



**LDES NATIONAL
CONSORTIUM**

LDES National Consortium Workshop

Equity and Social Benefits of LDES

H. J. Corsair
Oak Ridge National Laboratory



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OCED
Office of Clean Energy Demonstrations



OTT
Office of Technology Transitions

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Societal Values in Modeling

All economic models reflect the values of the society in which they are created.

- Assumptions we don't realize we make: everyone

- “Best” solution depends on what you are trying to achieve.
 - Least cost? Least cost to whom? Who bears the costs, who gets the benefits?
 - Externalities? Is the cost of treating asthma for downwind neighbors included?
 - Property values? If we choose to site based on lowest cost, we may drive down the property values of the already-poor while protecting property values in the high-rent district.
 - Do resilience metrics assume all customers are the same?



Resilience and Equity

Does the grid view every residential meter as the same when it comes to resilience?
Is that equal? Is it equitable?



Meet the Jones Family

Frequent power loss due to hurricanes

Large two-story home

2 SUVs

Backup generator

Employed with good incomes

In good health

Meet Chris

Lives a few miles from the Jones

Trailer home

Can only drive short distances

Lives on a small fixed income

Relies on an oxygen machine



LDES and Society

How does this picture change if everyone has LDES?



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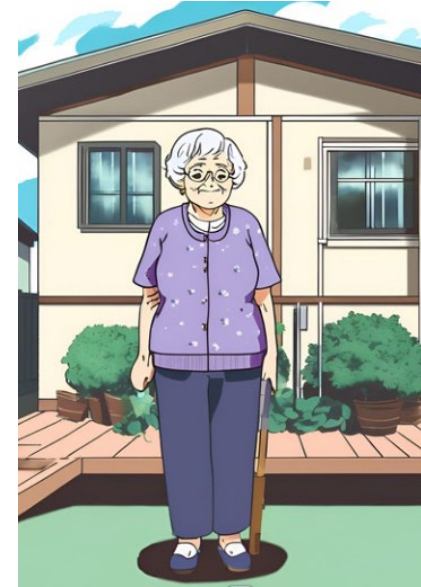
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Social Benefits of LDES, Economic Benefits of Equity & Access

Tiger Teams,

LDES & Society

- **Reduced energy cost/energy burden**
- Increased reliability
- **Increased resilience**, including community resilience centers
- Entrepreneurial opportunities
- Employment opportunities
- Diversity of technology options reduce supply chain risks
- Carbon reduction by pairing with intermittent renewables

Equity & Access

- **Economic efficiency – reduces waste of resources**
- **Innovation space expands**
- Improved relationships with customers, expanded customer base
- Increased workforce & tax base



Discussion Questions

- Should electricity customers be able to pay for improved (priority) resilience?
- How can the LDES industry gain acceptance in marginalized communities?
- If the rich have yachts and the poor don't, that is unequal but not wrong. If the rich have water and the poor don't, that is inequitable and unacceptable. If the rich have LDES in their homes to provide resilience & to make money with arbitrage and the poor don't, that is....?

