



Coastal Virginia
Offshore Wind

NC Towers

**Coastal Virginia
Offshore Wind
Update**

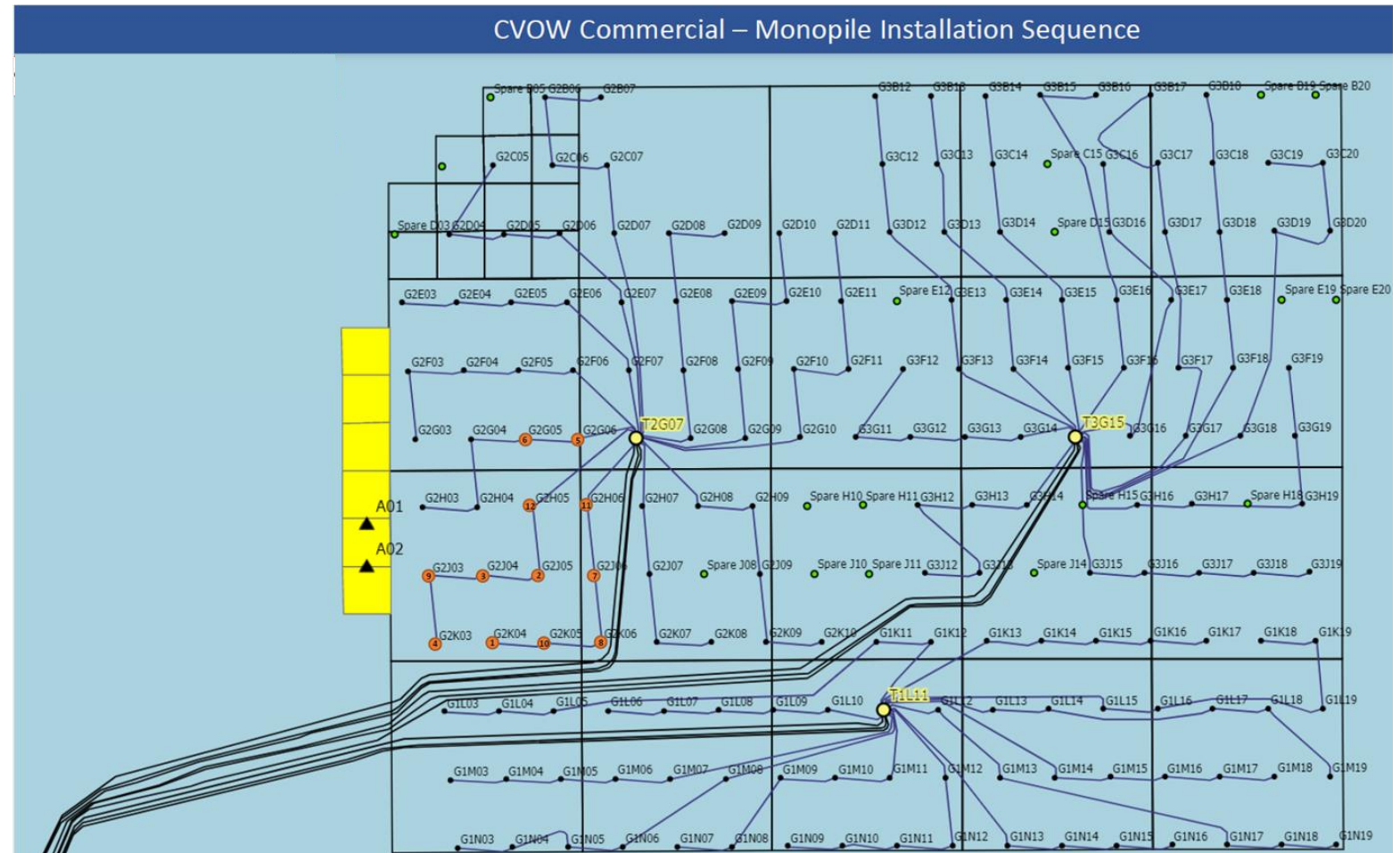
February 1, 2024

Safety Moment



Largest East Coast Utility Project In Construction

- Builds on success of the two-test turbine pilot project
- Located just east of the pilot project
- 27 to 42 miles offshore in a lease area equal to 85,000 football fields
- 176 X 14.7 MW turbines
- 2.6 GW total capacity
- Power up to 660,000 homes



