

A REGIONAL ENERGY MARKET – OVERVIEW

California Senate Bill 350, passed in 2015, directed the ISO to study the impacts of expanding the electricity grid over the western United States. The study, conducted by leading experts, assessed the impacts to the economy, disadvantaged communities, emissions of greenhouse gases and other air pollutants, and grid reliability and integration of renewable resources, such as wind and solar.

The studies concluded that a multi-state, regional electric market and grid overseen by the ISO would provide significant environmental and economic benefits to California and the West. Among the benefits are cost savings to California electricity ratepayers, new jobs, operations and market efficiencies, optimized regional transmission planning, and cleaner air.



Cost savings and increase in household incomes:

- Annual savings to California ratepayers may be as high as \$1.5 billion by 2030.
- Annual household incomes will rise from \$300 to \$550 annually in 2030 due to lower energy costs.
- For more on Ratepayer benefits, [click here](#).



Create new jobs:

- Create between 9,900 and 19,400 new jobs by 2030, primarily stemming from lower electricity rates.
- For more on job creation and economic impacts to California, [click here](#).



GHG reductions:

- California's greenhouse gas emissions would fall in 2030 by 4 to 6 million metric tons, or 8 to 10 percent of total emissions for the electric sector. The same year, the western region would see a decrease of 10 to 11 million metric tons.
- Emissions of carbon dioxide, nitrous oxide, sulfur dioxide and hazardous particulates will also be reduced.
- For more on GHG emission and other air pollutants, [click here](#).



Reduced impact on land and water resources:

- With improved planning, land used for new wind and solar plants would be reduced by up to 73,100 acres in California, and up to 69,300 acres in the rest of the West. That eases pressure on biological resources and reduces the need for cooling water needed for conventional power plants, and decreases the need for fossil fuel plants in California.
- For more on impacts to the environment, [click here](#).



Help integrate more renewable power plants while maintaining grid reliability:

- When solar plants produce too much energy and create midday oversupply conditions in California, that energy can be exported to other areas, rather than solar plants being curtailed or the energy going unused.
- More wind generation has been developed in regional energy markets than in similarly wind-rich areas that were not in ISOs.
- Grid reliability benefits will include operational efficiency, resource adequacy management and improved transmission planning.
- For more on reliability and renewable integration, [click here](#).



Benefits to disadvantaged communities:

- Income and job opportunities due to lower electric rates and economic stimulation.
- Decreased emissions of pollutants
- Decreased fossil fuel use.
- For more on impacts to disadvantaged communities, [click here](#).

Other benefits of a regional energy market

- The timing is right for expanding the ISO. The current energy landscape has undergone transformation from the grid of two decades ago, with the deregulation of utilities, the establishment of ISOs and RTOs, and open and non-discriminatory access to transparent markets that preclude risks of an energy crisis. With the state moving to a 50-percent renewable energy target, and competition from other ISOs to band western states together, the time is ripe for ISO's transformation.
- A regional marketplace will not affect individual states' procurement policies.
- A larger footprint will enhance California's ability to implement its renewable energy policies, even beyond the current goal of 50 percent by 2030. Regional integration allows for better coordination among electric systems, brings more resources to the mix, reduces overbuilding, and improves renewable energy integration.
- A regional grid wouldn't allow federal regulators to exercise authority at the expense of state authority. Federal authority over all interstate transmission grids is already regulated by FERC, and wholesale electricity transactions are considered interstate commerce.

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