

Does Granholm Know DOE Is The World's Largest Science Establishment?



Llewellyn King Contributor

Energy

I've been a player in energy since founding The Energy Daily in 1974.

With an eye to his environment agenda, President-elect Joe Biden has chosen [Jennifer Granholm](#) to be his secretary of energy. A perplexing move. She is a lawyer, a career politician, and a two-term Democratic governor of Michigan. She is about to head the world's largest scientific organization.

Granholm will be found, after confirmation, on the 7th floor of the Forrestal Building, headquarters of the [Department of Energy](#). It is a utilitarian, concrete structure in southwest Washington, across Independence Avenue from the romantic Smithsonian Castle.



The Biden administration's nominee for Secretary of Energy, former Michigan Gov. Jennifer Granholm ... [+] ASSOCIATED PRESS

She will become a key player in the nation's defense, de facto its chief scientist; a guardian of the electric grid against cyberattack; and the controller of the largest scientific research organization on earth, the DOE's 17 national laboratories — jewels in the crown.

Low on the matters that will cross Granholm's desk are those she has talked about since her nomination: alternative energy, and the jobs it will create, and electric vehicle charging. Yet that is what she has dwelt on in television interviews, as though that is the central job of the vast archipelago of an agency with a budget of about \$30 billion and awesome responsibility.

The most vital component of the DOE is housed in the National Nuclear Security Administration, which looks after nuclear weapons and reports directly to the secretary. It is charged with maintaining the stockpile, making sure that the weapons in it are in working order and that the computer testing is adequate, or to recommend at what point underground testing should resume.

While the three big weapons labs, Los Alamos, Sandia and Lawrence Livermore, are key to the weapons research and manufacture, there are many other moving parts to the weapons aspects of the DOE. For example, Pantex in Texas makes and disassembles nuclear pits; Savannah River in South Carolina prepares surplus plutonium for disposal in Carlsbad, New Mexico; and the department is responsible for cleaning up nuclear waste across the country, from highly polluted Hanford in Washington state to **West Valley in New York state**.

Eighty Nuclear Sites

There may be as many as 80 nuclear sites in which the DOE has an interest, including those that house spent fuel from the civilian reactor fleet and those that deal with the Navy's spent fuel from submarines and aircraft carriers. There are low-level disposal sites and high-level tanks of waste to be vitrified.

Granholtz will be asked to decide on new nuclear civilian reactors, particularly in the burgeoning field of small modular reactors which are all the rage in nuclear design. She will learn that advanced reactor study takes place mostly at the Argonne National Laboratory near Chicago, but the demonstration site is at the Idaho National Laboratory near Idaho Falls.

She will be reminded of her nuclear responsibility by the ubiquitous launch phone which will travel with her, keeping her informed if a nuclear weapon has been launched or detonated somewhere in the world. She will be involved with any future negotiations on disarmament with the Russian Federation, Iran or North Korea.

Granholtz has sounded on television as though she believes that the DOE should be hot-housing electric vehicle charging stations and helping Detroit catch up to Tesla, the EV leader. This is a far cry from the scientific research work of the DOE, a second mission after nuclear weapons.

The department, through the labs, has worked on medical issues, has developed ceramic car parts, and had a role in the mapping of the human genome. It studies high-energy physics and the nature of matter. It is into material science and nanoengineering.

It has actual energy functions, and these have included the development of alternative energy, like solar and wind, especially in the 1980s, and both solar and nuclear for space exploration. Its big energy contribution was in helping George Mitchell and his Mitchell Energy company develop fracking, which has made the United States a net energy exporter — something the progressives don't like. Granholtz might have to decide whether it is better to see a reduction in coal burning in Asia and Europe through U.S. gas exports or to end export of that gas from our terminals.

The DOE at its Sandia lab is trying even now to assess whether a large **Chinese electric transformer**, destined for the DOE-owned utility Western Area Power Authority (WAPA), has compromised spy-sensors which might threaten the integrity of the electric grid. The DOE makes electricity as well as improving the technology for doing that. Besides WAPA, it controls the Bonneville Power Administration which markets power generated by federal dams.

The Labs and Congress

Granholtz will learn that the labs and their 90,000 employees (the DOE employs directly only about 14,000) are her greatest tool. The labs do as they are bid so long as they have confidence in the secretary, and the funding

keeps flowing. They also are powerful politically in the congressional committees which control the DOE and with the state delegations. The Pacific Northwest National Laboratory in Washington or Oak Ridge National Laboratory in Tennessee, for example, have firm advocates on Capitol Hill. New Mexico is the most DOE-heavy state of all with two national labs, Sandia and Los Alamos, and the Waste Isolation Pilot Project in Carlsbad. Its elected officials are mindful of the labs' wishes.

Granholm had better be a quick study. The DOE is awesome and demanding, and its labs represent one of our greatest national assets, which should be the pride and joy of anyone sitting atop the department.