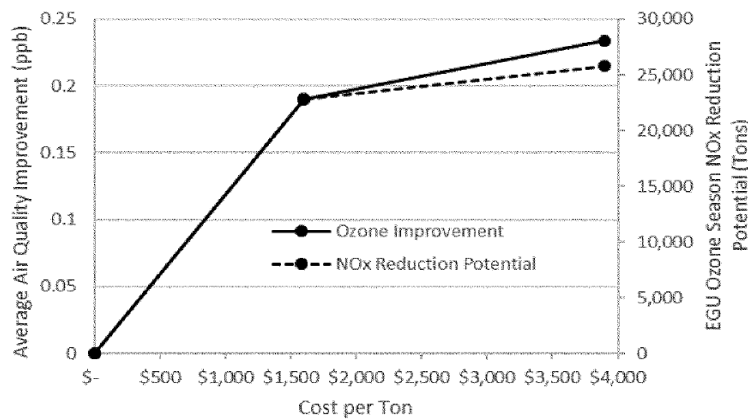


Figure 1 illustrates the air quality improvement relative to the marginal cost per control technology for the controls associated with the near-term cost thresholds of \$1,600 per ton and \$3,900 per ton. EPA combines costs, EGU NO_x reductions, and corresponding improvements in downwind ozone concentrations, which results in a “knee-in-the-curve” graph, with the “knee” at a point where emission budgets reflect a control stringency with an estimated marginal

cost of \$1,600 per ton. This level of stringency in emission budgets represents the level at which incremental EGU NO_x reduction potential and corresponding downwind ozone air quality improvements are maximized with respect to marginal cost. That is, the ratio of emission reductions to marginal cost and the ratio of ozone improvements to marginal cost are maximized relative to the other emission budget levels evaluated. The more stringent emission budget levels

(e.g., emission budgets reflecting \$3,900 per ton or greater) yield fewer additional emission reductions and fewer air quality improvements relative to the increase in control costs. This evaluation shows that EGU NO_x reductions are available at reasonable cost and that these reductions can provide improvements in downwind ozone concentrations at the identified nonattainment and maintenance receptors.

Figure 1 to section VII.D.1 - EGU Ozone Season NO_x Reduction Potential in 12 Linked States and Corresponding Total Reductions in Downwind Ozone Concentration at Nonattainment and Maintenance Receptors for each Cost Threshold Level Evaluated (2021/2022)*



*Note – this figure reflects full implementation of \$1600 per ton (SCR optimization + state-of-the-art combustion control upgrade)

EPA proposes that the \$1,600 per ton level control strategy, associated with optimizing existing SCRs and ensuring that state of the art combustion controls have been fully installed or upgraded, is a relatively highly cost-effective level of control (reflected as being the “knee-in-the-curve”), and should therefore be required to address significant contribution in the 12 linked states. EPA observes this \$1,600 per ton level of stringency results in a substantial number of emissions reductions totaling nearly 23,000 tons (19 percent of the baseline level), resulting in all downwind air quality problems for the 2008 ozone NAAQS being resolved after 2024 (one year earlier than the base

case). There are also projected changes in receptor status (from projected nonattainment to maintenance-only) for the Stratford and Westport receptors (the first in 2021, the second in 2024). In addition, the Houston receptor changes from maintenance to attainment in 2023. In 2021, the average level of improvement in ozone concentrations at all four of the receptors is 0.19 ppb.

By comparison, the next, more stringent mitigation technology available in 2021 (i.e., SNCR optimization at \$3,900 per ton) yields incremental emission reductions of approximately only 3,000 tons. This has a much smaller average air quality improvement of just 0.04 ppb in 2021.

Further, this smaller benefit comes at a substantial increase in marginal costs. Moreover, analysis using the AQAT tool suggests this strategy had no further impact on receptors’ status. EPA examined the total number of SNCR-controlled coal units in the 12 linked states. A small portion of the coal fleet had this technology in place (14 percent), and of that small portion, the majority of the units with these SNCR controls had emission rates of 0.13 lb/mmBtu or less (many operating less than 0.1 lb/mmBtu), suggesting they were already optimizing their SNCRs. Given the small portion of the coal fleet covered by this technology in the 12 linked states, combined with the