



Dominion Energy
Virginia and North Carolina
2024 Integrated Resource Plan (IRP)

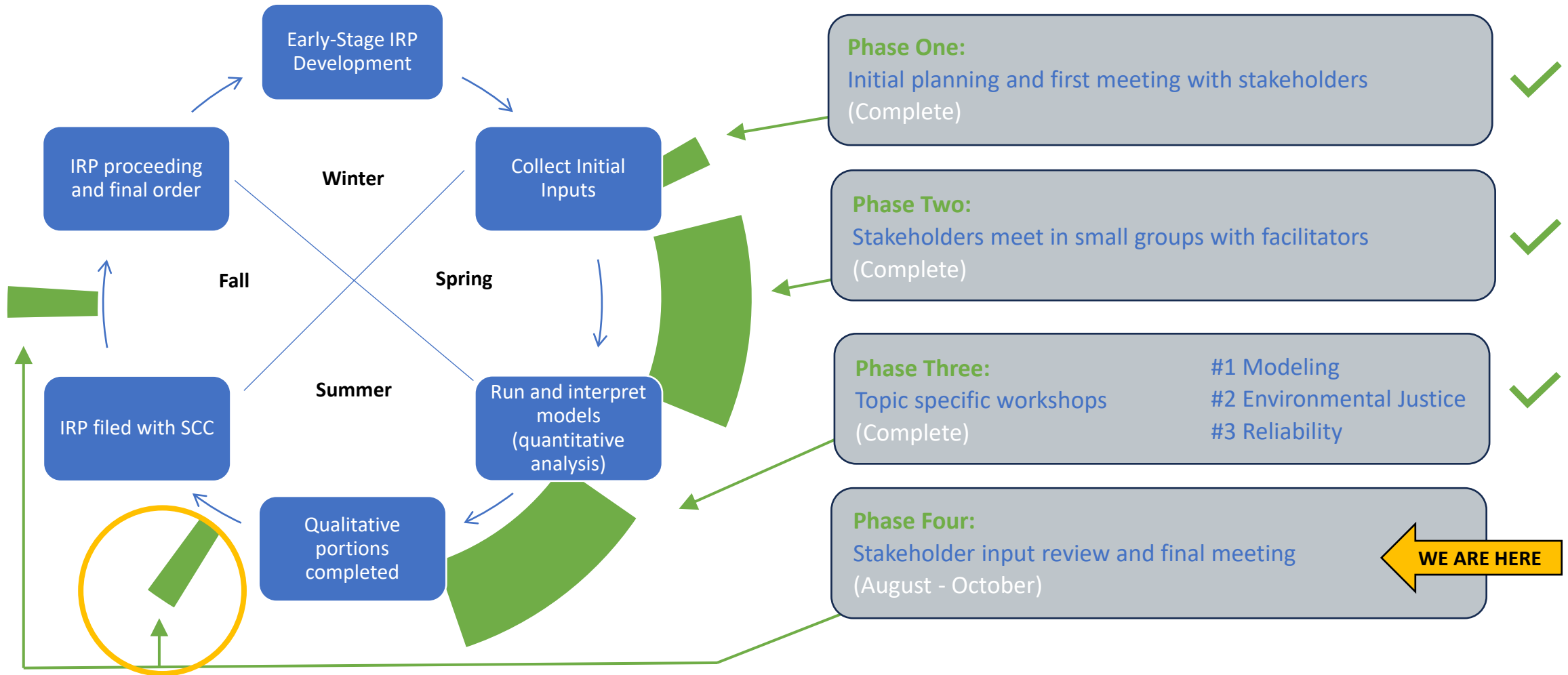
Phase 4

**Report Out: Review of Collective
Stakeholder Input and
Recommendations**

August 23, 2024



IRP Stakeholder Process: Status Update



Modeling

Quantitative information
will be summarized and
attributed to
Stakeholder Input

IRP Document

Summary of the
Stakeholder Process

Qualitative information
will be attributed to
Stakeholder Input

Reference to the
Stakeholder Process
Website

IRP Appendix

Provides an overview of
the stakeholder process
as well as a summary of
feedback received

Topics:

1. Modeling
2. Environmental Justice
3. Reliability
4. Feedback for Future Stakeholder Processes

Please note that information in this presentation is subject to change when the IRP is filed on October 15, 2024.

