

FLORIDA'S ELECTRICITY SOURCES & THE FUTURE[©]

BY Dan Pemble, Kissimmee, Florida – November 1, 2021

In light of the on-going discussions about how human-induced atmospheric pollution is contributing to climate change/global warming, I've done a bit of research. Considering that the production of electricity using fossil fuels has been singled out as a major contributor to such pollution, I was curious to know what is currently going on in the state of Florida and I wanted to share my findings with you in this article.

To begin with, throughout the entire USA, Florida is the second largest producer of electricity behind the state of Texas. Even so, Florida has a deficiency and the consumption of electricity exceeds the locally-produced supplies. Far and away from all other uses, the majority of Florida's electrical supply is consumed by households and businesses for air conditioning and general usage for cooking, lighting, etc. Due to Florida's high usage and production deficiencies, Florida's electrical supply must be supplemented by other states.

So, just what in-state sources are used to produce Florida's electrical supply? Some data I have found as effective in the year 2019 is as follows:

- About three-quarters (75%) of all electrical energy produced in Florida is from natural-gas-fired power plants
- Nuclear power is utilized for over 10% of Florida's electrical production
- Coal-fired power plants produce less than 10% of Florida's electricity
- A very small percentage of electrical power generation is produced by renewables (except wind turbines which are not practical in Florida); such renewables are: solar power, solar-thermal, and bio-mass
- Finally, a small amount of electricity is produced using diesel oil-fueled motor/generators

It seems reasonable to conclude that if all natural-gas and coal-fired power plants were suddenly shutdown to curtail atmospheric pollution, there is NO WAY that current renewables and other sources could make up for the loss in electricity production! Beyond the costs of bringing more and more of today's renewables to fruition, they all have inherent limitations. With the world's population growth forever increasing and with the introduction of more and more electric-powered cars, trucks, trains, buses, etc., how can the supply of electricity keep up with demand? It certainly should be obvious that we cannot now abandon the current major sources of electrical production without first having viable substitutes in place! What do YOU think?

