

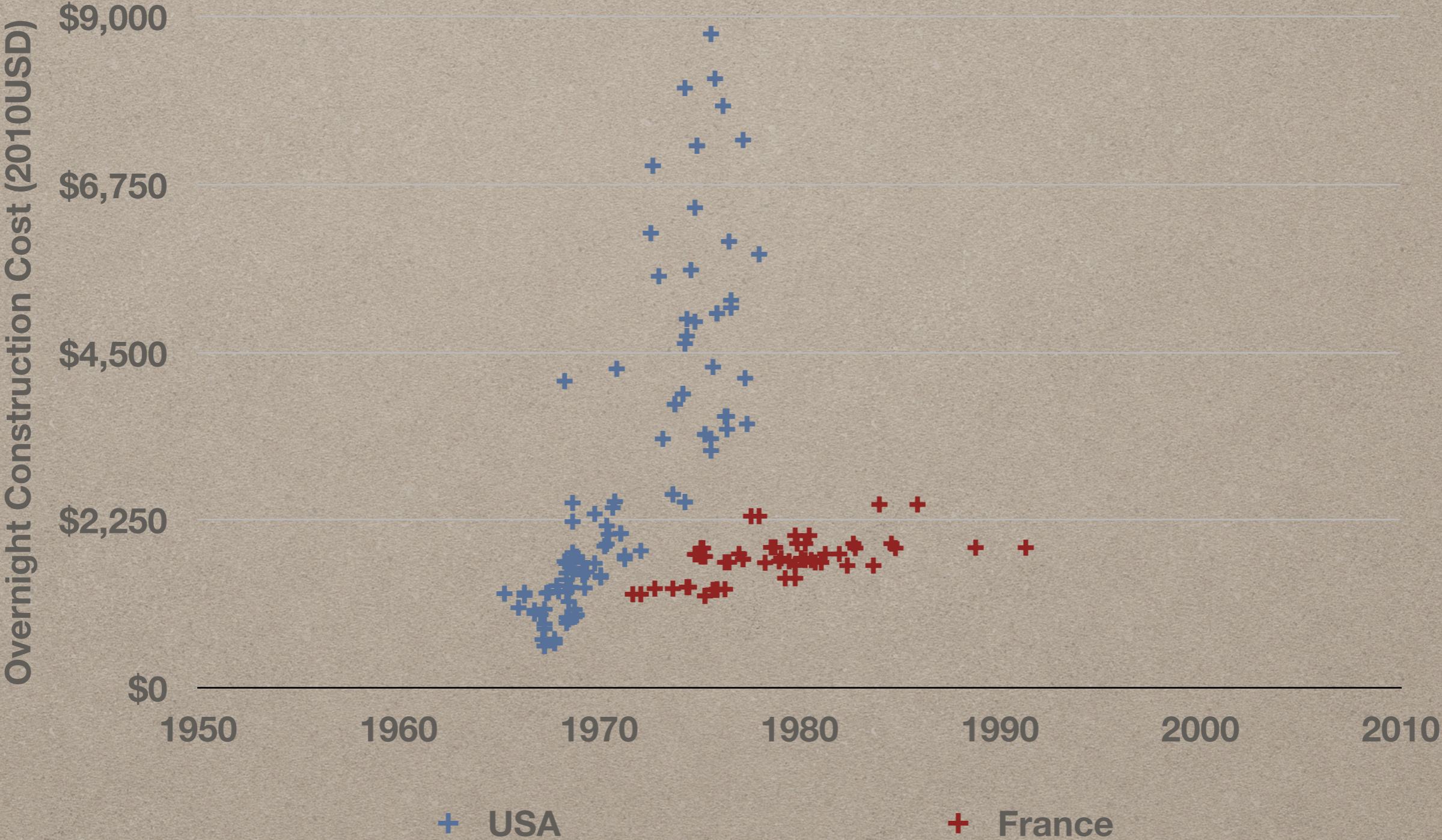


NUCLEAR RISKS VS. REWARDS

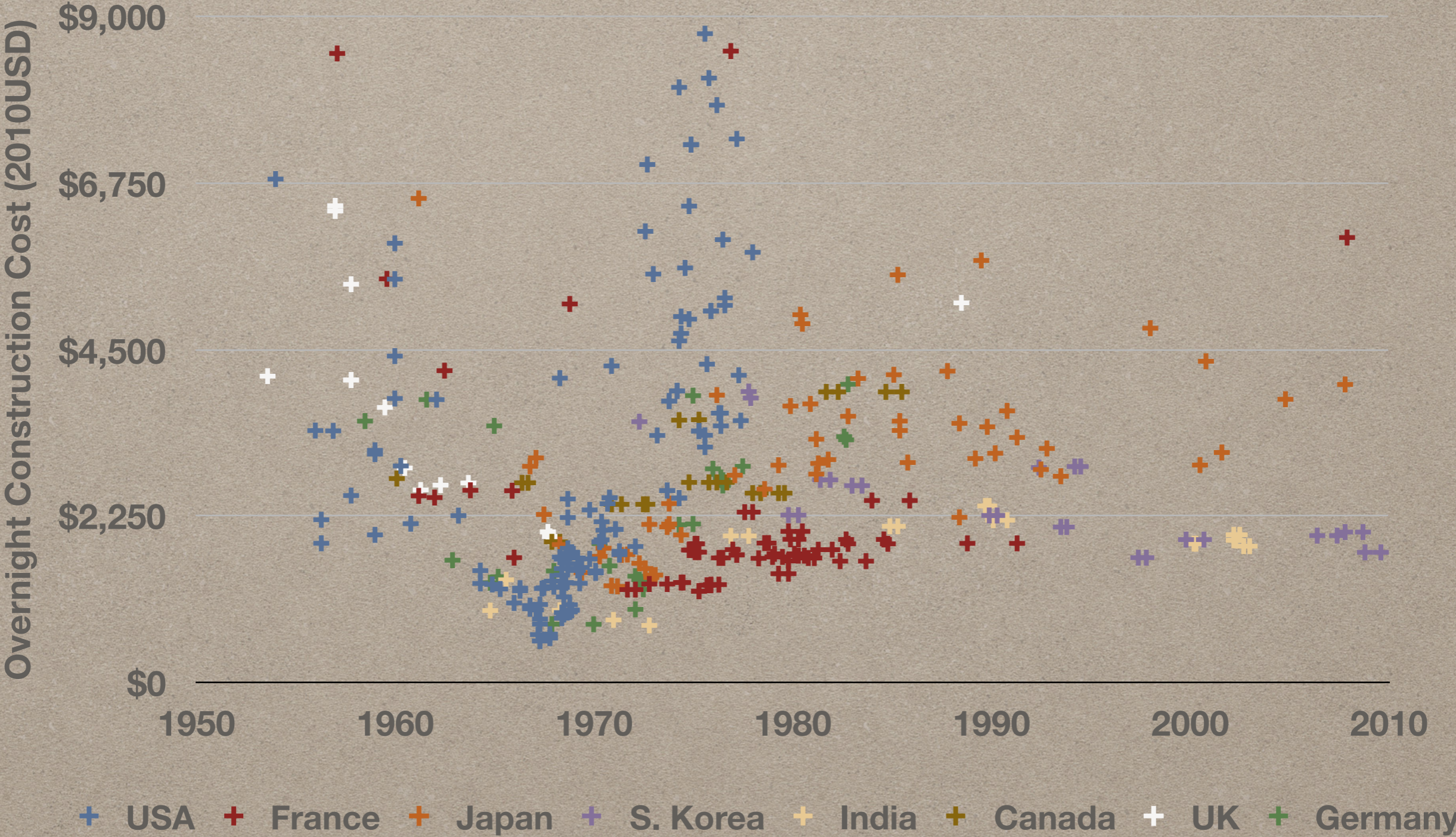
