



tensive studies regarding problems facing the state.

Under the director of the Assembly's bipartisan Committee on Policy Research, AOR investigates current state issues and publishes reports which include long-term policy recommendations. Such investigative projects often result in legislative action, usually in the form of bills.

AOR also processes research requests from Assemblymembers. Results of these short-term research projects are confidential unless the requesting legislators authorize their release.

MAJOR PROJECTS

Economic Development Assistance Programs in State Government (April 1993) provides information on California's existing economic development assistance programs and discusses programs which have proven successful in other states. AOR estimates that over 30 different state agencies are currently administering more than 125 economic development programs in California. Although a number of entry points exist which provide limited access to economic development assistance, AOR found no single, easily accessible entry point for comprehensive assistance in key areas of the state; AOR also found that despite a myriad of economic development assistance programs, gaps exist in California programs for technology innovation. AOR noted that some existing and proposed state programs could fill those gaps; however, before adding to programs which are already disorganized by function and agency, AOR suggested that California officials learn from programs that have worked in other states which experienced severe economic problems in the 1980s.

AOR's specific recommendations for change include creating a single, easily accessible entry point in key areas of the state for comprehensive economic development assistance; linking industry clusters and government with universities to turn research into products and jobs; improving the productivity of mature industries; leveraging public resources with private sector and nonprofit institution resources; and funding state programs based on performance.

Putting the Pieces Together: A Status Report on Integrated Child and Family Services (February 1993), part of AOR's *California Children, California Families* series, describes pioneering attempts in California to redesign delivery systems for child and family services; identifies obstacles encountered by such efforts and the institutional and political barriers to their expansion; and describes specific options for overcoming those barriers. AOR

notes that communities throughout California are inventing new systems for service delivery; although the programs vary greatly, most can be described as comprehensive, flexible, and holistic, prevention-oriented, family-centered, neighborhood-based/culturally sensitive, governed by collaborative leadership with shared resources, and accountable to program participants.

The report then describes four local programs which have been implemented to coordinate various services for children and families. For example, Sacramento County's "Cities in Schools" program is "committed to helping children succeed in school and to strengthening family life so that families in trouble can begin taking on more and more responsibility for the successful raising of their children." Since 1988, Cities in Schools has led a collaborative effort in Sacramento County to provide social, educational, and health services to children in danger of dropping out of school, as well as to their families. Fresno County's "K-SIX" program is aimed at identifying children at an early age who are likely to drop out of school, and working with the school and family to address barriers to school success. Yolo County's "PEARLS" (People Emerging and Reaching Lifeline Success) program combines education and support services for the pregnant and parenting minors program of the County Office of Education and the Greater Avenues for Independence (GAIN) program. Finally, San Diego's "New Beginnings" is described as an ambitious attempt by the City of San Diego, County of San Diego, San Diego City Schools, San Diego Community College District, San Diego Housing Commission, UC San Diego Medical School, and Children's Hospital to change the entire delivery system for health, human services, and education.

The report states that various obstacles or barriers to these and similar efforts include a lack of adequate facilities or space, lack of funding, confidentiality concerns, lack of collaboration, state-level fragmentation, and program inflexibility. According to AOR, the options available to the state in order to overcome these problems include the following:

- developing legislation which will designate a portion of future bond funds for integrated services facilities;

- simplifying eligibility standards, changing funding rules, emphasizing a more holistic view of services, and allowing local integrated child and family services programs more flexibility to provide the highest-priority services identified by the local community;

- exploring new federal funding sources for which the state is eligible; and

- developing a task force on professional development for integrated children and family services to examine current professional training programs, review credentialing and licensing requirements, identify exemplary multidisciplinary programs, and recommend changes in current programs, credentials, and licenses which would enhance collaboration.

AOR is expected to release a follow-up paper in December describing the progress of the efforts, reassessing the barriers, and, if appropriate, recommending additional specific legislation.

SENATE OFFICE OF RESEARCH

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Established and directed by the Senate Committee on Rules, the Senate Office of Research (SOR) serves as the bipartisan, strategic research and planning unit for the Senate. SOR produces major policy reports, issue briefs, background information on legislation and, occasionally, sponsors symposia and conferences.

Any Senator or Senate committee may request SOR's research, briefing, and consulting services. Resulting reports are not always released to the public.

MAJOR PROJECTS

How Safe? Issues Raised by the Proposed Ward Valley Low-Level Radioactive Waste Facility (January 1993) summarizes outstanding safety and liability issues facing California's plan to authorize US Ecology to locate and operate a low-level radioactive waste (LLRW) facility at Ward Valley, located in San Bernardino County.

