2018 Midwest Energy Solutions Conference

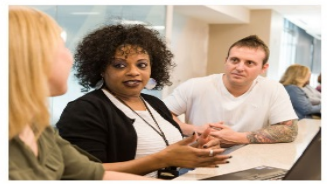
Planning Your Energy Future?
Let EE Be Your Guide

Presented by Victoria Vrab

February 21, 2019

NIPSCO®

NiSource®



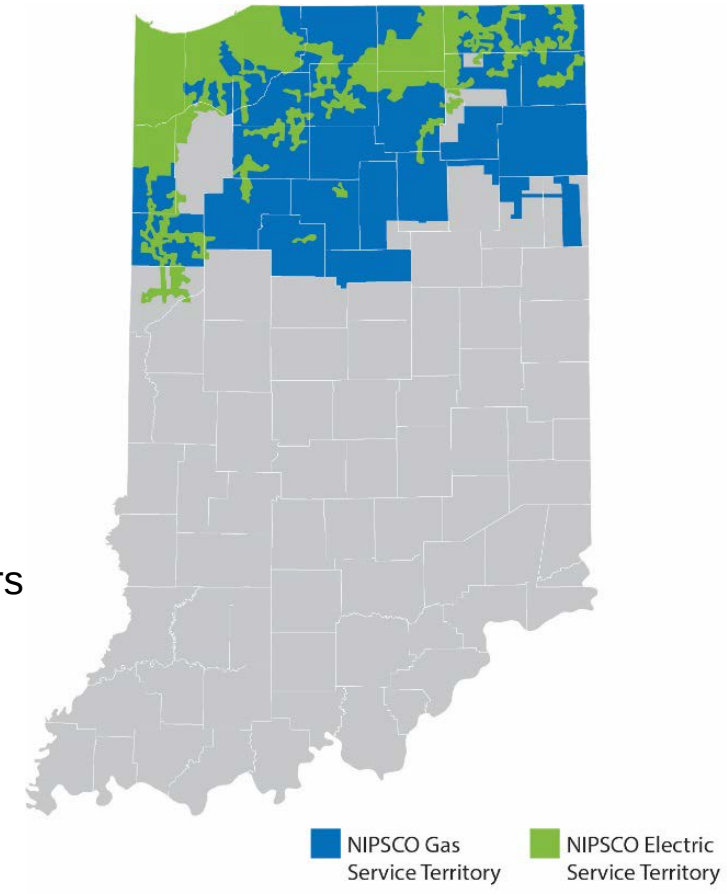
Overview of NIPSCO

Electric

- 468,000 electric customers in 20 counties
- ~2,900 MW generating capacity
  - Operates 5 electric generating facilities (2 coal, 1 natural gas, 2 hydro)
  - Additional 100 MW of wind purchased power
- 12,800 miles of transmission and distribution
  - Interconnect with 5 major utilities (3 Midcontinent Independent System Operator (“MISO”); 2 PJM)
  - Serves 2 network customers and other independent power producers

Gas

- 819,000 natural gas customers in 32 counties
- 17,000 miles of transmission and distribution lines
- Interconnections with 7 major interstate pipelines
- 2 on-system storage facilities



2,900
Employees

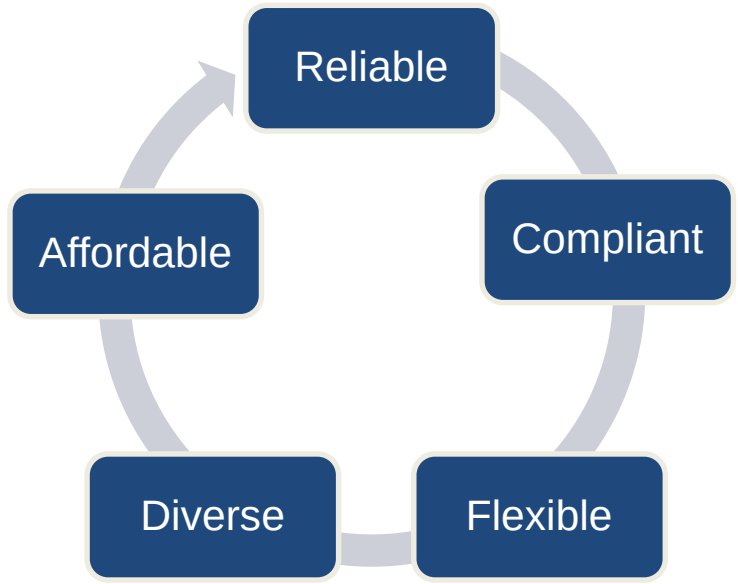
Merrillville, IN
Headquarters

How Does NIPSCO Plan for the Future?