JESSICA LOVERING
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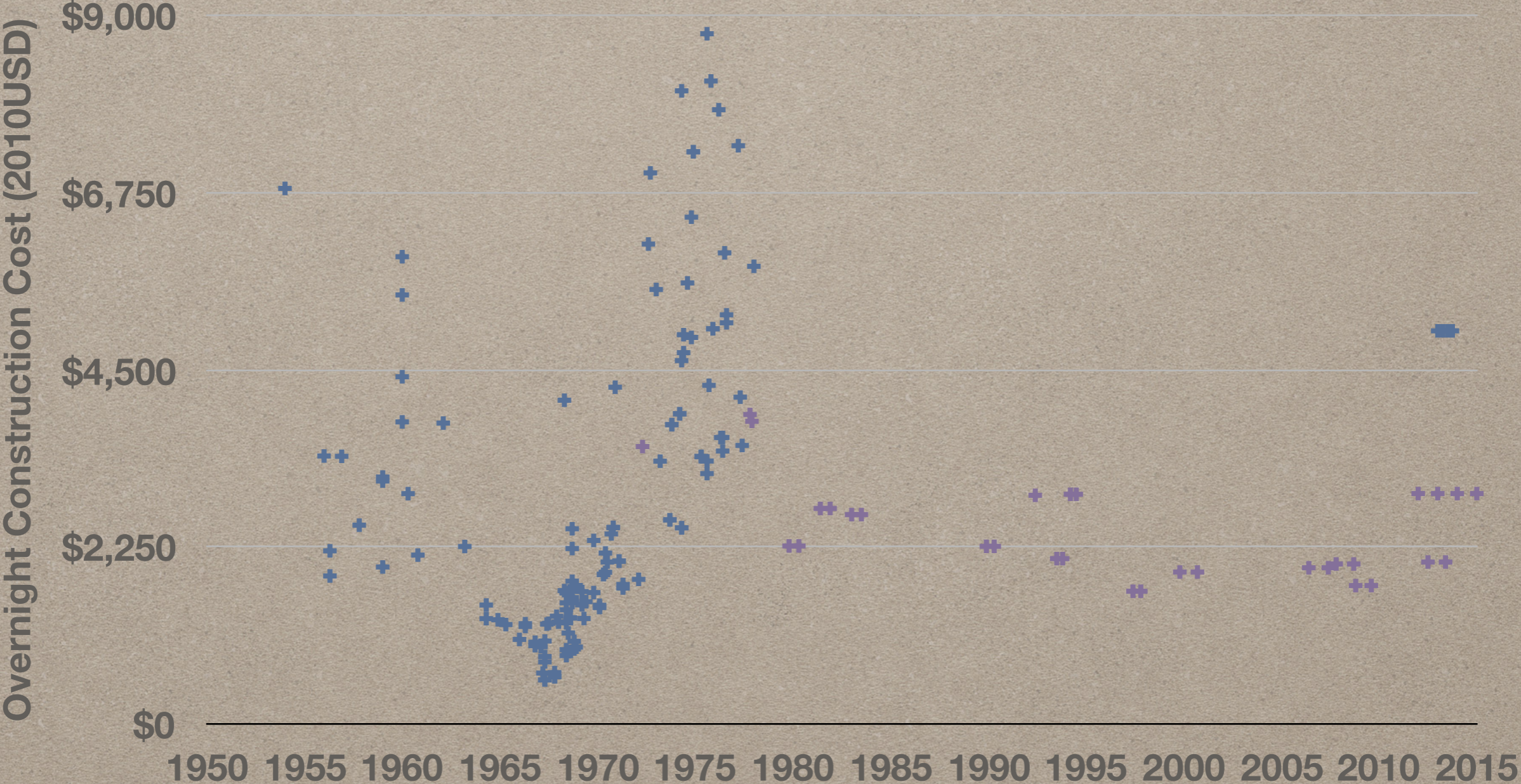
HISTORIC COSTS