The federal Low-Level Radioactive Waste Policy Act of 1980 gave states the responsibility for managing their own commercial LLRW facilities, encouraged states to enter multi-state compacts to safely manage the waste on a regional basis, and allowed compact regions to exclude LLRW generated outside their regions from their disposal sites beginning in 1986. In 1985, Congress amended those provisions to extend the deadline for states to enter into compacts and develop regional LLRW facilities, establish specific milestones for the siting and construction of new LLRW disposal facilities along with incentives and penalties to prompt



states to meet those goals, and extend the date after which states and compacts with waste facilities may close their borders to out-of-state and out-of-compact wastes to January 1, 1993.

At one time, six commercial disposal sites operated nationally, all constructed between 1962 and 1971; those facilities were located in Kentucky, New York, Illinois, Washington, Nevada, and South Carolina. The Kentucky, New York, and Illinois facilities were closed in the 1970s due to environmental problems; Nevada closed its facility effective January 1, 1993, in response to numerous operating violations. Also effective January 1, Washington closed its facility to California waste.

In preparation for the January 1, 1993 effective date of the federal amendments, California, Arizona, North Dakota, and South Dakota formed the Southwest Compact, and California agreed to provide a LLRW disposal facility for the first thirty years for wastes originating in the four states comprising the compact. The terms of the agreement require California to ensure that public health and safety are protected in the siting and operation of the facility, and that charges for disposal of LLRW are sufficient to pay for the safe disposal of LLRW and long-term care of the regional disposal facility. Additionally, the Department of Health Services (DHS) adopted regulations for selection of a LLRW facility license designee and for the ultimate licensure of a LLRW facility operator; the regulations called for the rank ordering of applicants in accordance with their demonstrated ability to meet established financial standards, provide the best concept for site development and operations, present an effective program to deal with concerns of the public regarding establishing a LLRW disposal site, and establish a reasonable schedule of charges for disposal of LLRW. According to SOR, the application submitted by US Ecology received the lowest rank of the four received by DHS; however, the other three companies subsequently declined to pursue their proposals and US Ecology, the sole remaining applicant, became the license designee in 1985. From 1982-84, DHS also identified 18 desert basins in the Mojave Desert as the most likely places for siting a LLRW facility; in 1988, US Ecology formally designated Ward Valley as the proposed project location.

However, the facility was not built by January 1, 1993. The project is still under review by the federal Bureau of Land Management (BLM) and DHS, and last year DHS promised the Senate Rules

Committee it would conduct an evidentiary hearing on the environmental impacts of the proposed LLRW facility [12:2&3 CRLR 13-14]; at this writing, that agreement is the subject of litigation. The Southwest Compact recently negotiated an agreement with the Southeast Compact; pursuant to this agreement, California may dispose of its LLRW in a South Carolina facility until mid-1994 so long as it makes continued progress toward siting its own LLRW facility.

In its report, SOR identified the following safety and liability issues regarding US Ecology's proposal:

• **Potential for Waste Migration and Groundwater Contamination.** According to SOR, project proponents contend that Ward Valley is a superior site and suitable for a shallow land burial facility due to its arid conditions, the nature of soil conditions, and the distance of groundwater from the site surface. US Ecology and DHS rely on extensive waste transport modeling efforts and assumptions about groundwater movement to conclude that, even if released, wastes would take thousands of years to reach groundwater, if they reach it at all; these assumptions are based on findings that, due to the arid conditions, moisture in the soil moves upward rather than downward. However, SOR notes that actual measurements at the site indicate that the waste tritium, which occurs both naturally and from nuclear testing fallout, has already migrated at least 100 feet downward in less than 35 years.

DHS also contends that Ward Valley is a topographically "closed" basin with no surface drainage to adjacent basins or the Colorado River, a prime source of drinking water to millions of U.S. and Mexican residents; according to the environmental impact report/statement (EIR/S) on the project, groundwater under the Ward Valley site drains southward, away from the Colorado River. However, SOR contends that the EIR/S overlooked evidence that increasing use of the two aquifers to the north of Ward Valley by the city of Needles and other users may eventually reverse the groundwater flow. Also, SOR contends that the conclusions of the EIR/S conflict with findings of a 1984 U.S. Geological Survey which found that the Ward Valley aquifer is a basin from which groundwater drains in a southerly direction to the Colorado River. Also, SOR notes that some critics contend that if surface evaporation produces upward migration of moisture through the soil at the site, as claimed by DHS, radioactivity could migrate back to the surface, where it could be released into the atmosphere and trans-

ported over the surrounding area, including the Colorado River.

