitoring & Sensing**

Analyzing data generated by monitors and sensors enables cities to enhance their efficiency. Cities can monitor and manage everything from energy use, to air quality, to pedestrian safety, to traffic flows, and more. This integrates and connects a city's infrastructure and improves environmental sustainability.

## **Continued Collaboration**



#### FOR IMMEDIATE RELEASE

## IBEW and UWUA Workers Urge Passage of Nofs-Proos Energy Package Now is the time to pass comprehensive energy reform in Michigan

LANSING, MI, November 3, 2016 – The Michigan leaders of the International Brotherhood of Electrical Workers (IBEW) and the Utility Workers Union of America (UWUA) are among many state leaders calling on the Michigan legislature to support Senate Bills 437-438, sponsored by Senate Energy Committee chair and vice chair Senators Mike Nofs and John Proos.

"On behalf of our combined 25,000 members around the state, the UWUA and the IBEW urge Michigan legislators to pass these comprehensive energy updates to ensure reliability for Michigan workers and their families," said Dean Bradley, Business Manager of IBEW Local 17. "That is why we fully support quick passage of Senate Bills 437 and 438 in the Senate so the House can take them up before the end of the year. It is past time to update Michigan's energy policy."

PR Newswire

IBEW and UWUA Workers Urge Passage of Nofs-Proos Energy Package

Now is the time to pass comprehensive energy reform in Michigan

NEWS PROVIDED BY Utility Workers Union of America (UWUA) → Nov 03, 2016, 14:37 ET



#### Governor signs comprehensive energy plan

Posted on December 21, 2016

**LANSING, Mich.** — The Michigan Comprehensive Energy Plan legislation, sponsored by Sen. Mike Nofs and <u>Sen. John Proos</u>, was signed on Wednesday by Gov. Rick Snyder.

The legislation has been in the works for more than two years and updates key provisions of the state's current energy laws.

"I would like to thank everyone for their hard work to protect Michigan ratepayers, support jobs for hardworking Michigan families and ensure clean, safe and reliable electricity into the future," said Nofs, R-Battle Creek, chair of the Senate Energy and Technology Committee. "This package establishes a strong foundation for Michigan's next-generation energy policy.



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