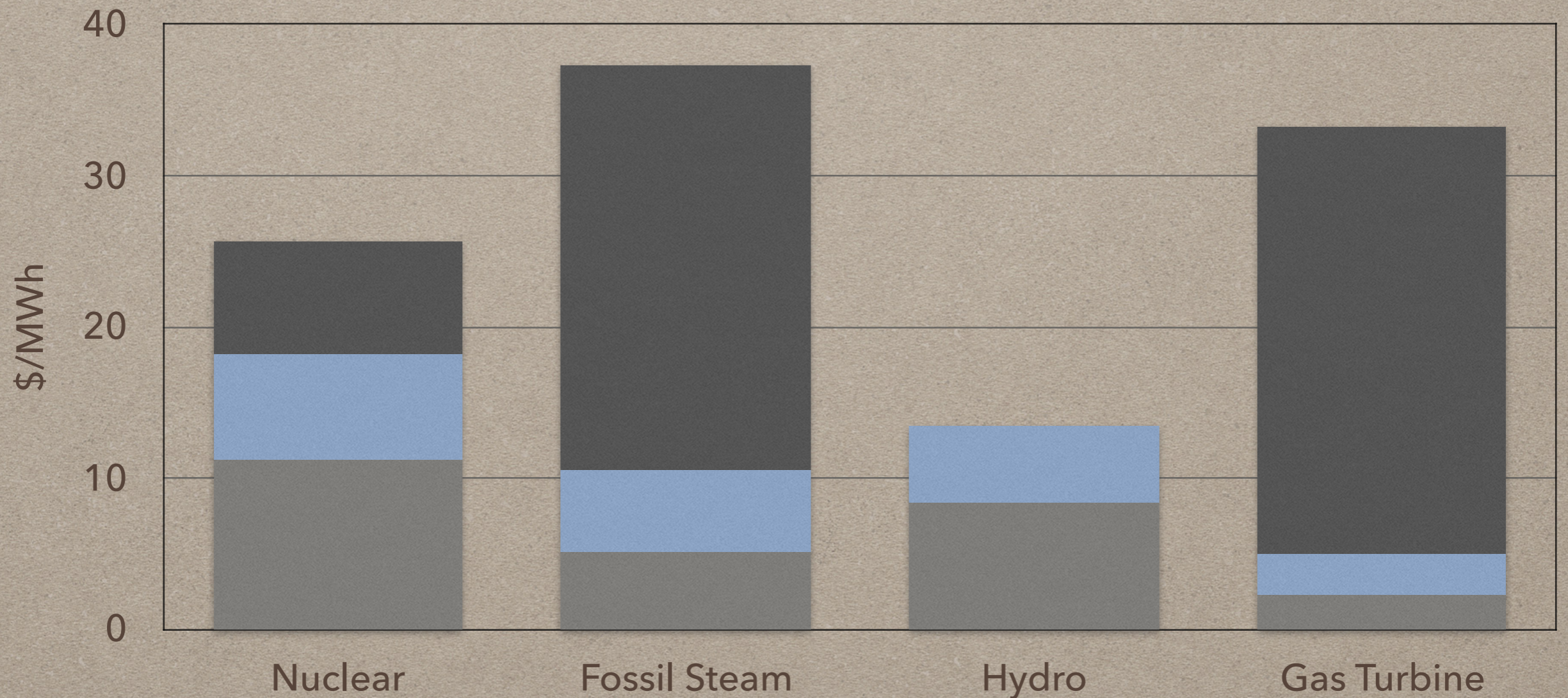
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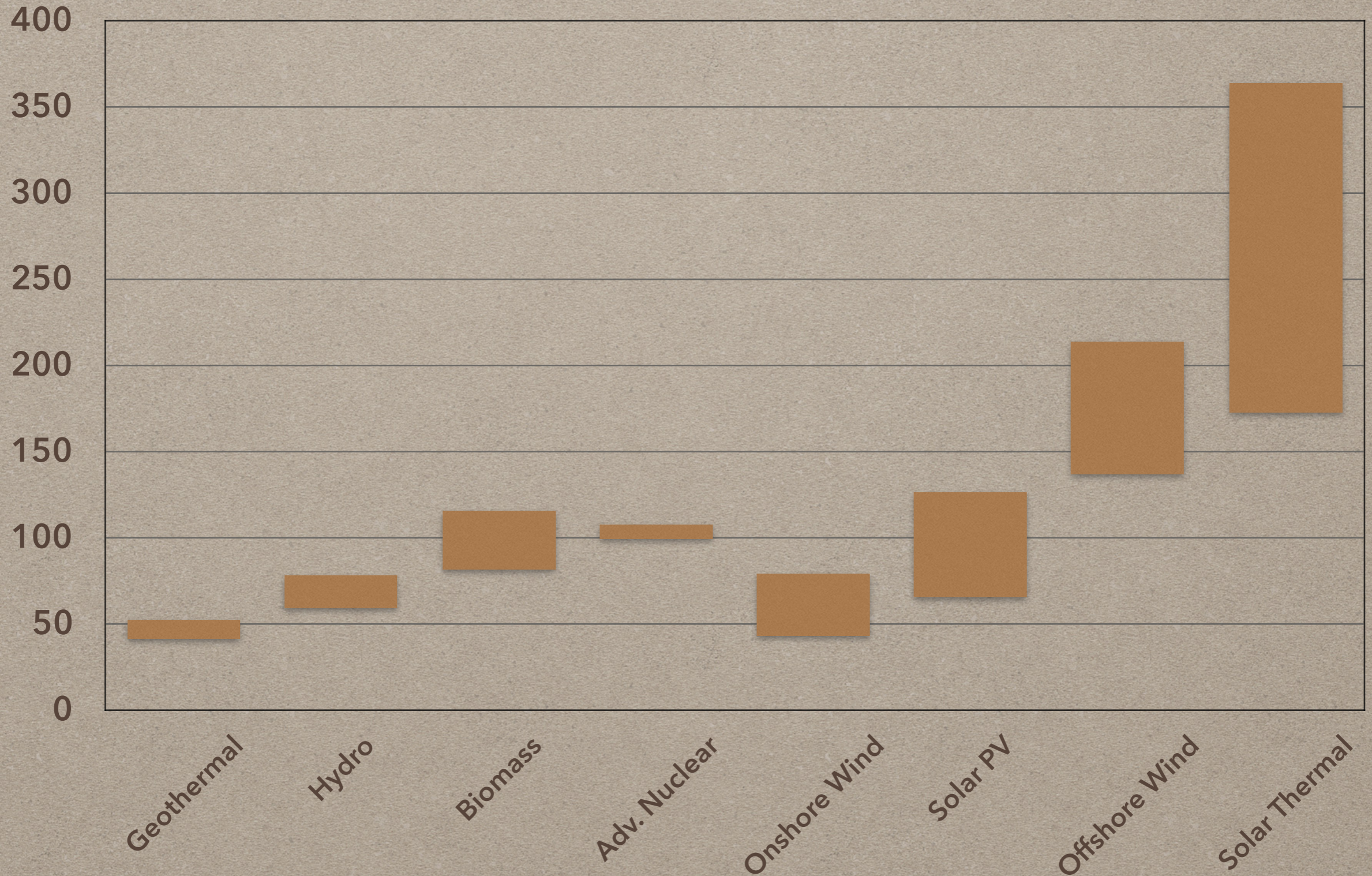