Many Accomplishments, More Objectives Ahead



✓ Nov. 2013	113,000-acre leasehold acquired via auction for \$1.7 M
✓ Sep. 2019	2.6GW full-scale deployment announced
✓ Dec. 2020	Construction & Operation Plan submitted to BOEM for 2.6GW
✓ May 2021	Foreign currency hedge strategy executed
✓ July 2021	Notice of Intent issued (BOEM)
✓ Nov 2021	Virginia OSW rider application submitted
✓ Dec 2021	Major contracts executed with SGRE, DEME, Bladt, Semco, EEW
✓ Aug./Dec. 2022	Regulated cost-of-service rider approved by VA SCC
✓ Oct. 2023	Record of Decision issued (BOEM)
✓ Jan. 2024	Construction and Operations Plan (BOEM)
2023/2024	Commence onshore/offshore construction
End of 2026	Construction completion

Constructing CVOW With Experienced Partners

Wind Turbine
Generators

Monopiles

Transition Pieces

Offshore Substations

Transport & install

SIEMENS Gamesa
RENEWABLE ENERGY

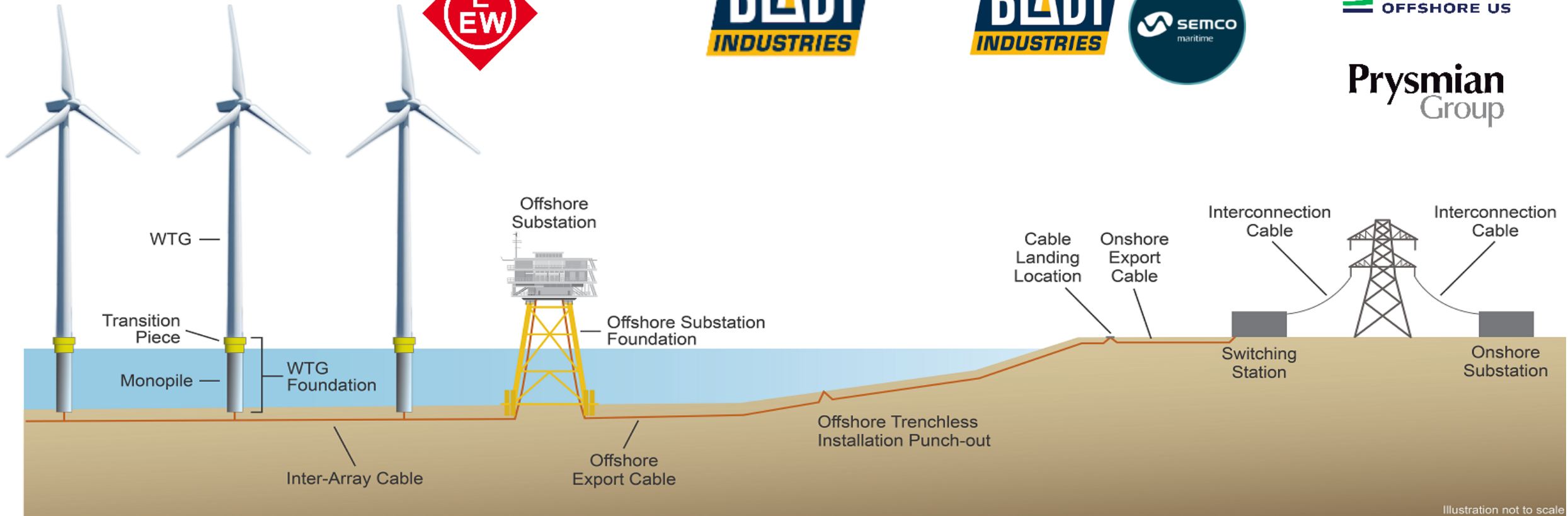


Illustration not to scale

First Monopile Arriving at Portsmouth Marine Terminal

Two week voyage from Rostock,
Germany to Portsmouth, Virginia

8 hours to unload each monopile

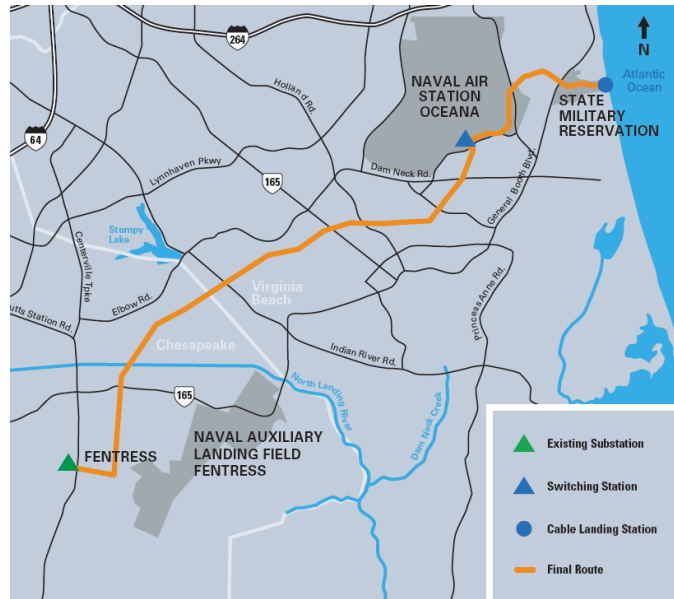


Up to 272 feet long, almost the size
of a football field (90 yards)

31 feet in diameter, about the
length of a school bus.

