Indiana’s Energy Transition

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Indiana’s Electricity Sector Is Undergoing Seismic Changes

- **Coal Retirements.** Utilities plan to retire/exit contracts for 8,400 MW of coal, about one-third of Indiana’s entire generation fleet, by 2028.

- **Large Renewables Poised for Boom.** Utility-scale solar and wind are poised to replace much of the retiring coal capacity.

- **Distributed Energy Resources (DERs) Are Falling Behind.** Unfavorable state policy currently in place is limiting the growth of distributed solar, energy efficiency, demand response, microgrids, and EV deployment.

- **Rising Rates.** Utility rates have increased much faster than in other states. Bill affordability is a huge concern.

- **The Climate Crisis.** State policy lags, but new federal regulatory action appears imminent.

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*Figure Source: “Powering Indiana’s Economic Future,” Indiana Chamber (November 2020)*
COVID-19 Crisis

- **Bill affordability crisis.** The economic crisis & public health creating unprecedented burden Hoosiers.

- **Utilities shutoff crisis.** Thousands of Hoosiers have been Utilities shutoff moratorium August 14.

- **Utility “Lost Revenues.”** IURC rejected utility request to bill for lost revenues due to COVID-
Recently Enacted Indiana Energy Laws

- **2013:** SEA 560 allowed utilities to recover billions in grid spending through bill surcharges (TDSIC)
- **2014:** SEA 340 repealed Indiana’s energy efficiency mandate. Industrial customers can “opt out” of participating
- **2015:** SEA 412 allowed utilities to recover decades of “lost revenues” from voluntary efficiency programs, making it artificially expensive to ratepayers
- **2017:** SEA 309 phases out net metering by July 2022 or sooner, reducing rooftop solar financial viability
- **2019:** HEA 1278 established the Energy Policy Task Force
- **2019:** HEA 1470 made it even easier for utilities to raise bill surcharges (TDSIC) to recover grid spending
- **2020:** HEA 1414 made it more difficult to retire Indiana coal plants

**HEA = House Enrolled Act; SEA = Senate Enrolled Act.**
Energy Efficiency: A Missed Opportunity

Figure 2. Energy Efficiency Savings as a Percent of Retail Sales

Energy Efficiency: I&M Example

- Indiana Office of Utility Consumer Counselor has settled with I&M in a case that would cut I&M’s Indiana energy efficiency savings levels in half for 2021 and 2022.
- Final Decision by IURC is pending.

**Figure 1: I&M (Indiana) DSM Savings by Year**
Bright Spot: Utility Integrated Resource Planning

- Utilities create plans (IRPs) every three years that show what resources they will use to meet forecasted capacity needs for the next 20 years.
- Requests for Proposals process resulted in utilities becoming better informed about the significant cost declines of solar, wind, and storage.
- New clean energy solutions are now more affordable for Hoosiers than continuing to run old coal plants, utility IRP modeling shows.
- Stakeholder participation, especially by consumer and environmental advocates, has played a critical role – and will going forward.

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NIPSCO to replace coal with 2.3 GW of solar, storage in latest RFP

Vectren Will Close Coal Units, Add Renewables

Hoosier Energy Announces the closings of the Merom Generating Station
Utility IRPs: Retire Coal; Build Renewables, Gas

Figures are 2021-2030 retirements and additions. NGCT = Natural Gas Combustion Turbine ("peaker" plants); NGCC = Natural Gas Combined Cycle. Wabash Valley’s IRP is from 2017; they next file in 2021.
Many of Indiana’s aging coal plants are no longer cost-effective compared to alternatives.

Coal generation has fallen from 90% in 2010 to 59% in 2019.

Indiana utilities are planning 8,400 MW of coal retirements this decade.

Advocates are challenging utilities’ ability to get cost recovery on running coal plants when they are not cost-effective.
Securitization as a Solution for Accelerating Coal Plant Retirements

- Securitization: ratepayers buying out the utility’s debt on a coal plant that is retired early through the issuance of a private bond.

