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***A NEW WASTE STRATEGY FOR A NEW
ADMINISTRATION?***

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A NUCLEAR WASTE REPOSITORY WILL BE NEEDED

- ▶ **All discussion of nuclear waste should start from one simple fact:**
 - ◆ **A nuclear waste repository is needed**
 - ...independent of nuclear power growth.
 - ...independent of fuel cycle chosen.
 - ...independent of who is the President.
 - ◆ **But we do not need it now,**
 - ◆ **What is needed is progress toward the implementation of waste disposal to assure the public that the Government will eventually meet its legislated and contractual obligations**

Challenges Going Forward

- ▶ **DOE must defend the recently submitted license application for a repository at YM.**
- ▶ **DOE must demonstrate convincingly that a YM repository can meet the final EPA standard just promulgated.**
- ▶ **This must be accomplished in a fiscally challenging environment**
- ▶ **It is unlikely that Congress will allocate enough funding to allow the NRC to meet its legislated timetable**
 - ◆ **Question: Is it time to remove the 3 (or 4) year deadline for NRC review of DOE's application?**

Challenges Going Forward Cont.

- ▶ **It is extremely unlikely that Congress will appropriate funds for repository construction in the amounts needed at peak of construction (more than \$1 billion per year)**
 - ◆ **Question: Is it time to reform the Nuclear Waste Fund to take it off budget and free from annual appropriations?**

- ▶ **It is doubtful that the DOE can properly manage and oversee the large and complex task of building the repository and transport system to feed it.**
 - ◆ **Question: Is it time to create a new Federally chartered organization to manage the back end of the nuclear fuel cycle?**

Alternative Approaches to Yucca Mountain

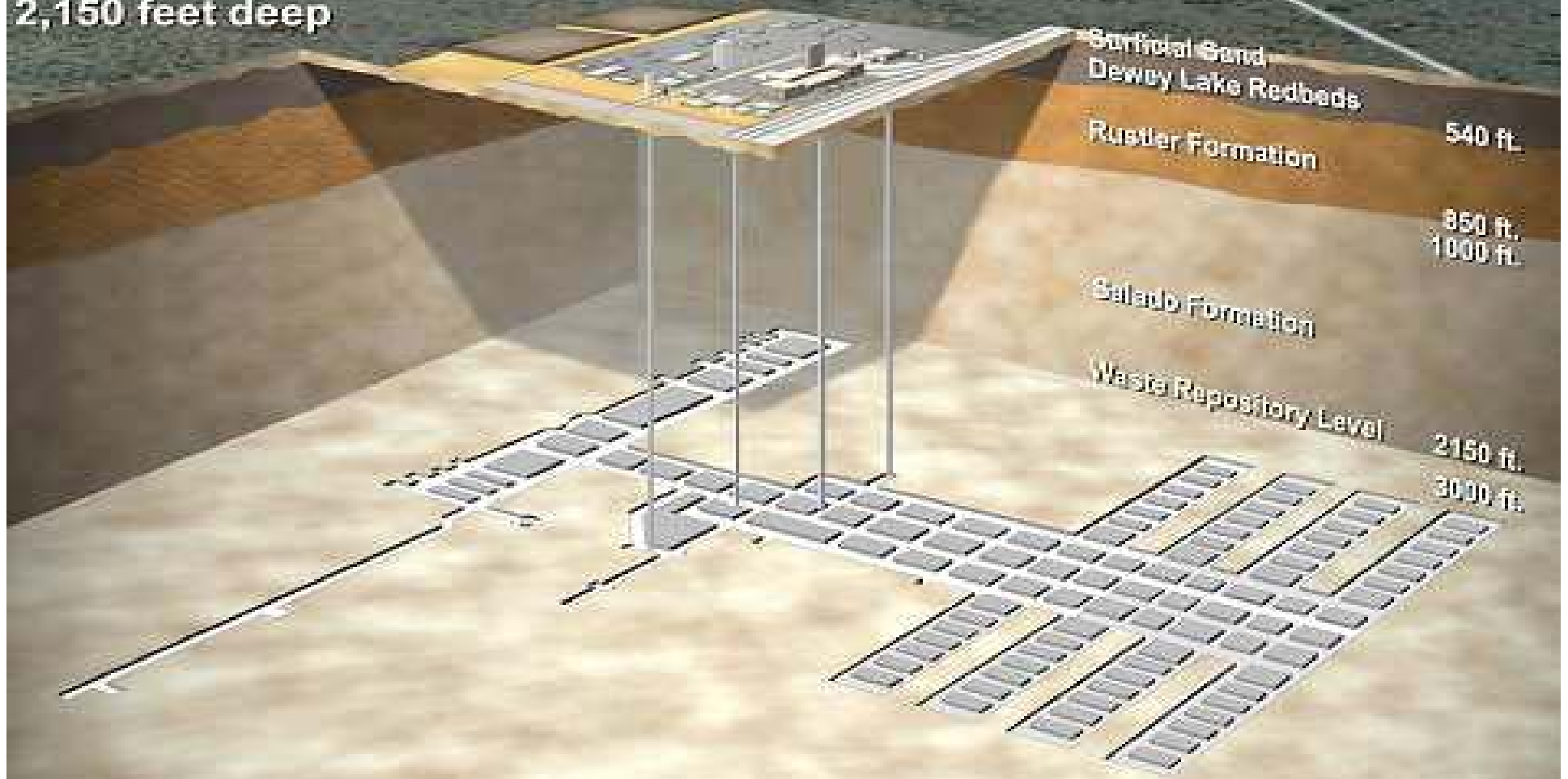
- ▶ **It would be a mistake to abandon Yucca Mountain as a potential repository at this time.**
- ▶ **However, since YM may be found by the NRC to be unsuitable or politics may conspire to block its implementation, alternative repository sites should be sought.**
- ▶ **A process to seek a voluntary site should be put in place in parallel with YM review.**
 - ◆ **Such a process has worked in Finland & is working in Sweden.**
 - ◆ **In the U.S. it worked in New Mexico for the WIPP facility**
 - ◆ **Considerations of fairness and equity strongly suggest that nuclear facilities of all types should be located where they are wanted.**
- ▶ **We have lots of time and many communities are warming up to advantages of hosting nuclear facilities.**