Average weight nearly 1,500 tons,
which is more than 6 Boeing 747s

Onshore Transmission Route



State Military Reservation Activity



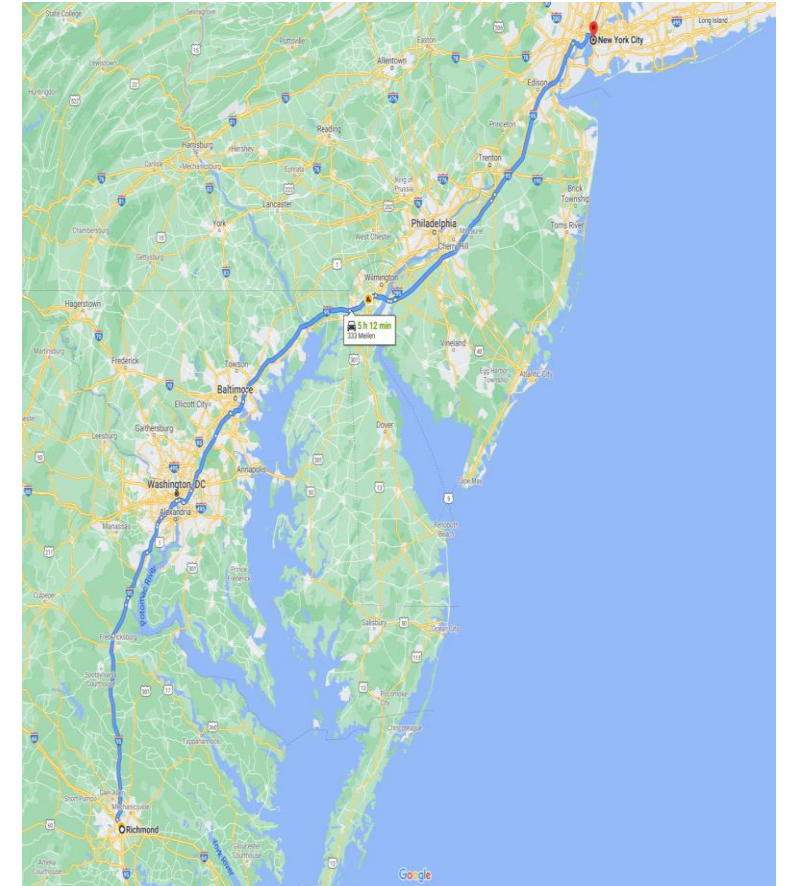
Fabricating A Transition Piece



First Offshore Export Cable Fabrication Completed



Export Cables - 365 miles
Distance from Richmond to NYC on I-95



Each of one of the 9 Export Cables will have one splice

Cables are 11.5 inches in diameter

Buried 3-16 feet deep

4,000 Ton Offshore Substations Are the Heaviest Project Lift

HVAC units for each substation



Preassembled of OSS #2



Transporting OSS #2 from Seville, Spain to Aalborg, Denmark



- Atlantic Surfclam pre-construction resource characterization completed June 2023; data analysis being completed by VIMS
- Black Seabass fishery pre-construction resource characterization and monitoring began June 2023; sampling will continue for 24 months
- Whelk fishery pre-construction resource characterization and monitoring to begin in early December 2023; sampling will continue for 18 months

The Vision: An Offshore Wind Industry Cluster





Endeavor, Dominion Energy's Crew Transfer Vessel

- 2 Crew Transfer Vessel
- Operating Crew (total): 8
- Resource shuttles



