



PROGRAMMATIC APPROACH TO NUCLEAR NEW BUILD: COST AND RISK REDUCTION

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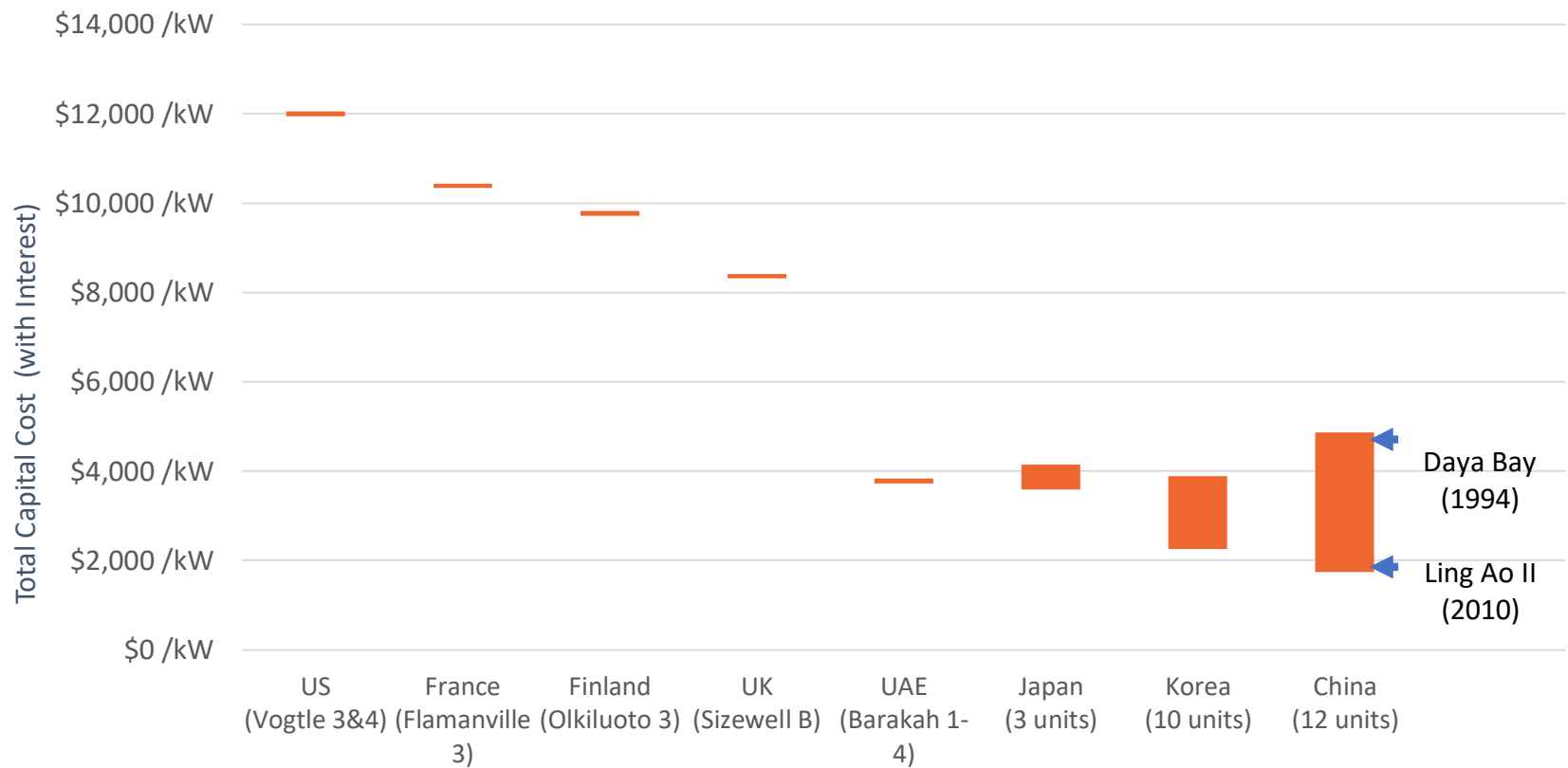
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Energy Costs Matter

Why is there such a range of nuclear costs?

Total Capital Costs for Historical and Ongoing Nuclear Projects



UK Energy Technology Institute Nuclear Cost Drivers Study

- Plant costs are driven by a small number of factors
- These are under the control of key participants in delivering projects
- Collaboration among parties with the clear goals of cost and risk reduction can make a big difference

The ETI Nuclear Cost Drivers Project: Summary Report



20 April 2018

What lowers risk and cost?

- The key is a programmatic approach
- Example: Up front investment in design and construction planning

Programmatic approach to improved delivery: elements of well organized programs

A large industrial furnace is pouring molten metal into a ladle. The scene is filled with bright orange and yellow light from the molten metal. Several workers in protective gear are visible in the foreground, observing the process. The background shows industrial structures and equipment.

1. Continuous building
2. Disciplined approach to capturing and disseminating learning
3. Competitive supply chain
4. Multiple units per site (4-6)
5. Standardized design and/or disciplined evolution
6. Long-term view
7. Well defined revenue model for investment recovery

Recent publications

Author/Participant

WHAT WILL ADVANCED NUCLEAR POWER PLANTS COST? A Standardized Cost Analysis of Advanced Nuclear Technologies in Commercial Development -- Andrew Foss, John Herter, Eric Ingersoll, Energy Innovation Reform Project 2017

The ETI Nuclear Cost Drivers Project: Summary Report-- Andrew Foss, Kirsten Gogan, John Herter, Eric Ingersoll, Energy Technologies Institute, 2018

The Future of Nuclear Energy in a Carbon-Constrained World (Member of Study Group) 2018

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THANK YOU!