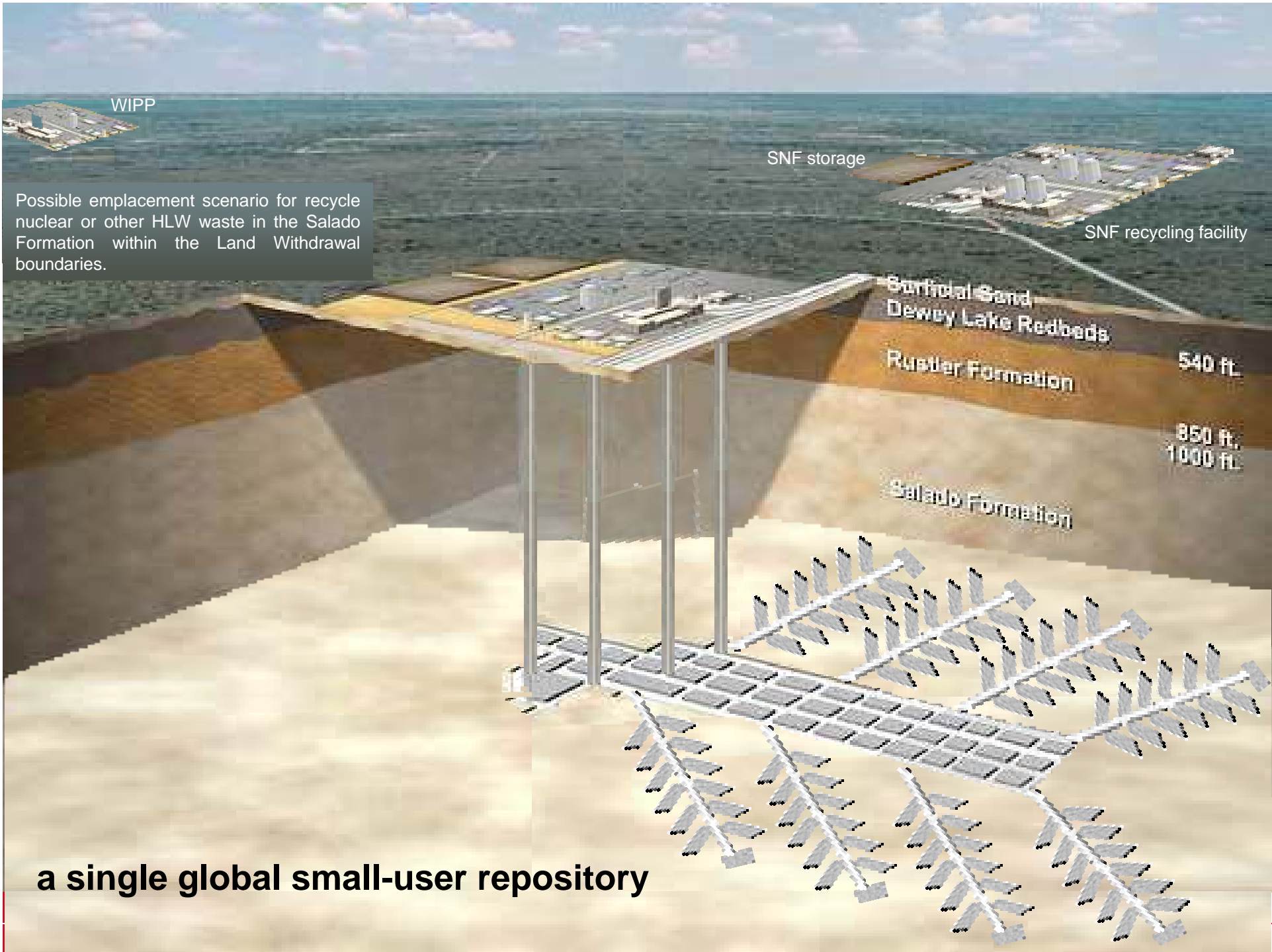
Waste Isolation Pilot Plant

U.S. Department of Energy facility

Designed for permanent disposal
of transuranic radioactive waste

2,150 feet deep





WIPP

SNF storage

SNF recycling facility

Surficial Sand
Dewey Lake Redbeds

Rustler Formation 540 ft.

850 ft.
1000 ft.

Salado Formation

Possible emplacement scenario for recycle nuclear or other HLW waste in the Salado Formation within the Land Withdrawal boundaries.

a single global small-user repository

Is There A Role For Centralized Interim Storage?

