

US new nuclear build before 2012

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Southern Company is expecting to begin full construction of two reactors at the end of this year, having been given a licensing schedule by the nuclear safety regulators.

Significant site work is already underway for Vogtle 3 and 4, near Waynesboro, Georgia, including some related to safety taking place under a limited authorization. The official start of construction of a nuclear power plant comes with the first pouring of concrete related to nuclear safety, but this will have to wait a few more months, Southern said yesterday. Company head Thomas Fanning said that he 'could see the finish line from here' as the licensing process moves into its final stages.



Retaining walls show where Vogtle 3 will stand. Pipes for coolant are being laid on the right, and in the distance stands the module assembly building (Image: Southern)

The Nuclear Regulatory Commission (NRC) has told Southern it will be ready to issue a Final Safety Evaluation Report this month, and that the public hearing process on that would take until around the end of 2011. The result should be a combined Construction and Operating Licence that will authorise full scale construction, commissioning and operation - subject of course to ongoing checks by the NRC.

The new AP1000 units from Westinghouse will sit alongside two other pressurized water reactors from the same vendor built in the 1980s.

So far, Westinghouse and its partner Shaw have cleared and excavated the twin-unit site, installing a materials warehouse and a covered module

assembly building. Sections of the containment vessel bottom head have already been delivered for at least one of the units.

Two concrete batch plants are in operation with at least ten mixing trucks available to move the concrete around the site. Large sections of concrete pipework are being laid out for cooling water circulation and foundations are in place for the heavy-lift derrick crane that each unit will need. Retaining walls mark out the future locations of the two nuclear islands.

Southern expects the construction workforce to peak at 3500 before the reactors start operation in 2016 and 2017. After that 800 staff will be required for operation, in addition to the 900 that already work at units 1 and 2.