“Walk to Work” concept for Service Operations Vessels

- 1 Service Operations Vessel
- Operating Crew: 25
- 2-week deployments



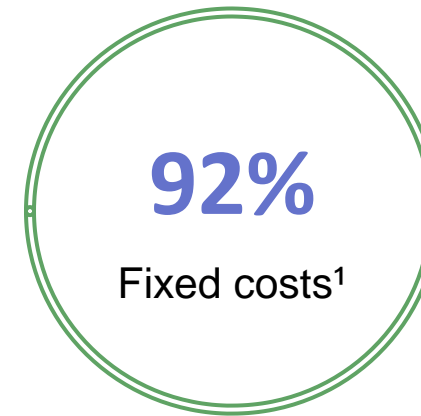
“Charybdis” 1st Jones Act compliant offshore wind turbine installation vessel

- Constructed by Dominion Energy Inc.
- Supporting U.S wind industry
- Operating Crew: 70

\$155 Million US Spend	939 Current US Staffing Level
\$136 Million VA Spend	760 Current VA Staffing Level
527 Current Local Staffing Level	

Port of Virginia Upgrades

- Approximately 100 subcontractors/vendors/suppliers for a total of \$109,849,078 dollars committed/spent.
- \$60,648,531 which is about 55% of the dollars have gone local Hampton Road Businesses.
- \$91,831,255 which is about 83% of the dollars have gone to Virginia based businesses.
- \$18,563,850 which is about 17% of the dollars have gone to Out of State businesses.
- 68% diverse workers and 73% Virginia workers



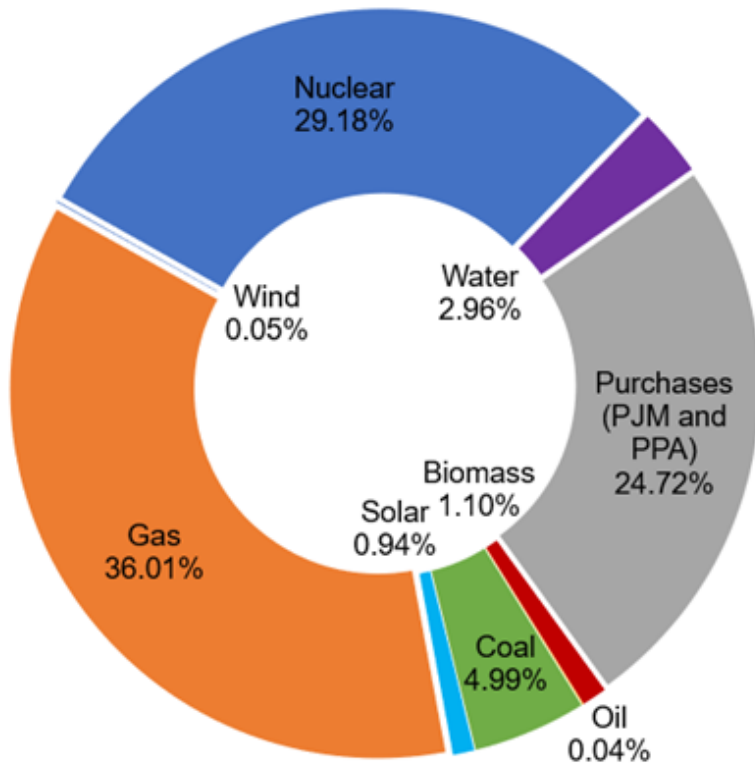
- 2.6 GW capacity; regulated utility offshore wind generation resource
- Est. installed cost of **\$9.8B** (including onshore transmission) (no change)
- Est. lifetime capacity factor 43.3% (gross) / 42.0% (net) (no change)
- **Est. LCOE of \$77/MWh with application of PTCs**