LOW (AND STABLE) GENERATING COSTS

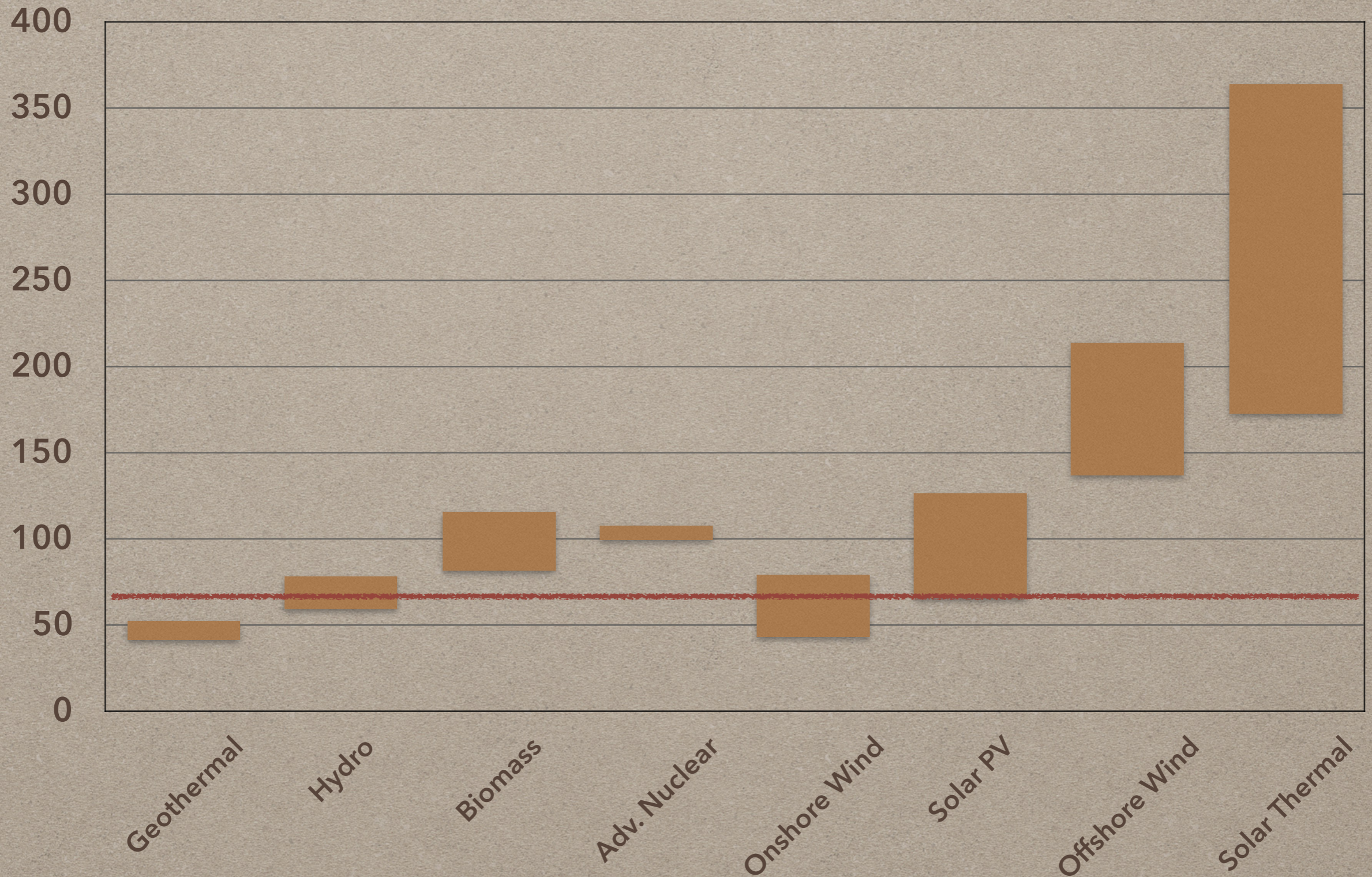


