

FCG Environmental Committee

Impact of EPA's CO₂ Proposal on Florida's Electric Generation System

Florida Cannot Comply with Existing Electric System Investments

- Florida cannot meet EPA's proposed rule with current generation plants, no matter how they are run.
- By changing dispatch from current economic dispatch to a dispatch to try to meet the proposed rule (fuel switching), the CO₂ rate can be reduced from approximately 1100 lbs/MWh (in 2020) to 950 - 900 lbs/MWh. Depending on the details of rule implementation and future natural gas prices, fuel switching alone is estimated to result in an average cost to Florida electric customers of \$3/MWh to \$20/MWh.
- Florida would increase its dependence on natural gas from 60% to around 80%.
- Even with fuel switching, Florida's average emission rate will still be significantly greater than EPA's proposed requirement of 740 lbs/MWh by 2030 (950 lbs/MWh in 2020, 900 lbs/MWh in 2030).

Significant Changes/Investments Required for Florida to Comply

- In addition to fuel switching, significant additional zero-emitting sources of energy will be required, with the associated costs to be borne by Florida electric customers.
 - Equivalent of 5,000 to 20,000 MW of new zero-emitting capacity will need to be added, depending on the resource chosen, compared to Florida's current total capacity of 55,000 MW.
 - For example, if solar energy is used it will require adding new solar capacity resources equal to about 37% of current statewide capacity from all sources.
- Overall Florida utility cost impacts likely will total in the billions - and perhaps tens of billions - of dollars. Rate impacts will vary by utility, depending on utility size and current generation mix. Average potential rate impacts may approach 25 to 50 percent as a result of EPA's proposal.

Uncertainties and Infrastructure Risks

- The effect of the proposed rule on the ability of Florida's transmission grid to reliably deliver power has not been studied and the impacts are not yet known.
- The ability for Florida's limited natural gas pipeline infrastructure to deliver the natural gas needed is not completely known.
- Estimates do not include consideration of potential stranded costs, deferral of planned investments, or potential technology improvements, including energy efficiency.
- Inter-utility purchases incremental to Ten Year Site Plans have not been estimated but are not sufficient to avoid new energy sources.
- Feasibility of adding new resources within required timeframes has not been confirmed; new nuclear capacity is unlikely to be possible within required timeframes.