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Total Cost Access

It is important to distinguish between electrical *production* and electrical *distribution*. Both are natural monopolies regulated by the Kentucky Public Service Commission. This has made sense until now, as coal or gas fired electrical production is most practical at centralized power plants, and the distribution of more than one source of electrical power to individual buildings (overhead or underground wiring) is impractical. The electrical grid (*distribution*) is likely to remain a regulated natural monopoly for the foreseeable future, but renewable energy *production* (solar, wind, hydro, geothermal) is generally decentralized and presents entirely new and innovative forms of electrical energy. Electrical production should not, therefore, remain a monopoly.

The following proposal for Kentucky is based on the premise that the transition to renewable energy will not occur under monopoly control of electrical production. Renewable energy entrepreneurs should be allowed **Total Cost Access** to the grid in order to provide the public with the possibility of cleaner and perhaps cheaper electricity. In a democratic society, the public should not be in a position to beg for clean energy from fossil fuel monopolies.

This is a pro-business proposal. Market access to the electrical grid will create new businesses, new employment, and greater choice to consumers. The principle of Total Cost Access follow on Kentucky SB100, passed in 2019, that requires the Public Service Commission to create new rate structures paid by utilities to renewable energy producers.

Overall pricing of electrical energy should be left to the market. But the Public Service Commission should determine *external* costs for each type of energy used (health, infrastructure, and environmental costs to the public). This amount should be paid to the general fund by each energy provider, as it is the general fund that will incur these costs in the longer run. An alternative would be the passage of a carbon tax by the legislature that would charge energy producers directly for external costs, and present energy consumers with the Total Cost of each form of generated electricity at the retail purchase of electricity. Either measure would level the playing field for energy providers.

Determination of external costs by the Public Service Commission (or other democratically controlled body) will involve both scientific analysis and political consideration. The politicization of the Public Service Commission will likely result in opposition to this proposal, but politicization of the transition to renewable energy is exactly what is caller for. The public should become directly involved in how energy is produced and consumed and how the cost structure of each form of energy affects living conditions for present and future generations.

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- 1. Distributed energy producers in Kentucky (grid-tied solar and wind producers) should pay a retail rate for electrical energy consumed from the utility grid and receive a wholesale rate (or public service commission determined rate) for utility energy generated and delivered to the utility.
- 2. As distributed energy (energy produced at locations other than a centralized power plant) becomes available to the general public in Kentucky, electric grid infrastructure should remain a natural monopoly but electrical generation should be open to the free market.
- 3. Distributed energy entrepreneurs should have market access to the utility grid to sell their product and utilities should have purchasing access to all forms of generated electricity. The utility grid should provide a level playing field on which all forms of electrical generation can compete fairly for market share. The grid should become a marketplace for electricity and not a single source of electricity.
- 4. The Kentucky Public Service Commission should determine the external cost of each form of electrical generation (coal, hydro, natural gas, solar, wind, etc.). External cost should include the cost to state taxpayers, if any, of (a) fuel extraction, including mine regulation and reclamation enforcement, community displacement and dislocation; (b) environmental costs of water, soil, and air degradation; (c) transportation of fuels to power generation facilities, including road maintenance and hazards of pipeline, rail, and truck transportation; (d) the cost of recycling construction wastes including pipelines, solar panels, wind turbines, gas combustion facilities, etc.; (e) the combustion or escape of solid, liquid and gaseous fuels on climate, including storms, wild fires, floods, infrastructure destruction and crop damage; (f) increased healthcare, including black lung, mining hazards, asthma, ozone, sulfur dioxide, mercury, etc.; and (g) the cost to state taxpayers, if any, of subsidies and tax credits to energy producing industries.
- 5. External costs, determined by the Public Service Commission, should be paid by energy producers to the Kentucky State Treasury. Energy producers will thereby compete on the basis of **Total Cost Access** to the electricity grid.
- 6. The Kentucky state legislature should mandate and oversee ongoing research on the part of the Kentucky Public Service Commission on the external cost of each form of electrical production, and periodically update cost figures accordingly.