



Highlights from the Union of Concerned Scientists report:

- **Enhanced Winter Reliability:** Offshore wind projects can significantly improve the reliability of the New England power grid during winter months. Offshore wind output typically increases during cold snaps, when demand for electricity is highest, helping to stabilize the grid and reduce the risk of energy shortfalls.
- **Reliability Impact at Different Capacities:** The analysis modeled three offshore wind capacity scenarios (1,500 MW, 4,000 MW, and 8,000 MW):
  - A 1,500 MW capacity (equivalent to Vineyard Wind and Revolution Wind projects) would reduce winter blackout risk by 42%.
  - A 4,000 MW capacity would reduce blackout risk by 82%.
  - An 8,000 MW capacity would nearly eliminate winter energy shortfall risks.
- **Cost Savings for Ratepayers:** Offshore wind can lower the need for expensive fossil-fuel-based emergency power generation, reducing reliance on costly oil and gas during cold spells. This helps avoid ratepayer costs linked to alternative solutions like the Mystic Cost of Service Agreement, which cost New England ratepayers \$755 million over two years.
- **Mitigating Energy Shortfall Risks:** Offshore wind reduces the need for oil and natural gas during extreme cold weather, helping to avoid energy shortfalls. The analysis shows that the addition of large offshore wind capacity could lower the number of high-risk days significantly, preventing blackouts or the need for rotating outages.
- **Local and Stable Power Supply:** Offshore wind offers a locally generated, renewable energy source that is not subject to the global market volatility that affects natural gas and oil prices. This stable and locally controlled energy source can replenish itself during consecutive cold snaps, providing continuous protection for the grid.

These points highlight the reliability, cost-saving potential, and strategic importance of integrating offshore wind energy into New England's power systems.