2015 Real Generating Costs

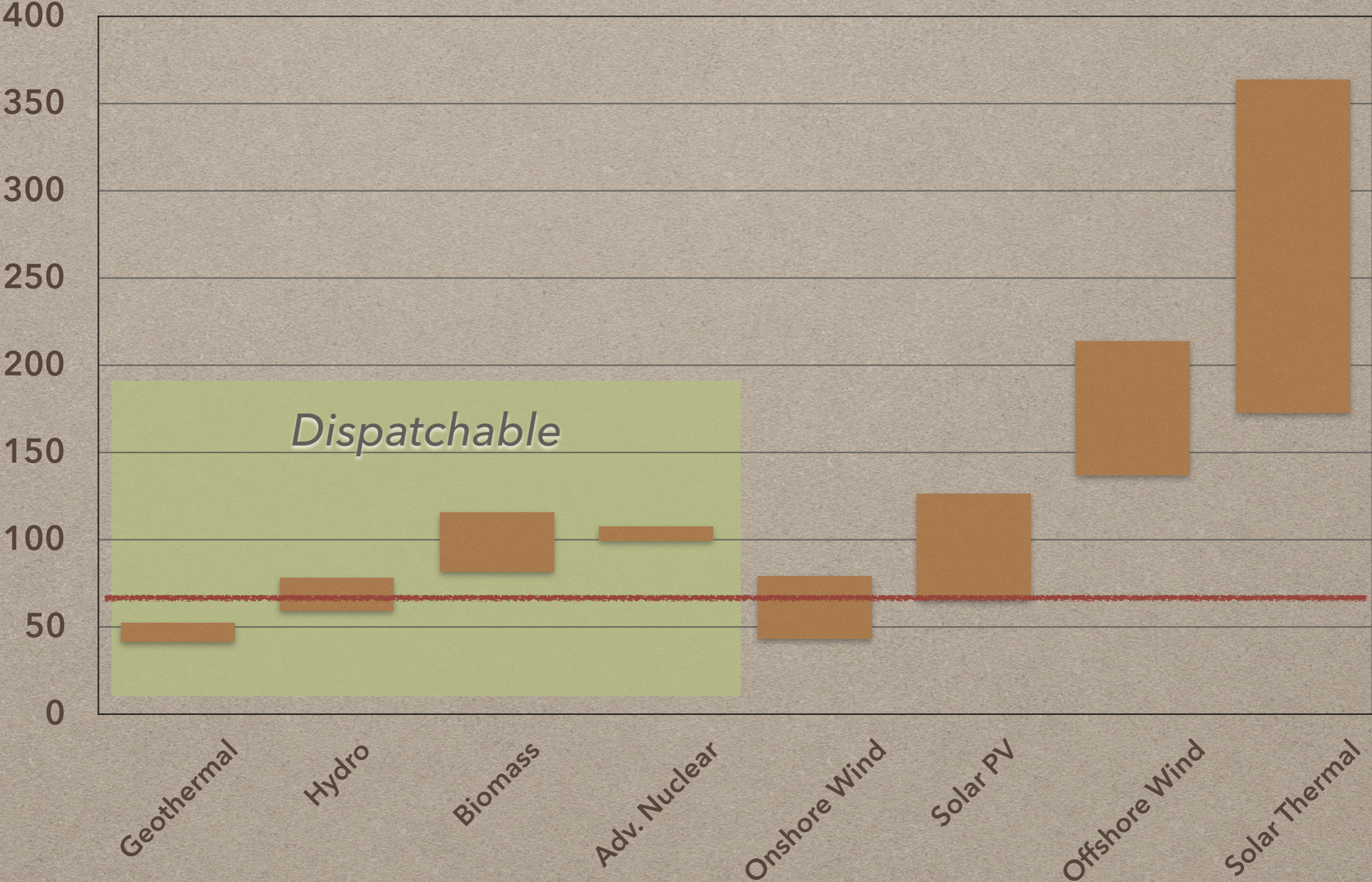
FUTURE LEVELIZED COST (IN 2022)



