

Bates White Study

Well-respected, independent national consulting firm based in D.C. (worked for NJ BPU regarding the Exelon-PSEG merger)

OYSTER CREEK GENERATING STATION

- Started construction December 1964; grid connection in September 1969 and commercial operations December 1969.
- 636 MW round-the-clock reliable energy (baseload)
- 600,000 homes
- 6% of New Jersey's electricity
- 20% of Jersey Central Power and Light Electric needs

Summary of Impacts:

1. Oyster Creek's Annual Economic Impacts on the State of New Jersey

Direct economic benefit of reduced wholesale electricity prices:	
State of New Jersey, \$ millions	\$190
PJM East region, \$ millions	\$655
Direct economic impacts of plant expenditures on State of New Jersey:	
Full-time, non-security employment	475
Annual direct injections to the State economy, \$ millions	\$ 96
Expenditure impacts on New Jersey, including multiplier effects:	
Total State employment	636
Total State impact, \$ millions	\$129

2. Reliability Impact

- a. Benefits from improved system reliability – Oyster Creek provides critical support for regional electric reliability – i.e., maintenance of uninterrupted electric service and prevention of transmission network overloads. The independent system operator, PJM, has determined that the retirement of Oyster Creek would result in significant transmission overloads, particularly in combination with the scheduled retirement of other New Jersey power plants. PJM estimates at least \$100 million in transmission upgrades would be required to address the retirement of Oyster Creek. This estimate does not include the costs of obtaining new rights of way. Nor did the analysis address the substantial challenges involved in making such upgrades, such as the time required to conduct environmental impact assessments, obtain state and local construction permits, and overcome potential local opposition.

3. Environmental Impact

- a. As a result, replacing the energy produced by Oyster Creek would require increased natural gas-fired or coal-fired generation, producing large quantities of carbon dioxide (CO₂), nitrogen oxides (NO_x) and sulfur dioxide (SO₂). We estimate that, if Oyster Creek's output were replaced with increased generation from coal, the annual increase in CO₂ emissions would be the equivalent of the output of 920,000 cars. Replacement with natural gas generation would cause annual CO₂ emissions equivalent to that of 460,000 cars.