The Essentials

- SCM 1004 requests access to money in the federal U.S. Nuclear Waste Fund.
- That money would be used to construct the nation’s first permanent nuclear recycling and waste storage site within Arizona.
- The federal Blue Ribbon Commission on America’s Nuclear Future recently found an urgent need for permanent nuclear waste storage for the 65,000+ metric tons of nuclear waste in the U.S.
- There are multiple significant risks connected with creating a permanent site, including risk from transportation of nuclear waste from the 43 states currently storing the waste and risk regarding potential groundwater contamination.

Policy details

Arizona State Senator Al Melvin sponsored this bill requesting that Congress grant the Arizona Legislature access to the U.S. Nuclear Waste Fund. The funds would go to building a new nuclear recycling and deep geologic waste storage site for some of the 100+ nuclear reactors throughout the U.S. Five potential locations have been identified by the Arizona Energy-Education Fund Coalition, an organization supporting State Senator Melvin’s plan: Hualapai Valley north of Kingman; the Colorado Plateau province in the Holbrook Basin; the Luke Basin west of Phoenix; the Picacho Basin southwest of Picacho Peak; the San Simon Valley southeast of Safford.

Fig. 1. Tacks indicate proposed nuclear waste facility sites
See interactive Google map:
http://bit.ly/xHF4Cf

Purpose of bill
The U.S. nuclear energy industry generates 2,000-2,300 metric tons of nuclear waste each year. Currently, 43 states store about 65,200 metric tons of nuclear waste in temporary locations.¹ State Senator Melvin plans to develop an Arizona nuclear recycling and storage site for high-level radioactive waste to replace the truncated Yucca Mountain site in Nevada as the nation’s first deep geologic permanent disposal area for radioactive waste.

This bill proposes a solution to an urgent national need. The Blue Ribbon Commission on America’s Nuclear Future (BRC), established in 2010 by President Obama, issued a final report in January 2012 stating “this nation’s failure to come to grips with the nuclear waste issue has already proved damaging and costly and it will be more damaging and more costly the longer it continues...”

State Senator Melvin, in his February 16, 2012 presentation to the Senate Energy Committee, proposed a fee structure for nuclear waste disposal that would bring in $500 million to the host community per year. About 1/5th of that revenue would be dedicated to funding education in Arizona.

Challenges
Nuclear waste transportation, disposal and storage pose significant risk to the host communities and environments. Concerns about groundwater contamination ended construction of the Yucca Mountain deep-geological storage facility in Nevada after 20 years of extensive study and planning.

The BRC report detailed recommendations for establishing permanent high-level nuclear waste disposal facilities. These recommendations draw on lessons learned from the Yucca Mountain siting process as well as practices from other countries with permanent high-level nuclear waste disposal sites.

The BRC recommends a consent-based approach to siting future nuclear waste management facilities. As noted in the final report issued in January 2012, “siting storage or disposal facilities has been the most consistent and most intractable challenge for the U.S. nuclear waste management program.” (p.8)

Some other significant challenges include the risk of groundwater contamination and risks in transportation of the waste from the 43 states around the country. Two of the proposed sites discussed above are located near or in metropolitan areas, and all five provide at least some measure of groundwater resources to local communities.

¹ According to the U.S. Nuclear Regulatory Commission (NRC), there are 65,200 metric tons of high-level waste stored on-site in 43 states.
**Read more**

*Nuclear Waste Policy Act*

*U.S. Nuclear Regulatory Commission page on waste disposal*
http://www.nrc.gov/waste/hlw-disposal.html

*Blue Ribbon Commission Final Report*
brc_finalreport_jan2012.pdf

*Blue Ribbon Commission homepage*
http://brc.gov/

*Arizona Energy-Education Fund Coalition, supporters of SCM 1004*
Azedcoalition.org

**Contact information**

Arizona State Senator Al Melvin
1700 W. Washington, Room 303
Phoenix, AZ 85007
Phone Number: (602) 926-4326
Fax Number: (602) 417-3159
Email Address: amelvin@azleg.gov

**Latest developments (any action alerts, impending deadlines, meetings, etc.)**

SCM 1004 passed through the Arizona Senate. As of March 23, 2012, it is being considered in the House.