C2N: The Nuclear Future of Coal

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SCQ

Situation: We <u>Need Zero Carbon</u> Energy

Complication:

Most <u>renewable energy sources</u> are too <u>intermittent</u> and current storage technology means they alone <u>can't replace base load</u> power. Question:

What can we do to quickly bring in <u>reliable</u>, <u>zero-carbon electricity</u>?





The Daily Demand Cycle

Meeting daily demand and base load is the greatest challenge to a renewable grid.

Nuclear energy can solve it.



Solar vs. Demand

Small Modular Reactors

Small Modular Reactors bring advantages in safety and versatility conventional nuclear lacks.





Coal Power Plant Site: New Home of SMRs

Reusing a coal power plant site can provide a new, clean energy life for the plant and surrounding communities.

Would remain *derelict otherwise*

Exclusion zone, infrastructure, and resource use *already established*

Can continue to be *source of tax revenue* and *employment*



C2N: Benefits for the Community and Country

In addition to providing clean energy for national use, nearby communities stand to benefit from renewed activity at the plant site.



Source tax revenue and development



High paying permanent jobs



Clean energy action that doesn't abandon rural communities

Recommendations Implementing any of these reforms will help realize a successful C2N.

Federal

Accept

NRC accepts State and Local requirements in Early Site Permit

Priority NRC gives C2N priority in Early Site Permit Review

Reform Title 10 CFR Parts 50, 52 to be conscientious of other SMR needs

State and Local

- Exempt Storage and Renewable permitting for valid Early Site Permit
- *Waive* permits for supporting infrastructure
- Raise public awareness for C2N projects



Cooperation is key!







Sources for Images

- SMR image from NuScale Power LLC
- <u>https://grist.org/climate-energy/coal-plant-pollution-can-be-deadly-even-hundreds-of-miles-downwind/</u>

Full informational citations will be available in the final policy document.



Questions?