Past administration Renewable Electricity Futures study did not conduct a full reliability analysis, which would include sub-hourly, stability, and AC power flow analysis. In fact, page xviii of that study qualitatively concludes "Additional challenges to power system planning and operation would arise in a high renewable electricity future. Studies (particularly those examining high VRE levels) may often assume (or ignore) modeled conditions that could be difficult and/or costly to achieve in practice, such as a large transmission buildout that may face siting or other obstacles, ability of non-wind and solar plants to remain financially viable and thus available, institutional changes, or, for one study, synchronization of all three interconnections. Past administration Federal and state policies, provide tax incentives, and mandates, significant quantities of variable renewable energy (VRE) resources—specifically wind and solar at high cost to tax payers. Contribution to wind and solar growth was quickly accelerated by government policies and mandates. State renewable portfolio standards (RPS) have been the largest contributor associated with 60 percent of VRE growth since 2000 followed by Federal tax credits and government research, to a high cost to tax payers. Repeal of Carbon Pollution Emission Guidelines Existing Stations Sources: Electric Utility Generating Units Clean Power Plan remains illegal and would do devastating harm to the average American. CPP flawed EPA used a two-step process to set limits on upwind states' emissions. First, EPA determined whether a state's emissions were projected to contribute significantly to air quality problems in a downwind area (making it hard for a downwind area to attain or stay in attainment with ambient air quality standards). Second, EPA determined the amount of...
emission reductions that in upwind states could make without exceeding a cost threshold. But EPA only used Power Plants, and Not Wildfire air quality problems.
The retrofit-or-retire decision for owners is also impacted by EPA's New Source Review (NSR) regulations that can affect owners' ability to enhance plant efficiency due to the delay, cost, and uncertainty associated with obtaining an NSR permit. The NSR permitting program requires stationary sources of air pollution including factories, industrial boilers, and power plants to get permits before construction starts, whether the unit is being newly built or modified. This is an important concern for owners considering retrofitting an existing power plant with carbon capture equipment to reduce CO2 emissions, or adding new components to improve operating efficiency. These upgrades could trigger the NSR requirements of the Clean Air Act because they would constitute a "physical change," or lead to a designation of the change as a "major modification," subjecting the unit to NSR permitting requirements. The uncertainty stemming from NSR creates an unnecessary burden that discourages rather than encourages installation of CO2 emission control equipment and investments in efficiency because of the additional expenditures and delays associated with the permitting process.143 144 Ironically, the uncertainty surrounding NSR requirements has led to a significant lack of investment in plant and efficiency upgrades, which would otherwise lead to more efficient power generation, benefits to grid management, and reduced environmental impacts. EPA has acknowledged these burdens and has made attempts to reform the rules to improve and streamline NSR: As applied to existing power plants and refineries, EPA concludes that the NSR program has impeded or resulted in the cancellation of projects which would maintain and improve reliability, efficiency and safety of existing energy capacity. Such discouragement results in lost capacity, as well as lost opportunities to improve energy efficiency and reduce air pollution. A few hydroelectric power plants have not sought relicensing due to concerns over the cost of meeting mandatory environmental requirements imposed by Federal and state resource agencies. Capital upgrade requirements can include capacity uprates (initiated by the plant owner rather than a regulator), dam safety upgrades, or environmental improvements. Agency should cancel all regulations in past few years and start new reports.