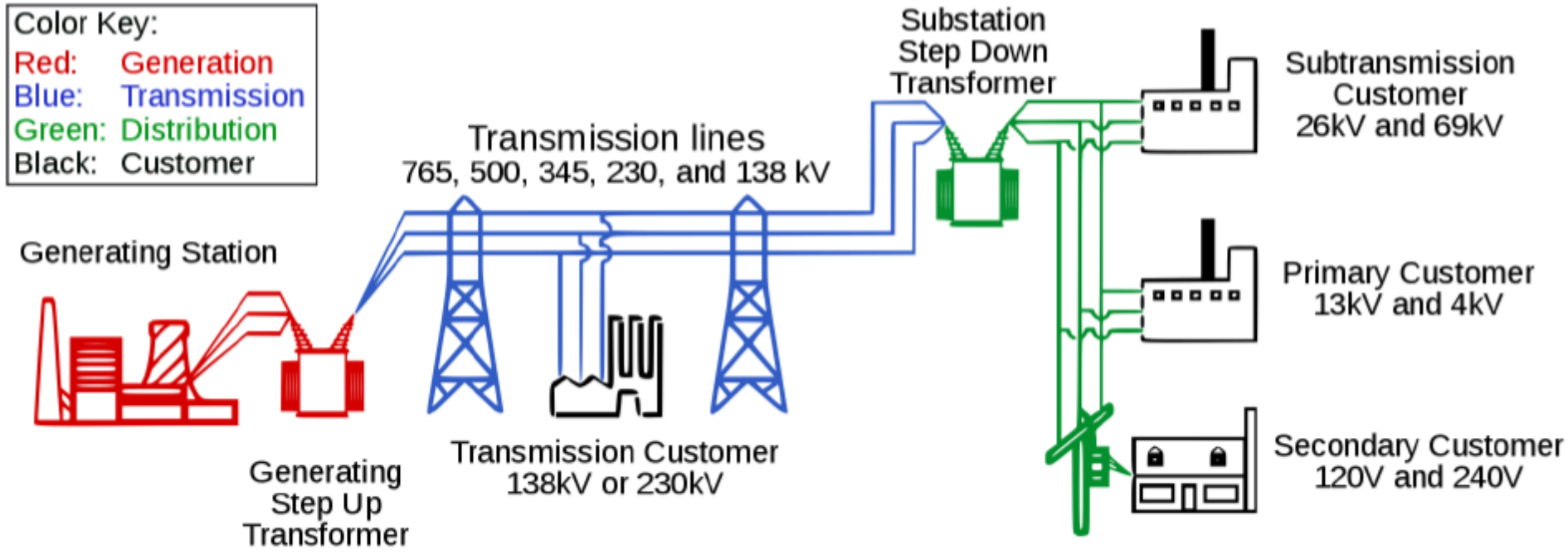
Indiana's Electric System Overview

Ryan Hadley

Director of Policy & Government Relations

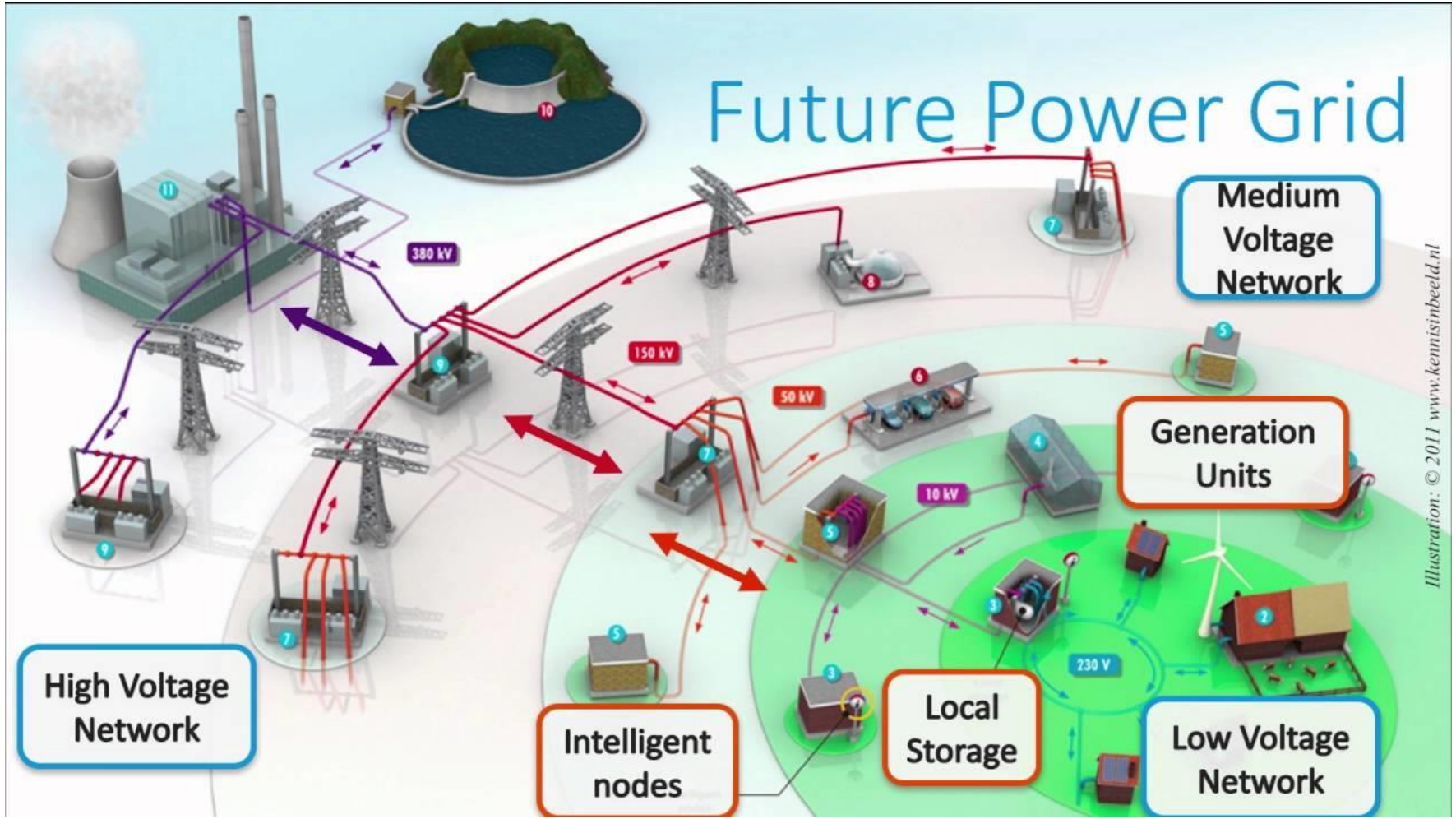
INDIANA ELECTRIC COOPERATIVES

Electric System Overview



INDIANA ELECTRIC COOPERATIVES

The Electric System Overview Today



INDIANA ELECTRIC COOPERATIVES

Regional Transmission Organizations

Regional Transmission Organizations

PLANNING

Planning for the future like...

OPERATIONS

Matches supply with demand like...

MARKETS

Energy Market Pricing like...

INDIANA ELECTRIC COOPERATIVES

Types of Electric Utilities

- **Investor-owned Utilities (IOUs)**
  - 5 IOUs operate in Indiana.
  - All are fully regulated by the IURC.
- **Rural Electric Membership Cooperatives (REMCs)**
  - 38 distribution REMCs operate in Indiana.
  - Hoosier Energy & Wabash Valley Power Alliance are generation and transmission companies that supply power to the distribution REMCs.
  - All REMCs have withdrawn from IURC statutory authority over rates and charges, as allowed by Indiana law.
- **Municipally owned electric utilities**
  - 71 municipally owned electric utilities operate in Indiana.
  - Indiana Municipal Power Agency (IMPA) provides generation and transmission services to 61 municipally owned electric utilities.
  - All but 6 have withdrawn from the IURC statutory authority over rates and charges, as allowed by Indiana law.

Indiana Energy Policy

- Indiana has embraced an all-of-the-above approach to energy, including:
  - Coal
  - Natural gas
  - Nuclear
  - Wind
  - Solar
- Diversification has benefits.
  - Reduces risk
  - Provides flexibility
- Every resource has its pros and cons, which is why they are complementary to one another.
- Drawing energy from multiple energy sources and suppliers also helps protect the state from service disruptions when one source or supplier is unable to meet demand.

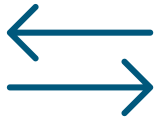
The Five Pillars

RELIABILITY

Reliability consists of two fundamental concepts—adequacy and operating reliability.

RESILIENCY

Resilience is the ability of a system or its components to adapt to changing conditions, and to withstand and rapidly recover from disruptions.



