Formally Verified Autonomous Hybrid Control

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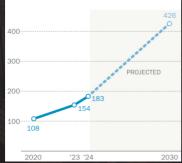




The United States stands on the precipice of a severe energy crises

Electricity consumption at U.S. data centers is expected to more than double by 2030

Total electricity consumption by U.S. data centers (terawatt-hours)

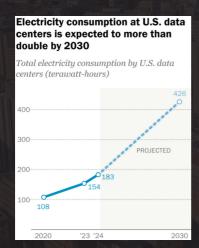


Source: Pew Research Center, Data from IEA

How much baseload power increase is this?



The United States stands on the precipice of a severe energy crises



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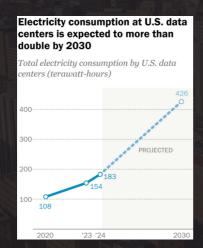
How much baseload power increase is this?



30 gigawatts!

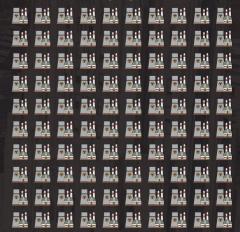


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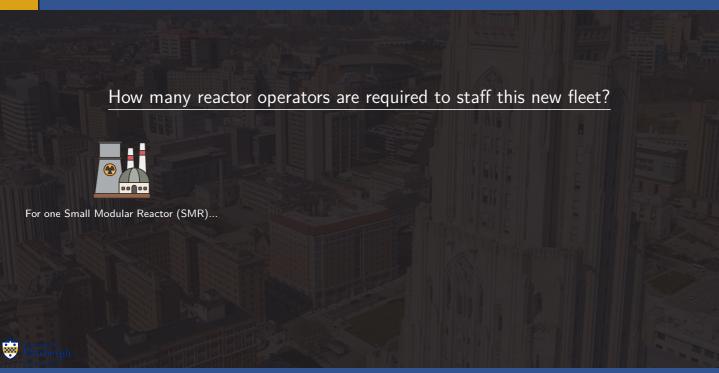
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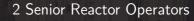
How many reactor operators are required to staff this new fleet?



For one Small Modular Reactor (SMR)...

One shift requires:









2 Reactor Operators



How many reactor operators are required to staff this new fleet?



For one Small Modular Reactor (SMR)...

24/7 operations require \sim 6 shifts:



24 licensed operators per reactor

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For 100 new reactors: 2,400 licensed operators per year!

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We currently have only 3,600 licensed operators...