The New Year brought plunging temperatures across the Northeast, the Midwest, and even the South, dropping thermometers into the single digits—and well below zero—in some areas.

These frigid conditions pushed independent system operators (ISOs) to meet the increased demand for electricity. (ISOs are organizations that control and maintain the running of an electrical power system, or grid, in a particular region.)

During the cold snap, five ISOs relied heavily on fossil fuels and nuclear power to make sure they could produce enough electricity for their customers:

- **Southwest Power Pool**
- **Midcontinent ISO**
- **ISO New England**
- **New York ISO**
- **PJM Interconnection**

### Average Generation Mix

- **Coal**: 40%
- **Natural Gas**: 24%
- **Nuclear**: 20%
- **Wind**: 6%
- **Hydro**: 4%
- **Oil**: 7%
- **Other**: 1%

In fact, the average generation mix at peak times of electricity usage was:

- **Coal and nuclear power combined provided 58%**—almost 3/5—of all power generated.
- **Coal** came to the rescue—supplying an average of almost 40% of the power generation mix during peak energy times across the affected regions.

Compared to a typical winter day, coal and oil-fired plants supplied nearly 15% more power at peak times of electricity usage.

During the cold snap, ISOs were able to produce more electricity because they had additional resources—like coal, gas, oil, and nuclear—available.

This fuel diversity saved the day. In the future, we will continue to need a diverse energy mix to ensure that the grid can respond to challenges and provide reliable, affordable electricity.

![Fossil Fuels Fight the Freeze](image_url)