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Method for Dissipating Decay Heat in Nuclear Reactors During an Extended Blackout

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Technology Summary

When a nuclear reactor experiences a blackout, no power is available to run the cooling pumps. Even with the reactor shut down, there is a large amount of heat that must be removed in a short period of time in order to avert catastrophic overheating of the reactor. The present invention provides a passive method to reject the decay heat generated in a nuclear reactor core after shutdown during an extended station blackout. The invention can be retrofitted to many existing nuclear reactors.

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