¹ Fixed costs as percentage of total project costs, excluding contingency

Forecasted 85% Demand Growth Over the Next 15 Years is Leading to Frequent New Seasonal Peaks

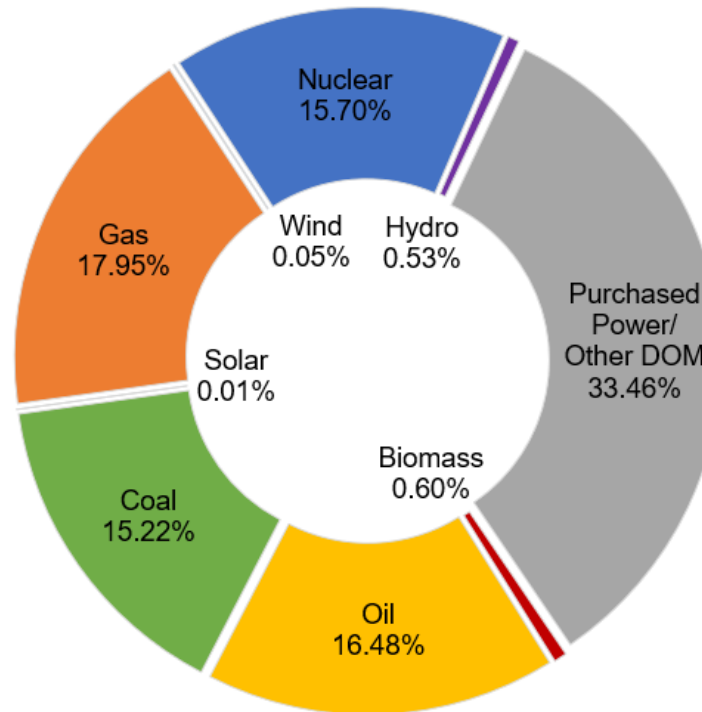
Annualized

2023 Generation Mix



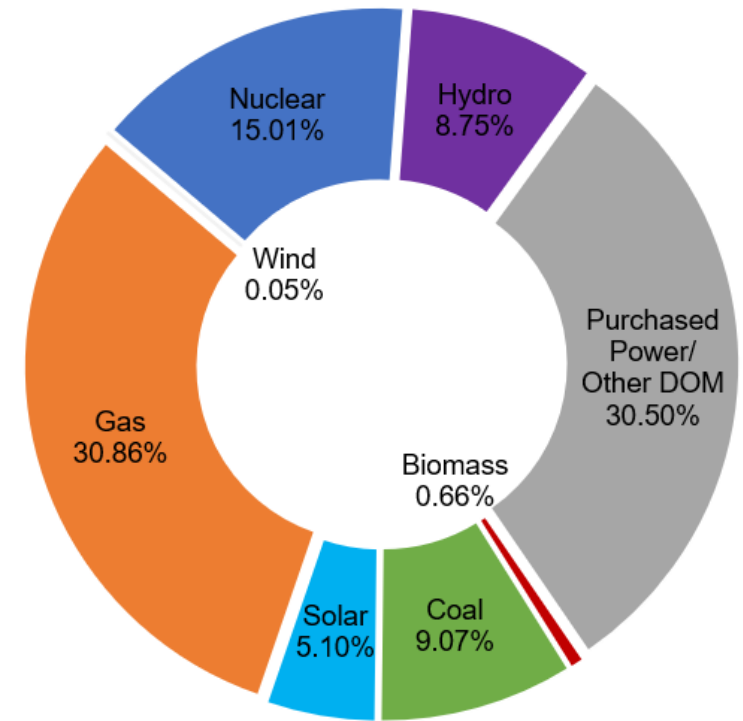
Seasonal Peaks

December 24 (a.m.) Generation Mix



22,219 MW

July 28 (p.m.) Generation Mix

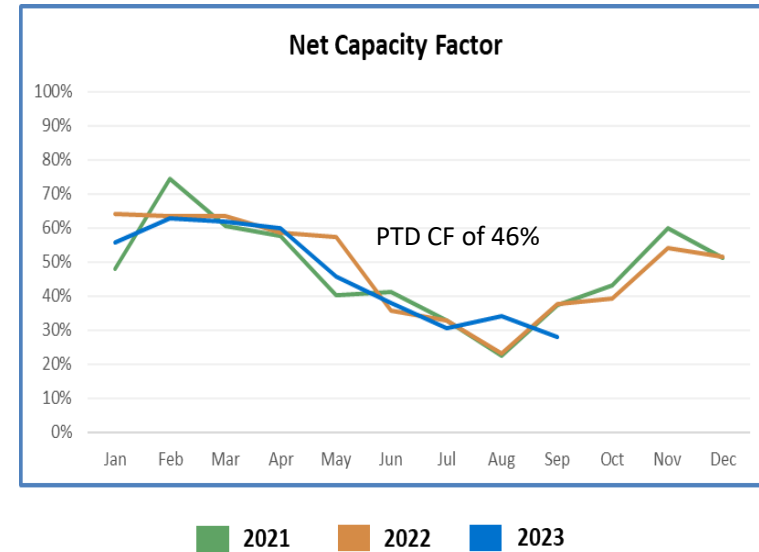
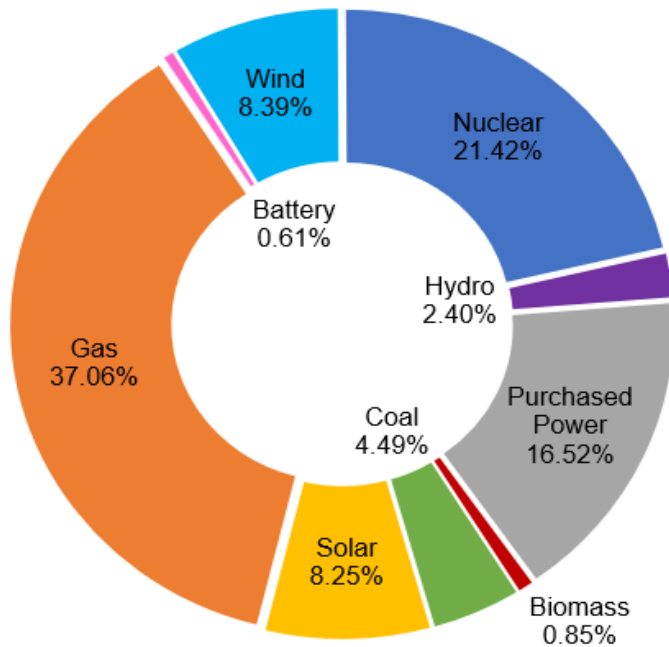


21,993 MW

“All of The Above Approach” and The Untold Benefits of Offshore Wind

Passed in 2020, the VCEA calls for 5,200 MW of wind, 16,100 MW of Solar and 2,700 MW BES by 2035

2030 Generation Mix (Alternative Plan B)



- Estimated \$3 billion of fuel savings in first decade of operations
- Winter storms are windy offshore and support meeting peak demand
- Winter storms create costly fuel bills
- Fuel price spikes can be mitigated in a predictable manner

Questions, Discussion and Shared Insights

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