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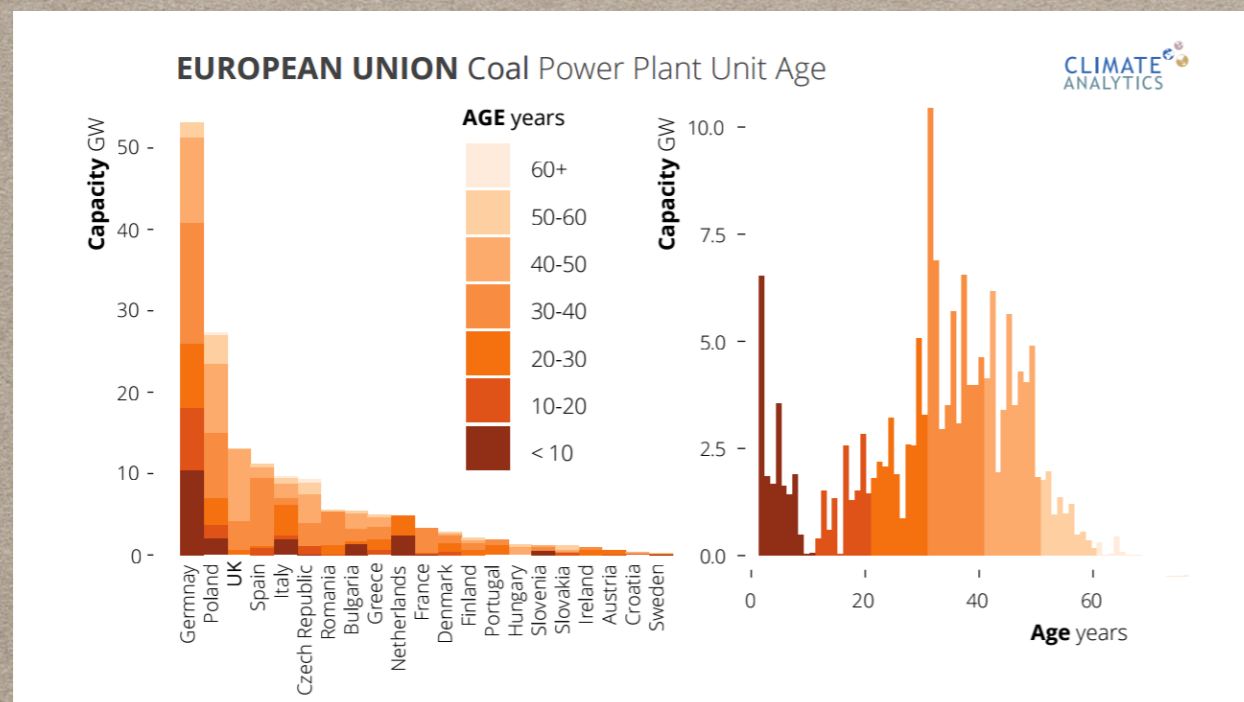


FUTURE LEVELIZED COST (IN 2022)

