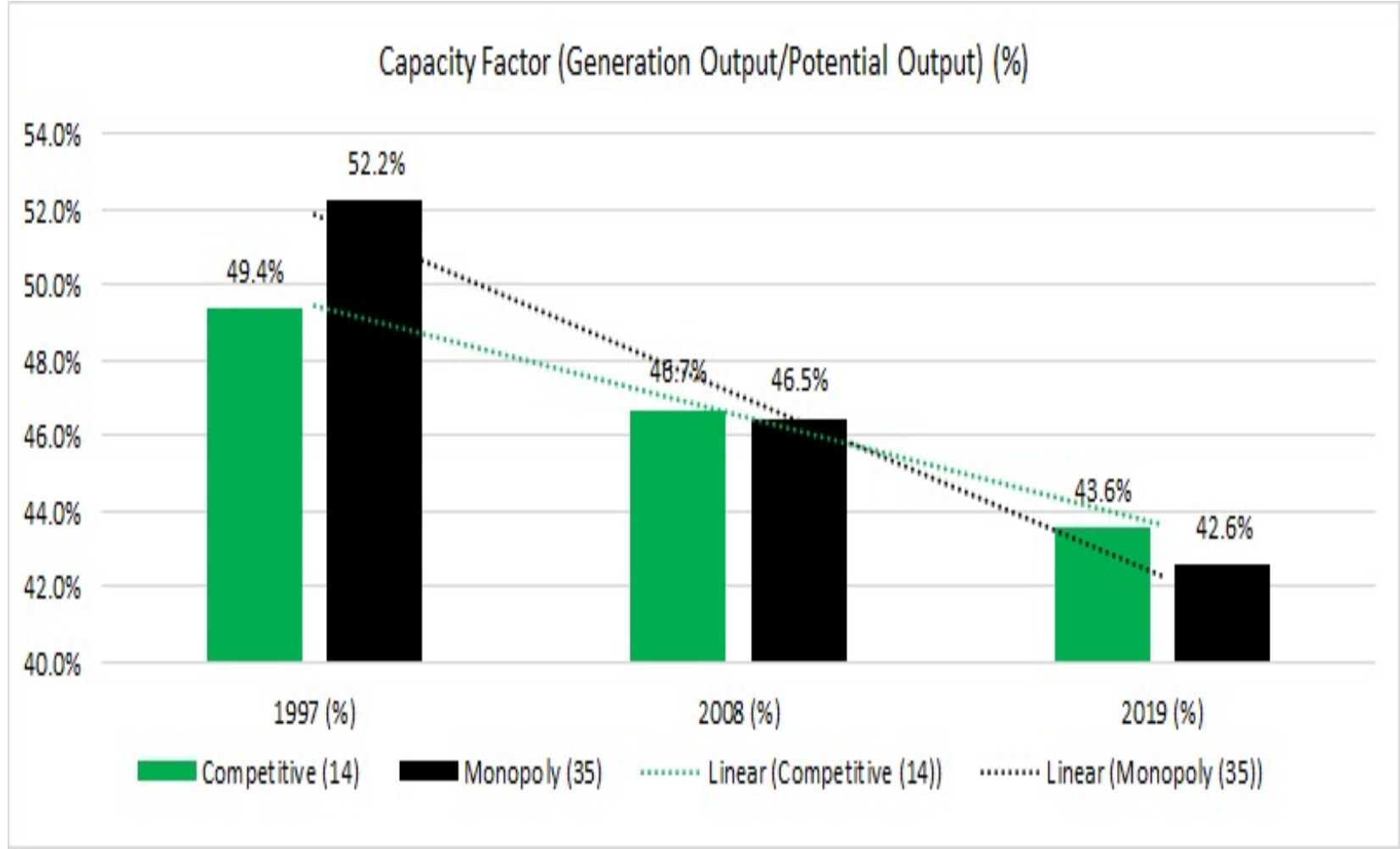


Change in Capacity Factor, 1997, 2008, and 2019 (Generation Output/Potential Output)

Figure 12 of The Great Divergence

Source: EIA-860, EIA-923



The information presented in this document represent the views of RESA as an organization and may not necessarily reflect the views of any particular RESA member.

Figure 12 (page 8) of The Great Divergence – Updated through CY2019

The explanation of the Great Divergence between the monopoly states and competitive jurisdictions is not to be found in the similar trend lines moving from coal to gas and negligible differences in patterns of renewables and nuclear resources. There is, however, a knock-on effect that may partially explain the Great Divergence in price direction. Monopoly regulation and competitive markets accord fundamentally different treatment to power plant utilization. The decline in power plant portfolio capacity factor has been larger, both nominally and proportionally in the 35 monopoly states than in the 14 competitive states/jurisdictions as shown in this figure (note the increased slope of the black dotted line compared to the green dotted line). The Capacity Factor in the 35 monopoly states declined from 52.2% in 1997 to 42.6% in 2019 (the most recent year for which EIA data are available). That is about a one-fifth decrease (18.4%) compared to the much more modest decline in Capacity Factor in the 14 competitive states/jurisdictions from 49.4% in 1997 to 43.6% in 2019, a proportional decline of 11.7% or about one-ninth. Plant utilization, as measured by Capacity Factor, has declined in far greater proportion in the group of monopoly states than in competitive states/jurisdictions, due in great part to the shift from coal toward gas. However, as long as rate-based generation assets are considered “used and useful”—even if underutilized— full cost recovery is accorded in the Monopoly States, with consumers absorbing those costs. In contrast, underutilized or uneconomic generation assets in the Competitive States/Jurisdictions will tend to experience adverse financial consequences under the same conditions. The difference is that investors, not customers, are the ones bearing the risk of changing market fundamentals.

More information is available regarding about specific energy source capacity factors. Please ask RESA for this information if interested.