- “Used as part of a comprehensive transition package, securitization can free up funds for clean energy projects while keeping utilities financially viable and reducing ratepayer costs.”

- Securitization requires the General Assembly to pass enabling legislation. It does not rely on any government subsidies.

$100 million securitization approved by Wisconsin regulators in 2020 is expected to save customers $40 million.
Securitization as a Solution for Accelerating Coal Plant Retirements

- Ratepayers pay the bondholders back through a non-bypassable (unavoidable) bill surcharge.
- **Customer bills are reduced** because interest on the bond (e.g., 3%) is far below the utility’s authorized return on equity (9-10%).

Coal Ash Remains a Threat

- Indiana leads nation in coal ash impoundments.
- Utility data show all but one coal ash site in Indiana has contaminated nearby groundwater.
- Utilities have strenuously resisted excavating coal ash at most of these sites and using safer disposal options instead.
- Coal ash excavation and removal is expensive. “Who pays?” – utility shareholders or ratepayers – is a big question.

The Coming Solar Boom in Indiana

- **8,500+ MW** of solar is being planned by Indiana utilities this decade, a 1,781% increase.

- **24,500+ MW** of solar located in Indiana are in PJM and MISO active interconnection queues.

- **Policy changes** are needed to grow customer-owned solar.

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**Solar Additions Planned, 2021-2030**

- **NIPSCO**
- **Indiana Michigan Power**
- **Vectren Indiana**
- **Duke Energy Indiana**
- **Hoosier Energy**
- **IPL**
- **IMPA**
- **Wabash Valley**
“Pollinator-Friendly” Solar Could Provide Additional Benefits to Indiana

Photo Credit: Rob Davis, Center for Pollinators in Energy at Fresh Energy
“Pollinator-Friendly” Solar Could Provide Additional Benefits to Indiana

- EQ Research’s 2020 report with Center for Pollinators in Energy at Fresh Energy
- Highlights the economic, environmental, and social benefits of creating pollinator habitat at large solar facility sites
- Provides model and example ordinances, state scorecards, and RFP provision

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<thead>
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</tr>
<tr>
<td></td>
<td>Potential Increased Efficiency of Solar Panels</td>
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<tr>
<td></td>
<td>Increased Crop Yield</td>
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<td></td>
<td>Maintaining Future Agricultural Viability</td>
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<td>Honey Production</td>
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<td>Improved Water Quality</td>
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<td>Reduced Erosion</td>
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<td>Habitat for Native Species</td>
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<td>Improved Aesthetics</td>
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<td>Greater Community Support</td>
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Download a complementary copy of the report at: https://eq-research.com/publications/
Wind Energy

Figure 29. Growth in installed wind capacity in Indiana (cumulative MW)


Sources: “Powering Indiana’s Economic Future,” Indiana Chamber (November 2020); AWEA
Key Issues for Utility-Scale Renewables

- **Siting uncertainty.**
  - 34 counties have restrictive local ordinances for wind facilities.
  - County-by-county zoning ordinances

- **Property Tax assessment variation.**
  - Local assessment rates for real property vary by county from $5,000 to $20,000 per acre

- **Transmission Planning.**
  - Transmission planning across the Midwest region needed to bring renewable generation to population centers

Sources: Presentation by Sean Brady to the 21st Century Energy Policy Development Task Force, Clean Grid Alliance (October 15, 2020); Presentation by Katya Samoteskul to the Task Force, Invenergy (October 15, 2020)
Regional and National Context

- **Indiana’s Neighbors**
  - MI becoming a regional leader in clean energy transition policy
  - IL & OH embroiled in major utility-legislature-regulatory corruption scandals
  - OH one of the most renewables-hostile policy environments in the nation

- **Broader Region**
  - Coal retirements; large-scale renewables growth
  - Transmission & interconnection have been major renewables barriers

- **President-Elect Biden could bring significant federal changes:**
  - Climate policy, pollution regulations, renewables policy
  - FERC appointees could reshape transmission, wholesale markets

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Thank you!

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