STABILITY

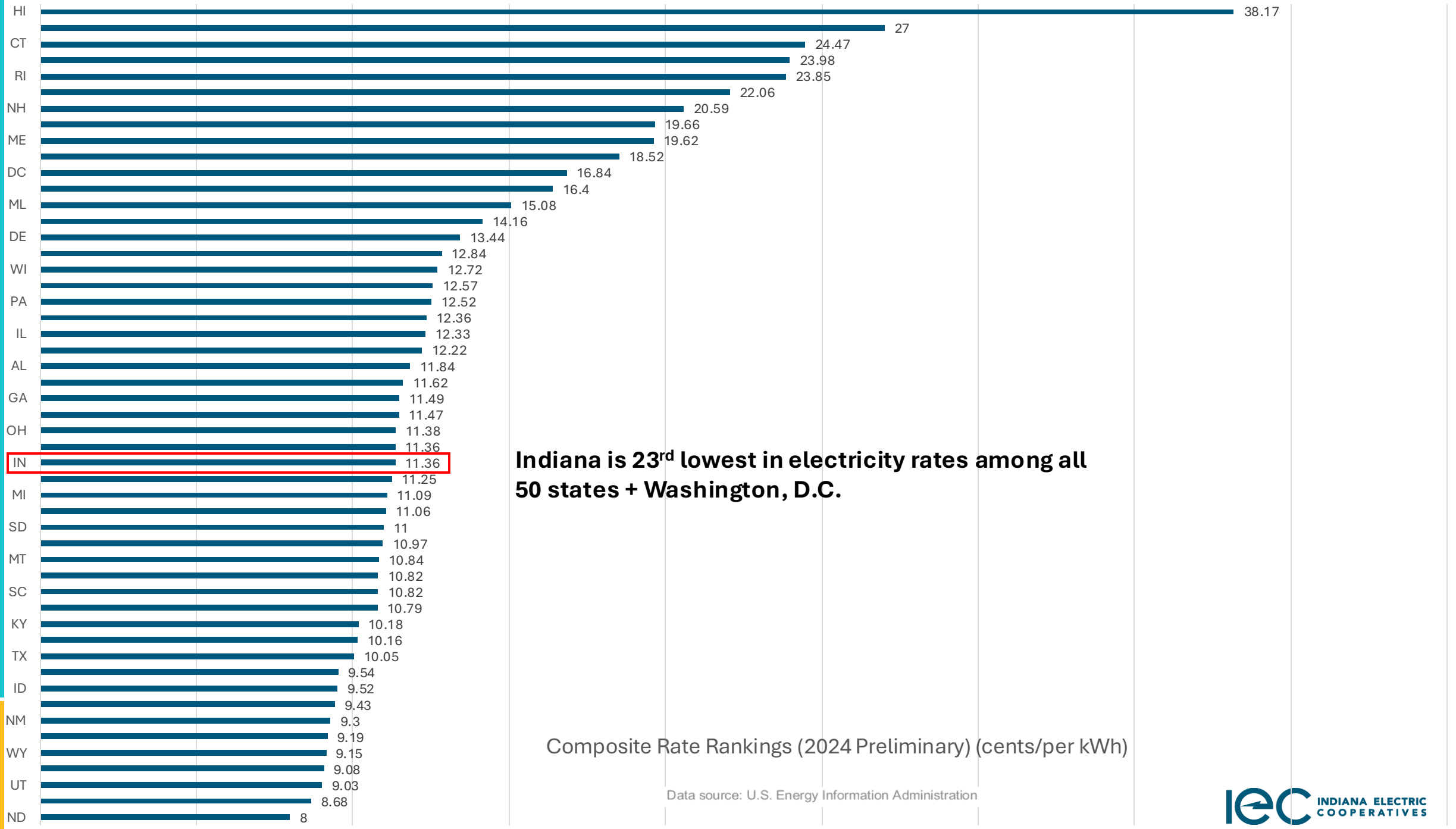
Stability refers to the ability of an electric system to maintain a state of equilibrium during normal and abnormal conditions or disturbances

AFFORDABILITY

Decisions regarding Indiana's generation resource mix must result in retail electric service that is affordable across all customer classes

SUSTAINABILITY

Decisions regarding Indiana's generation resource mix must take into account both environmental regulations and consumers' demands



Indiana is 23rd lowest in electricity rates among all 50 states + Washington, D.C.

Composite Rate Rankings (2024 Preliminary) (cents/per kWh)

Data source: U.S. Energy Information Administration

INDIANA ELECTRIC COOPERATIVES

Integrated Resource Plans (IRPs)

- Integrated resource planning is a process to structure thinking about resource commitments in a very uncertain environment.
- IRPs are illustrative, not definitive, planning documents. They can and should change every cycle.
- Optionality and flexibility are key: the plan should provide off-ramps to give utilities maximum optionality to adjust to inevitable changing and make appropriate and timely course corrections to alter their resource portfolios.
- All eight Generation & Transmission utilities must conduct an IRP once every three years.