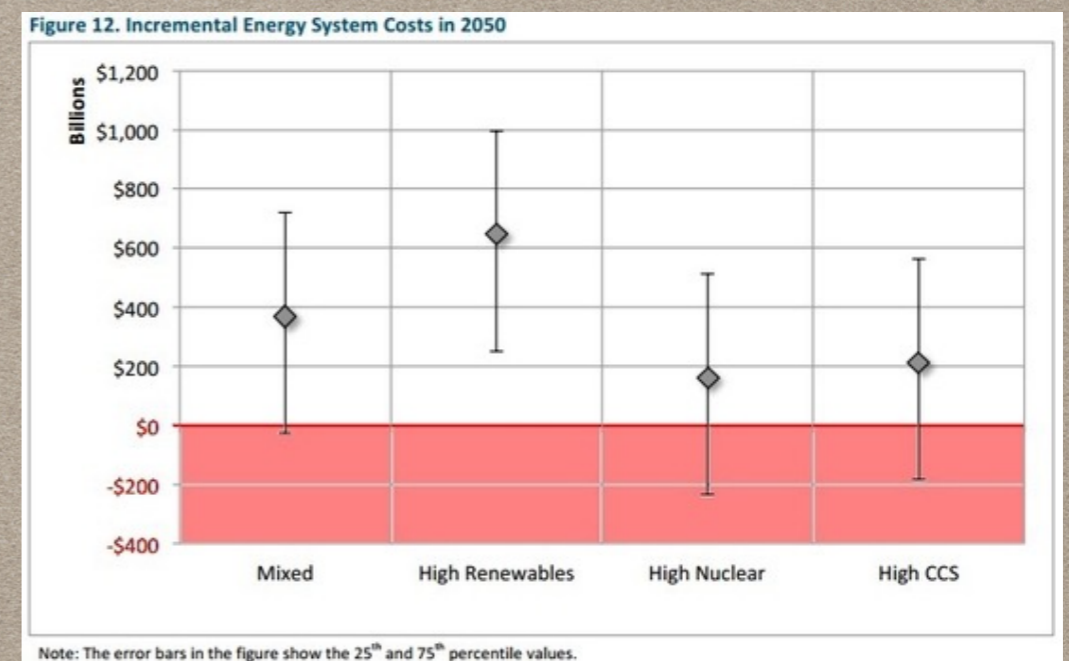


WE NEED A MIX (WITH BASELOAD)

- Need baseload to balance the grid, no easy solutions
- When nuclear closes, fossil fuels replace it. (Look at California, New England, Germany, Japan)



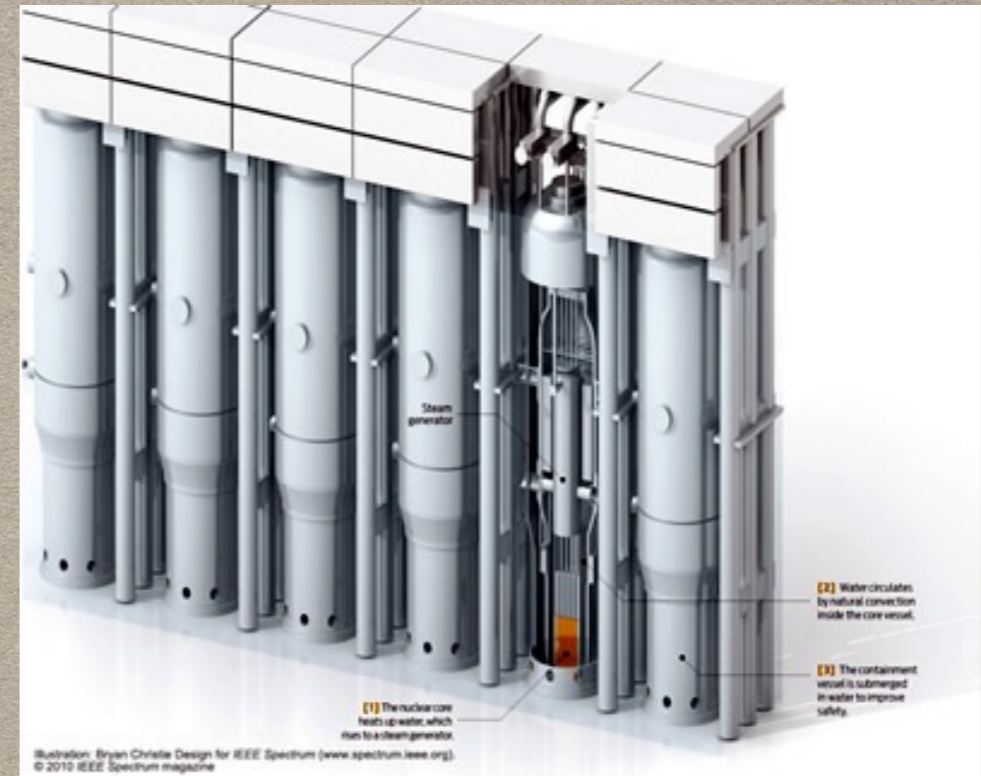
Climate Analytics (2017) "A Stress Test for Coal in Europe Under the Paris Agreement: Scientific Goalposts for a Coordinated Phase Out and Divestment"



Williams, J.H., B. Haley, F. Kahrl, J. Moore, A.D. Jones, M.S. Torn, H. M. Pathways to Deep Decarbonization in the United States. (2014).

