PJM Efficiencies Offer Regional Savings

RELIABILITY – resolving transmission constraints, gains in economic efficiency from regional reliability planning – from $470 million to $490 million in annual savings

GENERATION INVESTMENT – reduced reserve requirements and increased demand response – from $640 million to $1.2 billion in annual savings

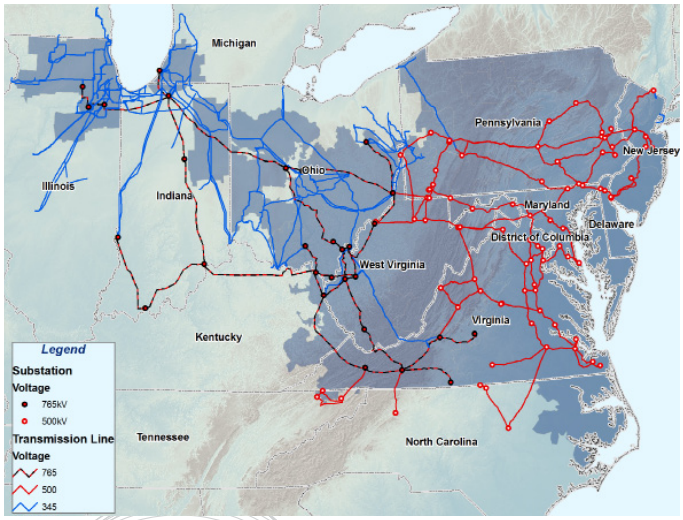
ENERGY PRODUCTION COST – efficiency of centralized dispatch over a large region – from $340 million to $445 million in annual savings

GRID SERVICES – cost-effective procurement of synchronized reserve, regulation – from $80 million to $105 million in annual savings

Total – as much as $2.2 billion in savings to the region each year

The following summarizes the impact of specific elements of PJM's role that produce benefits and economic value for the region it serves. These components of PJM's RTO operations produce as much as $2.2 billion in annual value for the region.

PJM Operations yield $2.2 billion in savings



Reliability Savings

PJM's ability to direct changes in the output of generating resources (redispatch) rather than curtail power-sales transactions to deal with transmission congestion enables it to deal with transmission constraints more effectively. By reducing the need for curtailments over a wide area – transmission loading relief procedures, or TLRs – PJM's narrowly targeted redispatch procedures resolve transmission constraints more quickly. This approach has significantly reduced the need for transaction curtailments to maintain transmission system reliability.

Annual savings: $78 million to $98 million

By planning for future reliability needs on a regionwide rather than a utility-by-utility or state-by-state basis, PJM's Regional Transmission Expansion Planning (RTEP) process helps focus on transmission upgrades that meet reliability criteria and increase economic efficiency.

Annual savings: $390 million

Generation Investment Savings

The large size of the PJM market area, combined with its diversity of demand and resources, reduces the overall level of capacity needed to ensure adequate reserves of electricity to meet peak demand or emergency situations. This capacity buffer, known as the reserve margin, would need to be higher without the PJM RTO. Consumers avoid the costs of additional generation to meet higher levels of reserves.

Annual savings: $366 million to $900 million

The commitment of demand-response resources to reduce load during system peaks also forestalls the cost of building additional generating facilities. Through the Reliability Pricing Model (RPM), demand response competes on an equal footing with generation and transmission in the capacity market. Through RPM, the quantity of demand response that is providing capacity in the PJM footprint has increased by more than 1,800 megawatts.

Annual savings: $275 million

Energy Production Cost Savings

PJM's centralized dispatch of the numerous resources over its expanded territory produces significant efficiencies and cost savings compared with the previous operation of independent control areas across the region. The increasing effectiveness of PJM's dispatch operations also has reduced operating reserve costs.

Annual savings: $340 million to $445 million

Grid Services Savings

By operating markets for grid services, also known as ancillary services, across its footprint, PJM achieves economies in providing services that are essential to the reliability of the electric system. Synchronized reserve service supplies electricity if the grid has an unexpected need for more power on short notice, while regulation helps match generation and load by correcting for short-term changes in electricity use that might affect system stability.

Annual savings: $80 million to $105 million

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