Generation Types

Baseload

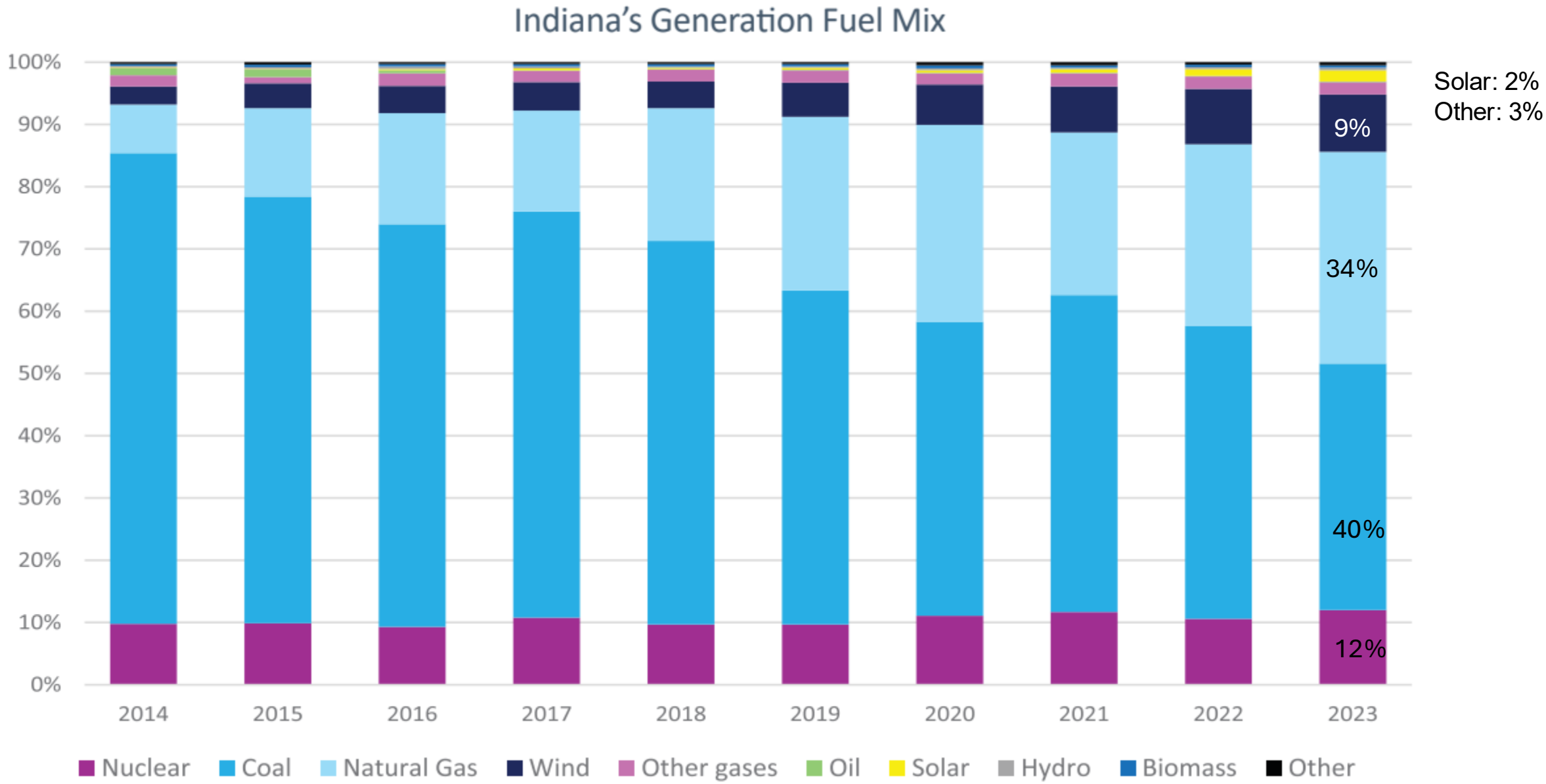
- Available 24/7/365.
- Does not easily ramp, operate best under consistent conditions.
- Sources: nuclear, combined cycle natural gas, coal, hydropower.

Peaker

- Ramp quickly to meet demand.
- Targeted for peak demand and only operate on occasion.
- Sources: combustion turbine natural gas, battery storage.

Intermittent

- Low-cost, but weather dependent.
- Little to no environmental compliance issues.
- Sources: wind, solar.



Solar: 2%
Other: 3%

Source: Indiana Utility Regulatory Commission

INDIANA ELECTRIC COOPERATIVES

Thank you!

Contact Information:
Ryan Hadley
Email: RHadley@IndianaEC.org
Phone: +1 (317) 512-9896

INDIANA ELECTRIC COOPERATIVES