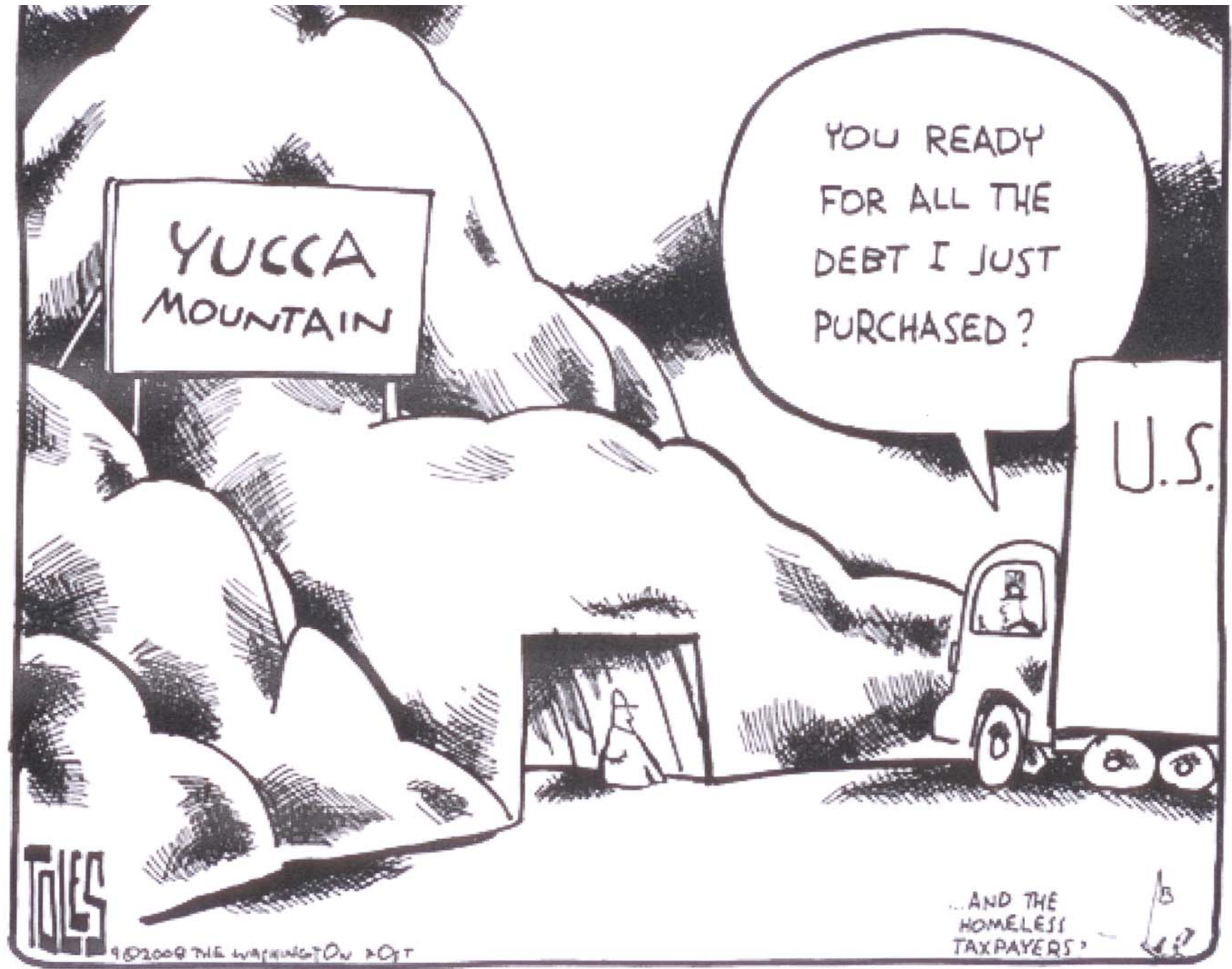
- ▶ **Here, answer is simple. Maybe, but only if local jurisdiction wants it.**
- ▶ **Must recognize that this is NOT an alternative to disposal but a stopgap measure to buy time for the repository.**
- ▶ **If centralized interim storage is pursued, there are only two realistic locations—at the head end of the repository or at the site of a treatment facility if a closed fuel cycle is chosen. Problem today is a repository location at YM is legislatively forbidden and there is no treatment facility in existence or on the immediate horizon.**
 - ◆ **Question: Isn't this a decision which could be assigned to the new Government entity?**

Should the U.S. Pursue Recycling Like France and Japan?

- ▶ **Recycling will not eliminate need for a repository, but...**
- ▶ **Recycling will change the waste form to be put in the repository**
 - ◆ **In France LWR recycling reduces HLW volume by factor of five**
 - ◆ **And reduces radio toxicity of waste by a factor of ten,**
 - ◆ **While adding about 5% to the cost of nuclear electricity.**
 - **Question: Would a similar trade off be good for the U.S.?**
- ▶ **If recycling in the U.S. were to add 1mil/kwh to the cost of waste management, this would represent a 1-2% increase in cost of nuclear electricity at retail level.**
 - ◆ **Question: Could the decision regarding if, when, where and how to do recycling be assigned to the new Government entity?**

A Workable Strategy

- ▶ **Allow the NRC to complete its job of reviewing the YM license application taking as much time as it needs.**
- ▶ **Establish a new Government corporation charged with responsibility for used fuel management including the repository(ies), transportation and possibly recycling**
- ▶ **Take nuclear waste fund off budget and out of the annual appropriations process.**
- ▶ **Implement a process to seek volunteer sites for a second (or a first) repository.**
- ▶ **Continue to evaluate the options to close the fuel cycle to gain benefits in resource management, waste form optimization and non-proliferation.**



YUCCA
MOUNTAIN

YOU READY
FOR ALL THE
DEBT I JUST
PURCHASED?

U.S.

T.S.

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...AND THE
HOMELESS
TAXPAYERS?

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