

Quantifiable | Widespread | Long-Lasting Transmission Investment Benefits Consumers and Local Economies

New regional and interregional electric transmission projects and upgrades are subject to elaborate and expensive planning and permitting requirements. But these vital energy networks produce diverse and quantifiable benefits during their long lives, according to a new report by London Economics International (LEI).

To demonstrate how those benefits can be quantified during the planning process, LEI analyzes two hypothetical projects and models their economic impacts. Developers, planners and regulators can now determine how and where grid investments will yield stronger local and regional economies, help grow businesses, lower consumers' energy costs and ensure a reliable and resilient power supply throughout every stage of operation. By quantifying the extent and distribution of the benefits that a proposed project will produce, planners and industry can aim for a more robust and cost-efficient system that integrates the emerging high-tech electrified economy and makes it work for all consumers and stakeholders.



SHORT-TERM BENEFITS: JOB CREATION, INCREASED GDP

Workers, residents and local businesses benefit from new transmission investment before projects even begin operation. Within three to four years leading up to project launch, the sample Eastern Interconnect project generates a **\$22 million local GDP** increase annually and significant job creation. With the Western Interconnect project, annual **GDP growth hits \$700 million** with more than **5,500 new jobs** each year.



MEDIUM-TERM BENEFITS: JOBS, ECONOMIC DEVELOPMENT, LOWER CONSUMER BILLS, ENVIRONMENTAL ENHANCEMENT, BETTER POWER MARKETS

Once operational, projects produce GDP growth between **\$150 million and \$2 billion annually**, depending on the region and the project, while **electricity market cost savings span \$275 million to \$1.2 billion each year**. The benefits of the two projects would include: lower costs of electricity for consumers; higher revenues for some generators; efficiency improvement; regional economic stimuli; lower carbon emissions; access to more diverse; cheaper energy resources; and demonstrable quality of life improvement for consumers and society generally.



LONGER-TERM BENEFITS: RELIABILITY AND RESILIENCE, STRONG REGIONAL ECONOMIES, ACCESS TO NEW RESOURCES

The two sample transmission projects in the study would integrate and sustain a more reliable and resilient electric grid, facilitate deployment of new technology, support powerful wholesale markets for energy and reduce the frequency and severity of blackouts through efficiency and access to diverse resources. The reliability benefits of the Eastern Interconnect project would save the economies in MISO and PJM **over \$1 billion** by avoiding disruption to local businesses. Similarly, if the Western Interconnect project helped avoid a major outage, the savings would be **nearly \$600 million**.

Consumer Benefits from Transmission Investment

A transmission line in the Eastern Interconnect, designed to increase capacity between two regional markets operated by PJM and MISO, has many significant benefits to consumers according to LEI's hypothetical model. These average benefits to varying customer classes span the near-term (3-4 years prior to line operation); the medium-term (the first 15 years of operations); and longer-term, for the duration of the project's lifespan. Visit www.wiresgroup.com for the full analysis.

MEDIUM-TERM BENEFITS



\$275 MILLION
savings a year for consumers
on electricity market cost savings



4,200
new jobs added per year

LONGER-TERM BENEFITS



Benefit of
\$62 MILLION
with more reliable electricity and
avoided higher energy costs



Increasing GDP by
\$710 MILLION



Providing cleaner air by avoiding
3 MILLION
metric tons of carbon emissions



Avoiding blackouts benefits
regional economies by
\$1 BILLION



A New Era In Planning

As LEI reports, transmission investment can be planned with assurance that it will produce specific benefits over 40-50 years. Economic valuation methodologies, like those in the study, should be integrated into the current planning process. While benefits vary, the cost of this critical infrastructure is virtually always dwarfed by the economic and societal benefits it produces.