Charting The Long-Term Course for Electric Generation

About the IRP Process

- Every three years, NIPSCO outlines its long-term plan to supply electricity to customers over the next 20 years
- This study – known as an Integrated Resource Plan (“IRP”) – is required of all electric utilities in Indiana
- IRP process includes extensive analysis of a range of generation scenarios, with criteria such as reliable, affordable, compliant, diverse and flexible
- The IRP is submitted to the Indiana Utility Regulatory Commission which solicits comments on the Plan, but it is not approved by the Commission



Requires Careful Planning and Consideration for:

- NIPSCO’s employees
- Environmental regulations
- Changes in the local economy (property tax, supplier spend, employee base)

Overview of Public Advisory Process

- Stakeholder input was critical to the process
  - NIPSCO held 5 meetings and one technical webinar
- The Public Advisory Process provided NIPSCO with feedback on its assumptions and sources of data and helps inform the modeling process
  - It also served as a “check” on the modeling process as results are received
  - This improved the Integrated Resource Plan and its results
- Candid and on-going feedback was key to the process
  - Allowed time for stakeholder presentations, which were given by the NAACP, Sierra Club, Hoosier Environmental Council, Indiana DG, vendors and other interested parties
- In addition, the Indiana Utility Regulatory Commission hosts an annual Contemporary Issues Forum to discuss broad policy issues related to the development of IRPs
  - The agenda of the technical conference shall be set by the commission staff
  - Utilities and interested parties may request commission staff include specific contemporary issues and presenters

NIPSCO Energy Efficiency

- Promoting energy efficiency is good for customers, it can play an important role in helping ensure that we can meet future energy needs. NIPSCO offers a variety of programs to help residential and business customers save energy. The programs are tailored to customers and designed to help ensure energy savings.
- Since 2010, NIPSCO customers have saved more than 1 million megawatt hours of electricity and 31 million therms of gas by participating in the range of energy efficiency programs offered by NIPSCO.
- Technologies continue to change, and it’s important that we constantly evaluate our offerings. We regularly track and report on program performance, which helps to inform and improve future program filings and customer offerings.

DSM Modeling

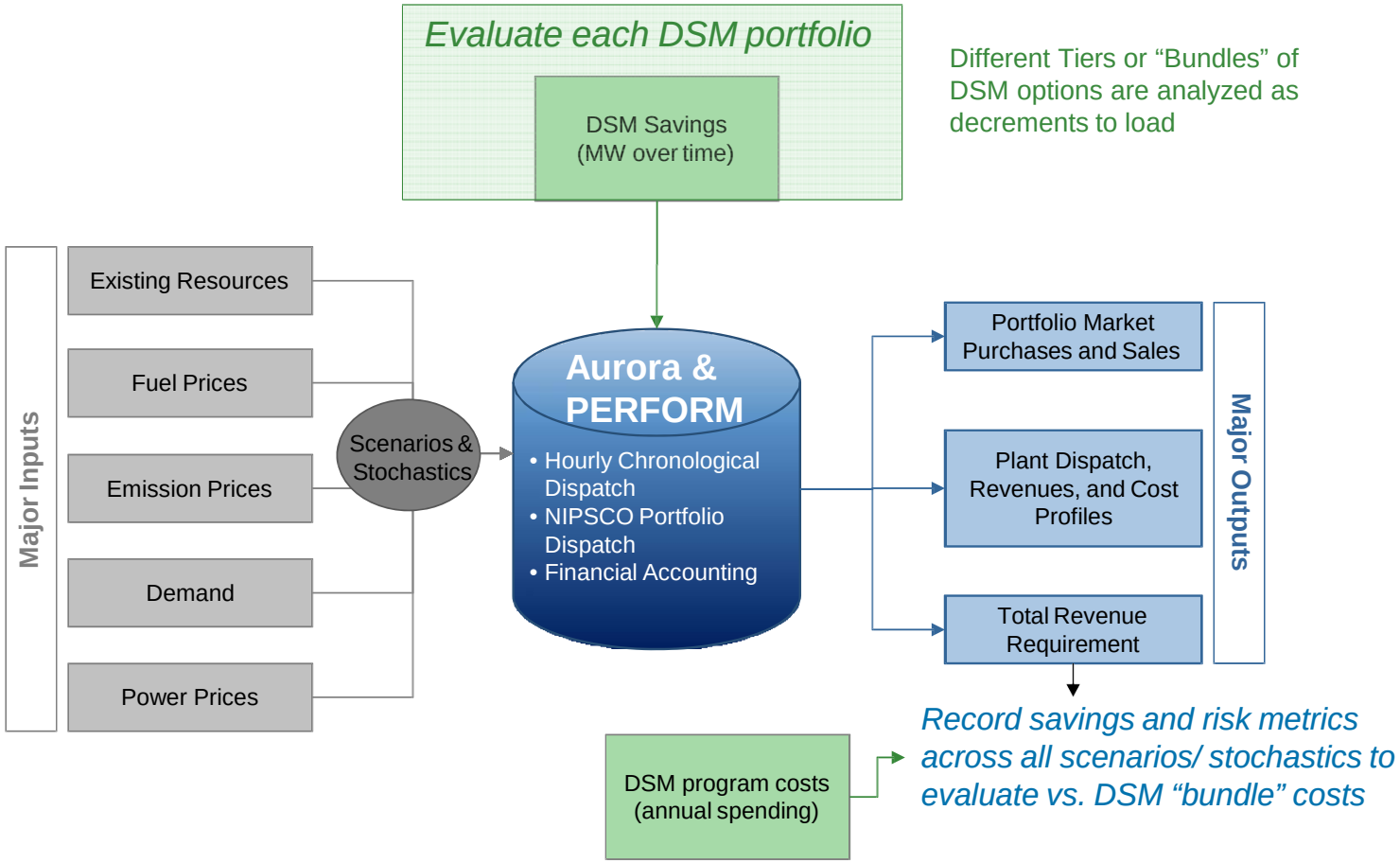
Step 1	Step 2	Step 3
DSM Analysis	Identify DSM “bundles” or decrements	Analyze *each* “bundle” across *all* scenarios and full stochastic range
• Evaluate detailed program-level opportunities in service territory (DSM Savings Update) • Identify program impacts and associated costs	• Aggregate detailed DSM measures into “bundles” of measures that reflect energy savings potential at varying levels of measure costs per lifetime kWh saved • Produce bundles with detailed energy savings characteristics and costs	• Run each DSM “bundle” or decrement in IRP models against other resource options • Record savings, risks, environmental metrics • Assess vs. costs to identify the preferred DSM plan to be integrated into portfolio

