# FICIAL COF

### **Dunston, Shonta**

## E-100 Sub 190 CS

Subject:

FW: In Rust We Trust

From: Storms Reback <stormsreback@gmail.com>

Sent: Sunday, May 26, 2024 9:56 AM

To: Mitchell, Charlotte < cmitchell@ncuc.gov >

Subject: In Rust We Trust

Dear Commissioner Mitchell,

I'm a father who fears for my family in a warming world.

Economists say that if the price of grid storage drops to \$20/kWh, fossil fuels will not be competitive with renewables. That is now on the verge of happening with a battery based on rust!

https://singularityhub.com/2023/01/11/form-energys-new-factory-will-churn-out-iron-air-batteries-forgrid-scale-storage/

Form Energy's iron-air battery offers low cost (\$20/kWh), long duration (100-150 hours), safety (non-flammable), and recyclability. All of these are key advantages over lithium-ion batteries for grid-scale energy storage. It can store energy for 100 hrs. However, it has lower efficiency (50% vs. 95%), slower charging, and larger size/weight than lithium batteries.

Although rust batteries are less efficient (50% vs. 95%), that doesn't matter in places like California and Texas, where there is a surplus of renewable energy. And as solar and wind get cheaper, there will be more and more states in this situation.

The upshot? New fossil fuel infrastructure is a bad investment - not just for ecologically, but financially. No new fossil fuel infrastructure, period!

Sincerely,

Storms Reback

Asheville, North Carolina

E-mail correspondence to and from this address may be subject to the North Carolina Public Records Law and may be disclosed to third parties by an authorized state official.

# AL C

### **Dunston, Shonta**

### E-100 Sub 190CS

Subject:

FW: In Rust We Trust

----Original Message----

From: (null) vatkinson <vatkinson@frontier.com>

Sent: Monday, May 27, 2024 8:08 AM

To: Mitchell, Charlotte <cmitchell@ncuc.gov>

Subject: In Rust We Trust

Dear Commissioner Mitchell,

I'm a mother who fears for my family in a warming world. Please say no to methane gas expansion.

Economists say that if the price of grid storage drops to \$20/kWh, fossil fuels will not be competitive with renewables. That is now on the verge of happening with a battery based on rust!

https://singularityhub.com/2023/01/11/form-energys-new-factory-will-churn-out-iron-air-batteries-for-grid-scale-storage/

Form Energy's iron-air battery offers low cost (\$20/kWh), long duration (100-150 hours), safety (non-flammable), and recyclability. All of these are key advantages over lithium-ion batteries for grid-scale energy storage. It can store energy for 100 hrs. However, it has lower efficiency (50% vs. 95%), slower charging, and larger size/weight than lithium batteries.

Although rust batteries are less efficient (50% vs. 95%), that doesn't matter in places like California and Texas, where there is a surplus of renewable energy. And as solar and wind get cheaper, there will be more and more states in this situation.

The upshot? New fossil fuel infrastructure is a bad investment - not just for ecologically, but financially. No new fossil fuel infrastructure, period!

Sincerely,

Vickie Atkinson

Chapel Hill, North Carolina

Sent from my iPhone

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lav 28 2024