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## “The Levelized Cost of Electricity from Existing Generation Resources”<sup>i</sup>

- ✓ A new [study](#) sponsored by America’s Power and the Institute for Energy Research analyzes the levelized cost of electricity (LCOE) for six electricity sources (coal, natural gas, nuclear, wind, solar and hydro).
- ✓ LCOE is a way to compare the cost of different sources of electricity. A source with a lower levelized cost is preferable to one with a higher cost.
- ✓ The study is unusual because it compares the levelized costs of both existing and new electricity sources. Typically, levelized costs are used to compare only new electricity sources to one another. However, levelized costs are also useful to compare existing power plants to new sources.
- ✓ **The study finds that, on average, the LCOE for the existing coal fleet is less than the LCOE for new sources of electricity (natural gas, wind and solar) that usually replace existing coal.**
- ✓ Levelized costs are calculated by summing all the costs (variable and fixed O&M, capital investments and financing costs) of an electricity source over its lifetime and then dividing the costs by the amount of electricity the source is expected to generate over its lifetime. Therefore, levelized costs are expressed as dollars (costs) per megawatt-hour (electricity generated).
- ✓ Although there are many considerations that influence retirement decisions, these national average levelized costs show that **decisionmakers should give careful consideration to levelized costs when decisions are being made to retire existing coal-fired power plants.**
- ✓ The study does not take into account the cost of transmission upgrades to connect new wind and solar to the grid or the cost of new infrastructure to satisfy the increasing demand for natural gas in the electric power sector.

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<sup>i</sup> “The Levelized Cost of Electricity from Existing Generation Resources,” Tom Stacy and George Taylor, June 2019, [www.americaspower.org](http://www.americaspower.org).