DSM Bundles

For purposes of modeling energy efficiency programs in NIPSCO's 2018 IRP, GDS grouped DSM Plan energy efficiency measures into bundles according to each measure's cost of saved energy over its measure life. The following three bundle categories were created:

Bundle 1	Measures with a utility incentive cost ranging from $.00 to $.01 per lifetime kWh saved
Bundle 2	Measures with a utility incentive cost ranging from $.011 to $.05 per lifetime kWh saved
Bundle 3	Measures with a utility incentive cost over $.05 per lifetime kWh saved

DSM Modeling in IRP



NIPSCO Supply Resource Plan And Timing

Timing	Near Term 2018 – 2020	Mid Term 2021 – 2023	Long Term 2024 – 2037
NIPSCO Activity Description	• Initiate retirement process of Schahfer Units 14,15,17,18 • Identify and begin implementation of required reliability and transmission upgrades • Select initial replacement projects identified from the 2018 RFP evaluation process, prioritizing resources that have expiring federal tax incentives to achieve customer savings • Actively monitor technology and market trends and evolution	• Fully implement required reliability upgrades • Actively monitor technology and market trends, and continue engagement with project developers and asset owners to understand landscape • Conduct subsequent RFP to identify preferred resources to fill the remainder of the 2023 capacity need; procure replacement resources • Implement Schahfer coal retirement with a focus on interests of customers, employees and local communities	• Monitor market and industry development and refine future IRPs
Retirements	• None	• Schahfer Units14/15/17/18 (2023)	• Michigan City Unit 12 (2028)
Expected Capacity Additions	~150-200MW (UCAP)	~1,100-1,150MW (UCAP)	~400MW (UCAP)
NIPSCO's Preferred Replacement Plan	• Demand Side Management • PPA / Market purchases • Primarily Wind	• Demand Side Management • Wind/Solar/Storage • Market Purchases	• Demand Side Management • Wind/Solar/Storage • Market Purchases
Expected Regulatory Filings	• Approvals for replacement capacity projects	• Approvals for replacement capacity projects • DSM Plan for 2022- 2025 (file in late 2020)	• Approvals for replacement capacity projects

Your Energy, Your Future Initiative

We envision a brighter future for Northern Indiana in three key ways: by focusing on the long-term strength of our local economy; delivering the best cost, most balanced and reliable energy our customers need; and reducing emissions to improve our environment.

Customer Benefits	Economic Benefits	Environmental Benefits
More than $4 Billion in Customer Cost Savings	5-10 Years Transitioning to Lower Cost Renewable Energy	90% Lower Cost Emissions by 2028

Thank you!