• **Adequacy of Shallow Trench Burial.** According to the report, a number of experts contend that shallow trench burial, the method of disposal proposed by US Ecology, is unreliable; better alternatives are available and should be considered.

• **Lack of Consideration of Measures to Minimize Waste Disposal.** According to SOR, neither DHS nor BLM, the lead agencies for the project, have given serious consideration to alternatives to minimize the environmental consequences of a LLRW disposal facility in California. Such alternatives include the recovery of tritium, which many experts contend can be economically recycled if 100 curies of waste are annually available for treatment; market-based incentives for conservation and recycling of LLRW; and storage to decay—either onsite or in centralized facilities—for the relatively small amount of LLRW which results from nuclear medical treatment.

• **Risks of Waste Stream Understated.** SOR notes that because utility nuclear power plant wastes are considerably more hazardous in terms of half-life and radioactivity than LLRW produced by other sources, determining the exact make-up of the waste stream entering Ward Valley is critical to determining both the degree of risk and the adequacy of the proposed facility. According to DHS, only about 6% (in terms of radioactivity, not volume) of the total wastes expected to be shipped to Ward Valley is from electric utilities, while 10% is from industry sources, 79% is from medical sources, and roughly 5% is from government and academic sources. However, SOR contends that DHS' waste stream figures are contradicted both by figures collected by the U.S. Department of Energy, which indicate that in terms of activity, utilities nationally produce close to 90% of all LLRW, and by the documented waste stream of generators in the Southwest Compact, which indicates that utilities accounted for 47% of total LLRW generated over the four-year period from 1987-91.

• **Lack of Redundancy System for Waste Containment.** According to the report, experts advise that the ideal LLRW containment scheme is one that relies on multiple containment features to ensure control of the waste, should any one layer of protection fail; both the U.S. Environmental Protection Agency and the California Integrated Waste Management Board have recommended that trench liners and leachate collection systems be included as part of a comprehensive monitoring and



containment scheme for Ward Valley. However, US Ecology's application does not propose a multiple containment system and instead relies mainly on the natural characteristics of the site to contain the wastes. Further, US Ecology's proposal does not call for wastes to be shipped in state-of-the-art containers; according to DHS, packaging to be used for the more hazardous LLRW can only be expected to last for 20-30 years, far less than the hazardous life of most LLRW.

• **Operator Track Record.** According to SOR, two of the three LLRW facilities which have experienced contamination problems in other states were operated by US Ecology; also, the Nevada site operated by US Ecology was closed effective January 1, 1993, due in part to operating violations at the facility. The report states that the company's track record was one of the reasons it scored the lowest of the four applicants seeking to be the state's license designee.

• **Financial Responsibility for Damages Caused by Unplanned Releases.** According to a comprehensive analysis of liability issues prepared by the Controller's Office, the financial safeguards proposed by DHS to cover liability for injuries resulting from unplanned releases of LLRW are inadequate to protect the state's taxpayers for long-term damages resulting from operation of the facility. AB 2500 (Sher) in the 1991-92 legislative session would have addressed many of the liability issues by—among other things—raising the minimum required amount of insurance from \$10 million to \$15 million, establishing a \$25 million third party liability fund financed by a surcharge on waste disposal, requiring the license to expressly authorize the Governor to close the facility if the federal government or Compact Commission authorizes the receipt of out-of-compact waste, and making the operator of an LLRW facility, generators, and transporters absolutely, jointly and severally liable for damages resulting from the release of LLRW into the environment. However, Governor Wilson vetoed by bill, opining that the establishment of liability requirements for the facility was better left to the Secretary of Health and Welfare. [12:4 CRLR 11]

• **Risk of Ward Valley Becoming a National Repository.** SOR notes that there are two principal mechanisms under which Ward Valley could be opened up to out-of-compact waste. First, the Southwest Compact can accept waste from any out-of-compact state if a majority of compact commission members vote to do so and DHS prepares a report assessing the environmental and economic effects of

importing the waste. By virtue of being the initial host state for a LLRW facility, California currently controls a majority of seats on the Commission and could theoretically block the acceptance of out-of-state wastes for the duration that Ward Valley is operational. However, since the effect of admitting additional wastes will be to spread Ward Valley's operating costs, which are already expected to be the highest in the nation when and if the facility opens, and reduce disposal fees to in-state generators, SOR contends that there will be intense pressure to admit additional wastes.