Topic 1: Modeling: Key Metrics 2023 vs. 2024



| Key Metrics | 2023 IRP | 2024 IRP |
|--|----------|-----------------------|
| PJM Dom Zone Load Coincident Peak Forecast Growth Rate | 4.5% | 4.9% |
| PJM-Derived Dom LSE Coincident Peak Forecast Growth Rate (Preliminary) | 3.0% | 2.8% |
| 3-year average Solar Capacity Factor | 22.2% | 21.2% |
| Environmental Rules | RGGI | New EPA Rules |
| Energy Imports | 5,200 MW | Transmission Study |
| PJM ELCC – Fixed-Tilt Solar | 37% | 9% declining to 3% |
| PJM ELCC – Tracking Solar | 55% | 14% declining to 4% |
| PJM ELCC – 4 hr Storage | 82% | 59% declining to 38% |
| PJM ELCC – Offshore Wind | 43% | 60% declining to 20% |
| PJM ELCC – Nuclear | N/A* | 95% declining to 93% |
| PJM ELCC – Gas CC | N/A* | 79% increasing to 82% |
| PJM ELCC – Gas CT | N/A* | 62% increasing to 78% |

Topic 1: Modeling: Technologies Considered



| Resource | Unit Type | Dispatchable | Primary Fuel |
|--|----------------------------|--------------|--------------|
| Solar – Utility Scale | Intermittent | No | Sun |
| Solar – Distributed | Intermittent | No | Sun |
| Wind – Onshore | Intermittent | No | Wind |
| Wind – Offshore | Intermittent | No | Wind |
| Pumped Storage | Peaking | Yes | Water |
| Battery (4 hr) | Peaking | Yes | Lithium Ion |
| Nuclear SMR | Baseload | Yes | Uranium |
| Combined Cycle (incl. 3x1, 2x1, 1x1) | Intermediate / Baseload | Yes | Natural Gas |
| Combustion Turbine (incl. Advanced Class and Aero-derivative) | Peaking | Yes | Natural Gas |
| Fuel Cell | Baseload | Yes | Natural Gas |

| Environmental Regulations | 2024 IRP Considerations |
|--|---|
| Section 111 (b) of Clean Air Act | Limit capacity factors for new gas units: 40% (Advanced-Class CTs and 2x1 CCs), 20% or less (F-Class CTs) |
| Section 111 (d) of Clean Air Act | Assume conversion to 100% gas* |
| Mercury & Air Toxics Standard (MATS) | Compliance costs included in EPA Environmental Regulation Scenarios |
| Effluent Limit Guidelines (ELG) | Compliance costs included in EPA Environmental Regulation Scenarios |
| Ozone NAAQs Federal Implementation Plan (FIP) "Good Neighbor Rule" | The US Supreme Court granted a request for a stay on June 27, 2024. |

Topic 1: Modeling: Build Plan Overview



| Scenario | 1 | 2 | 3 | 4 | 5 |
|---------------------------------|--|---|--|---|---|
| Description | Least Cost with EPA Environmental Regs | Least Cost without EPA Environmental Regs | Least Cost with EPA Environmental Regs | VCEA-Compliant with EPA Environmental Regs | VCEA-Compliant without EPA Environmental Regs |
| Meets RPS Program Requirement? | Yes | Yes | Yes | Yes | Yes |
| Forced VCEA Development Targets | No | No | No | Yes | Yes |
| Retirements | Least Cost Optimized with Reliability Consideration | Least Cost Optimized with Reliability Consideration | Least Cost Optimized with <u>Retirement</u> Considerations | Least Cost Optimized with Reliability Consideration | Least Cost Optimized with Reliability Consideration |
| REC Purchases | 30% | 30% | 30% | 30% | 30% |
| Load Forecast | PJM* | PJM* | PJM* | PJM* | PJM* |
| Capacity Purchases | PJM CETL | PJM CETL | PJM CETL | PJM CETL | PJM CETL |
| Energy Imports | Transmission Study | Transmission Study | Transmission Study | Transmission Study | Transmission Study |
| Planning Horizon | 15 years | 15 years | 15 years | 15 years | 15 years |
| Renewable Utility/PPA | Model Optimized | Model Optimized | Model Optimized | 65/35* | 65/35* |
| Energy Efficiency | Aligned with goals established in SCC's pending target setting proceeding; Beyond 2028 based on proposed targets with reasonable increase based on savings potential | | | | |

