

Russians to deploy floating nuclear power plant

July 10 2013, by Bob Yirka



(Phys.org) —The general director of one of Russia's largest shipbuilders, Aleksandr Voznesensky, has announced to reporters that a floating nuclear power plant is currently under construction at one of Russia's ship yards. He added that it will likely be ready for use by 2016. The Russians are calling it a "floating power" station, abbreviated to PEB. The vessel has been given the name Akademik Lomonosov.

Several countries, including the United States and China have considered

building floating nuclear power plants but until now, no other known vessels have reached the construction phase. The advantages of a floating [nuclear power station](#) are obvious—[electrical power](#) could be brought to areas that are not currently being served by other means. Russia in particular has many far-flung outposts in its eastern region that have had difficulty flourishing due to the financial constraints of building power plants so far away from everything else.

The Akademik Lomonosov will have two KLT-40 naval propulsion reactors modified to serve as [power providers](#) for an external location—with a displacement of 21,500 tons. Lomonosov noted that nuclear powered marine vessels have a proven safety record going back 50 years. Many nations now routinely deploy nuclear powered ships, submarines and even ice-breakers. He also stressed that the design of the vessel will be such that the platform will be capable of withstanding a tsunami or even a collision with land or a ship. The Akademik Lomonosov will not be able to power itself however, which means it will be towed to wherever it's needed. The vessel will be operated by a crew of 69 people and will also conform to regulations set by the International Atomic Energy Agency.



Lomonosov said that plans are underway to build a fleet of the floating platforms to provide cities and towns across Russia with electricity for general use and more specifically for heating homes and businesses. The Akademik Lomonosov will be capable of generating 70 MW of electricity—enough to power a city of 200,000 people. He noted also that such vessels could also be used to [power](#) desalination plants, providing 240,000 cubic meters of fresh water daily.

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