Combining WWSIS and JEDI economic impacts

This study quantified the difference in operating cost between the WWSIS wind-development scenarios and the no-wind scenario per MWh of wind introduced as the operating savings per MW. By adding this to the local economic impact per MWh, this study estimated the net economic benefit to Arizona of each wind-development scenario. While the operating cost savings at 30% wind integration were highest in the Mega Project scenario, the local economic impacts of in-state development in the In Area and Local Priority scenarios were more than offset this difference in operating cost. The Local Priority scenario yielded the greatest net benefit to the state at any wind integration percentage.

Quantifying & monetizing environmental impacts

The total emissions for all of the electricity generation in Arizona were quantified by the WWSIS for each scenario. By calculating the average emissions and water use per non-wind GW in Arizona, this study was able to estimate the emissions reductions and water savings that would result from wind integration rates of up to 30%. In addition, by assigning a mid-range market value to emissions permits and water, this study estimated the market value of these emissions reductions and water savings.

Conclusions

Wind energy should be used as part of a strategy to meet Arizona’s future electricity load. Arizona should pursue the development of in-state wind resources, even if it requires the creation of financial incentives to attract that investment. Wind energy should be used as part of a strategy to meet Arizona’s future electricity load. Arizona should pursue the development of in-state wind resources, even if it requires the creation of financial incentives to attract that investment. Wind energy should be used as part of a strategy to meet Arizona’s future electricity load. Arizona should pursue the development of in-state wind resources, even if it requires the creation of financial incentives to attract that investment. Wind energy should be used as part of a strategy to meet Arizona’s future electricity load. Arizona should pursue the development of in-state wind resources, even if it requires the creation of financial incentives to attract that investment. Wind energy should be used as part of a strategy to meet Arizona’s future electricity load. Arizona should pursue the development of in-state wind resources, even if it requires the creation of financial incentives to attract that investment. Wind energy should be used as part of a strategy to meet Arizona’s future electricity load. Arizona should pursue the development of in-state wind resources, even if it requires the creation of financial incentives to attract that investment. Wind energy should be used as part of a strategy to meet Arizona’s future electricity load. Arizona should pursue the development of in-state wind resources, even if it requires the creation of financial incentives to attract that investment. Wind energy should be used as part of a strategy to meet Arizona’s future electricity load. Arizona should pursue the development of in-state wind resources, even if it requires the creation of financial incentives to attract that investment. Wind energy should be used as part of a strategy to meet Arizona’s future electricity load. Arizona should pursue the development of in-state wind resources, even if it requires the creation of financial incentives to attract that investment. Wind energy should be used as part of a strategy to meet Arizona’s future electricity load. Arizona should pursue the development of in-state wind resources, even if it requires the creation of financial incentives to attract that investment.