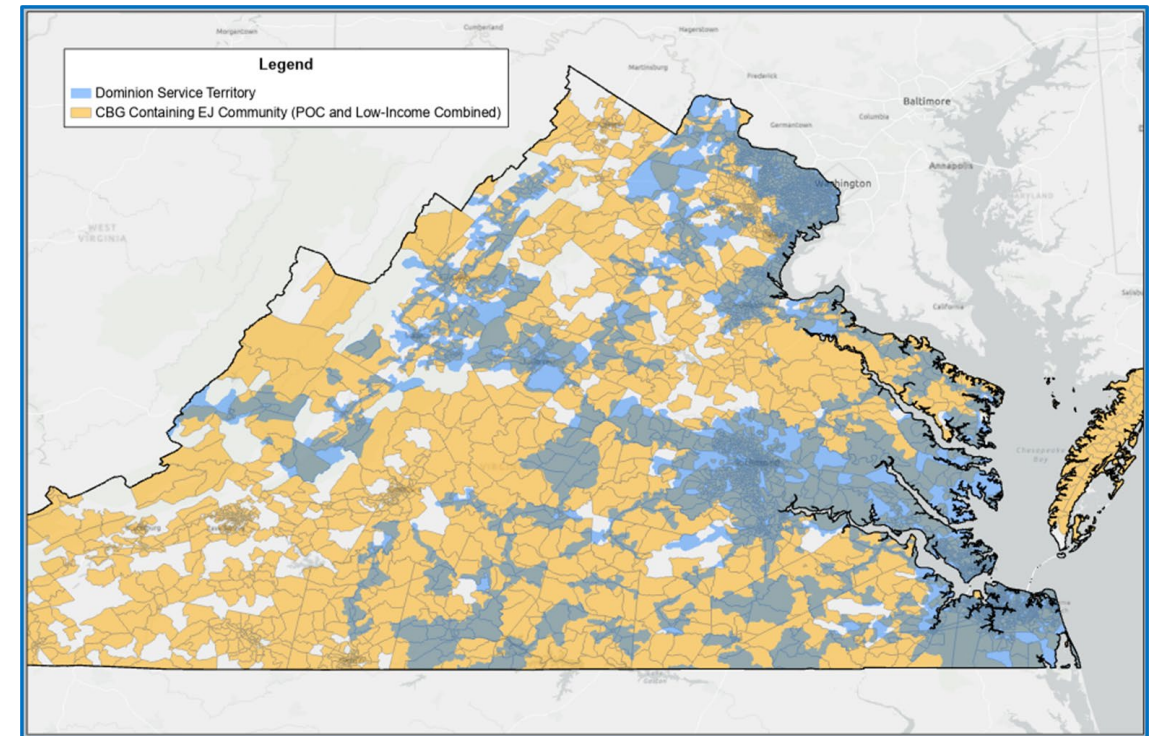
Topic 1: Modeling: Sensitivities



| Factors | Sensitivity |
|-------------------------|--|
| High Load Forecast | Increase data centers (example) 5%, 10%, 20% |
| Low Load Forecast | Decrease data centers (example) 5%, 10%, 20% |
| Company Load Forecast | Yes |
| High Fuel | Includes high energy, capacity, RECs |
| Low Fuel | Includes low energy, capacity, RECs |
| High Construction Costs | +10% |
| Low Construction Costs | -10% |
| Non-Normal Weather | Yes |

- Description of Dominion Energy's EJ Process
- More information on how EJ is generally considered from the Company's perspective
- A generic evaluation of potential environmental impacts relative to different types of power generation facilities
 - Renewable and other
 - Table for comparison
- Dominion Energy's Virginia EJ Act Map
- Section on Just Transition

Dominion Energy's Map of VA EJ Communities



This map represents a preliminary analysis, created on behalf of Dominion Energy. This map is not provided by or endorsed by the Commonwealth of Virginia.

Examples of the spectrum of current GETs application in use across the Dominion Energy Virginia footprint.



Aluminum Conductor Steel Supported (ACSS)



Fixed Series Capacitor Bank



STATCOM

The electric grid is experiencing a rapid transformation both in terms of the unprecedented growth it must meet and the challenges that come with a changing generation portfolio to more renewable resources. **Grid-enhancing Technologies (GETs)** play a part in delivering on Dominion Energy's commitment to meeting our customers' energy needs and enable more clean energy.