Also, the emergency access provisions of the federal Low-Level Radioactive Waste Policy Act permit the Nuclear Regulatory Commission (NRC) to force a compact to accept LLRW if it determines there is an immediate and serious threat to public health or security and that the threat cannot be mitigated in any other way. Although NRC has assured California that it views the emergency access provisions as a last resort mechanism, critics contend that this position may change now that one of the three existing sites has permanently closed and the other two have taken steps to restrict access to their facilities.

• **Problems with LLRW Classification System.** SOR notes that a number of experts disagree with NRC's waste classification scheme, which classifies wastes according to the process which produces them and not according to the hazardous life of the radioactive materials contained in them; these experts contend that NRC's classification scheme allows wastes to remain at hazardous levels long after the established timeframes.

SOR concludes that, despite being under review for many years, numerous safety and liability issues concerning the proposed Ward Valley LLRW disposal facility remain unresolved. According to SOR, "[a]s the history with LLRW disposal sites in other states attests, licensing the Ward Valley facility before these issues are fully resolved could prove to be very costly to the state, both economically and environmentally."

Report on the Prison Industry Authority (January 1993) is based on a 1992 review of the Prison Industry Authority (PIA) by the Senate's Advisory Commission on Cost Control in State Government. According to the report, PIA employs over 8,000 inmates in the California prison system (approximately 8% of the prison population) and operates under a statutory mandate to provide inmates with training and experience that will assist them when they seek to join the outside working population; PIA is directed to accomplish this

goal by replicating as closely as possible the outside work environment, in conjunction with relevant education, training, and post-release placement. PIA, which has a non-inmate staff of 745, operates 71 enterprises at 19 facilities; the enterprises involve a number of areas such as furniture manufacturing, hog raising, coffee roasting, laundering, and printing.

The Commission found that many PIA products are not competitive with those produced in the private sector based simply on pricing, and working conditions within PIA do not encourage the productivity and innovation necessary for free market survival. Noting that the objective of making the PIA program financially self-supporting may be unrealistic, the Commission suggested that the Department of Corrections decide whether PIA is a business that must operate on a for-profit basis, or whether the Authority's programs provide a non-economic benefit that justifies a state subsidy. The Commission also noted that a desire for cost-effectiveness should be balanced with the presently unknown cost of lowering prison recidivism through PIA's education and training opportunities.

The Commission found that PIA needs to develop a more business-oriented workforce by exempting certain managerial and supervisory positions from the state's civil service system and establishing a realistic incentive system that rewards employee productivity. According to the report, PIA is constrained in its ability to hire and terminate managerial and supervisory personnel in a manner that meets the needs of a profit-making business, and the civil service rules do not allow for free market methods of dealing with the business cycle, such as layoffs during slack periods or hiring temporary help during upturns. Also, PIA does not presently provide employee incentives typically found in the private sector, such as additional vacation time, salary raises, and bonuses to encourage greater employee productivity; the Commission noted that while a normal free market measurement of productivity would be difficult to meet in a prison environment, PIA should try to establish incentives that would reward non-prisoner employees.

The Commission also found that PIA's financial statements omit a number of state subsidies, and thus present an inaccurate picture of the Authority's financial condition. For example, PIA often pays rent at below market rates, has fully subsidized insurance, and is exempt from sales tax on its products. These factors tend to give PIA special treatment that private vendors do not receive. Exclusion



of these factors from PIA's financial statement's leads to misleadingly optimistic reports on PIA's financial condition.

Because PIA's main goal is to successfully reintegrate ex-offenders into the free world, the Commission opined that the work programs should replicate as closely as possible free world production and service operations. Because this successful reintegration has potentially high societal payoffs in cost savings, the Commission suggested that PIA do everything possible to prepare the inmates for work in the outside world, such as taking an inmate's parole date into consideration and assigning work involving marketable skills to those inmates who have less than five years remaining in their terms; PIA should also place a high priority on requiring inmates to reach a minimum level of literacy as a condition of employment.

To make the prison work environment more similar to the outside world, the Commission recommended that PIA institute a system-wide application and interview process and require transitional services for all inmates prior to their release, to make their transition into society easier. The cost of a mandatory system-wide program could be recouped from the savings resulting from a reduction in the number of participants returning to prison. The Commission suggested that the Department of Corrections evaluate the effectiveness of its existing Pre-Release Education Program to determine whether the Program should be mandatory for all inmates before parole.

Finally, the Commission noted that PIA should attempt to ensure that prison work skills are marketable in the private sector, and expressed concern that PIA does not place enough emphasis on selecting enterprises that offer a high degree of employment potential for an inmate once he/she has returned to society.

