2018 Indiana Renewables Study & 2018 Forecast Update

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Historical Renewable Energy in the U.S.

Source: EIA
2017 U.S. Energy Consumption by Source

Source: EIA
2017 U.S. Electricity Generation by Energy Source

Source: EIA
Renewables Share of Indiana Total Energy Consumption

Source: EIA
Renewables Share of Indiana Electricity Generation

Source: EIA
Wind Capacity

Sources: IURC, EIA
Organic Waste Biomass

• Until the recent increase in ethanol production, this resource was the largest source of renewable energy in Indiana
  – Now third behind biofuels and wind

• It is the 2\textsuperscript{nd} largest source of renewable electricity generation in the state
  – Landfill gas (79 MW)
  – Animal waste biogas (20 MW)
  – Wastewater treatment (195 kW)
Photovoltaics

- As of June, there was an estimated 254 MW of PV capacity in Indiana, almost all of it installed in the last six years
- Continued growth of utility scale PV is indicated
- Currently filed utility Integrated Resource Plans include over 2,000 MW of future PV additions
Hydroelectric Power

• Until expansion of wind energy beginning in 2008, hydroelectricity was the largest source of renewable electricity in Indiana
  – Now third behind wind and biomass

• The 88 MW project at the Cannelton Locks on the Ohio River was completed in 2016
  – Most of the output goes to utilities outside Indiana
2018 Forecast Update

• Our 2017 forecast was released in December
• We have developed an update this year that reflects more recent projections of future economic activity, population and fossil fuel prices
  – Also changed the corporate tax rate to reflect new tax law
Forecast Results

• Long-term electricity sales are expected to grow more slowly than in last year’s forecast
  – 0.88% per year vs. 1.12%

• Sales to the residential and commercial sectors are slightly higher

• Sales to the industrial sector do not grow as fast as in the 2017 forecast
  – lower natural gas prices
Future Resource Needs

• Slower load growth means fewer additional resources needed in the future
  – New resources are indicated to be needed by 2023
Future Prices

• As in the 2017 forecast, real (inflation-adjusted) prices are projected to increase in the next few years, then level off

• The price forecast is somewhat lower than previously projected
  – About 0.7 cents/kWh lower in the long term
Further Information

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