COST IS STILL A BURDEN FOR UTILITIES

- Small Modular Reactors
- NuScale Submitted License in 2016
- 45 MW, built in 6-12 packs
- Planning to Build First Plant in Idaho, for UAMPS



DISRUPTIVE NUCLEAR TECH

- GenIV Designs
 - Passive, Intrinsic Safety
 - Modular Fabrication
 - High Thermal Efficiency
 - Radically Cheaper?

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HOW TO MAKE NUCLEAR CHEAP

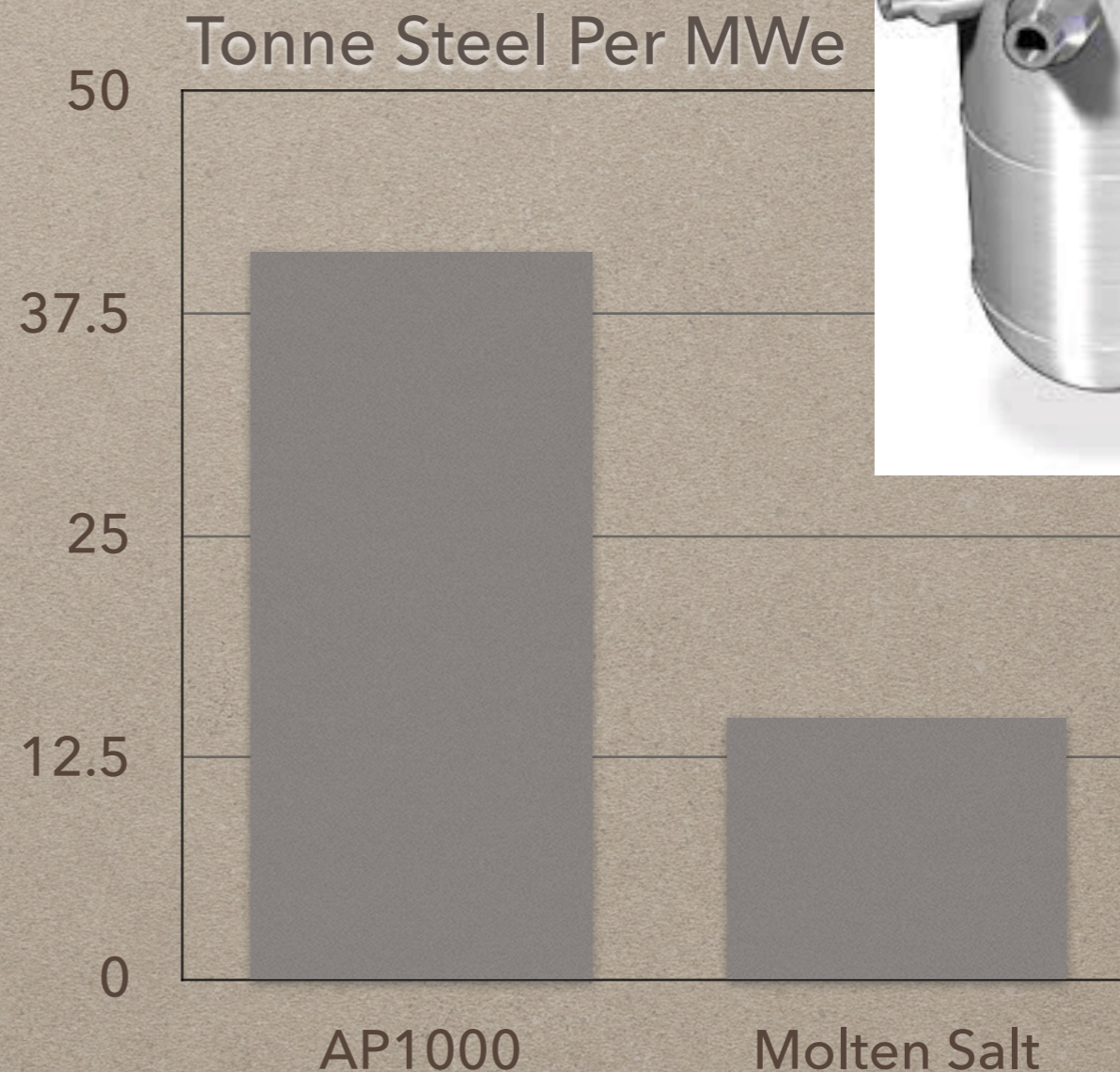


SAFETY, READINESS,
MODULARITY, and EFFICIENCY

TED NORDHAUS, JESSICA LOVERING,
AND MICHAEL SHELLENBERGER

REDUCE RISKS AND COSTS?

- Low-Pressure = Less Steel
- Smaller Footprint = Less Concrete
- High-Temp = Less/Zero Cooling Water, Industrial Applications
- Less Waste, Longer Time Between Refueling
- Floating Reactors
- Build-Own-Operate-Remove Model



THE ADVANCED NUCLEAR INDUSTRY



"We want to view nuclear waste in a new way. To look at it as a resource to be tapped rather than a liability to be disposed of."

- Leslie Dewan, Transatomic Power



THANK YOU!

Jessica Lovering
Director of Energy
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