



PJM Interconnection developed a Perfect Dispatch process as a way to analyze the efficiency of its dispatch operations and to spur continuous improvement in dispatching. The Perfect Dispatch metric is a measurement of the ability of dispatch operations to minimize PJM's system production cost while meeting reliability requirements.

The "perfect dispatch" for a given day – the calculated, hypothetical unit commitment and dispatch that would result in the lowest production cost while maintaining reliability – could be achieved in real-time operations only if all system conditions, such as the load forecast, unit availability and performance, interchange and transmission outages and constraints, occurred exactly as predicted.

While hypothetical and not realistically achievable, the calculated Perfect Dispatch serves PJM as a valuable baseline for measuring performance and identifying opportunities to improve the dispatching process.

The metric compares the calculated daily production cost to the actual real-time daily production cost to derive a "percentage of perfect" score. For the baseline period of calendar-year 2008, the average percentage of perfect was 98.18 percent. In 2009, it improved further, to 99.03 percent.

The estimated savings in production costs in 2009 for PJM members were more than \$122 million. That is equivalent to about half of PJM's annual budget.

In addition to the production cost savings, the Perfect Dispatch initiative provides other significant benefits for PJM's members, including reduced emissions from the generation fleet and more efficient overall use of generation resources, including less wear and tear on the equipment.

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