

Date of Hearing: April 25, 2011

ASSEMBLY COMMITTEE ON UTILITIES AND COMMERCE
Steven Bradford, Chair
AB 277 (Galgiani) – As Amended: April 7, 2011

SUBJECT: High-speed rail: power supply.

SUMMARY: Requires the California Research Bureau (Bureau) to develop an energy consumption profile that includes a forecast and an analysis of any recommendations for power supply for the high-speed rail system by May 1, 2012. Specifically, this bill:

- 1) Requires the Bureau to develop an energy consumption profile that includes a forecast of the power needs of the high-speed rail system and an analysis of any recommendations for identifying carbon-free baseline power supply for the system by May 1, 2012.
- 2) States the Bureau should work in consultation with the High-Speed Rail Authority (Authority), the Federal Railroad Administration, the California Public Utilities Commission (PUC), the California Energy Commission (CEC), the United States Department of Energy (DOE), and the Legislative Analyst's Office (LAO).
- 3) Requires the Bureau to submit its report to the Authority, Senate Committee on Transportation and Housing, the Assembly Committee on Transportation, the Assembly Committee on High-Speed Rail for California, and the Authority's independent peer review group.
- 4) Finds and declares all of the following:
 - a. High-speed trains will alleviate the need to build nearly 3,000 miles of new freeway, five airport runways, and 91 airport departure gates in California, with an avoided cost of nearly \$100 billion dollars over the next two decades;
 - b. Electricity powered high-speed trains reduce pollutants and greenhouse gas emissions, and reliance on fossil fuels. The California high-speed train system is projected to result in emissions savings of 12 billion pounds of CO₂ in the year 2030, and this number would grow as ridership levels grow;
 - c. The high-speed rail system is projected to save 12.7 million barrels of oil per year by 2030, even with projected future improvements in auto fuel efficiency.
 - d. At its September 2008 board meeting, the High-Speed Rail Authority approved the following policy statement: "The California High-Speed Rail Authority's policy goal is to power the train by clean renewable energy, making it the first true zero-emission train in the world."
 - e. It is essential to take the necessary steps to ensure than an efficient and environmentally responsible power supply is available for high-speed rail operations. Currently, the PUC, the DOE and CEC have responsibility for overseeing and regulating utility and energy company activities in California.

- f. It is the intent of the Legislature that California's high-speed rail system shall be powered by green electricity from renewable energy sources.

EXISTING LAW:

- 1) The California Constitution creates the CPUC and authorizes it to fix rates and establish rules for the transportation of passengers and property by transportation companies and for all public utilities.
- 2) Creates the High-Speed Rail Authority to develop and implement a high-speed rail system in the state, with specified powers and duties.
- 3) Enacts the Safe, Reliable High-Speed Passenger Train Bond Act for the 21st Century (High-Speed Rail Bond Act). The High-Speed Rail Bond Act, approved as Proposition 1A in November 2008, provides \$9.95 billion in general obligation bond authority to fund the planning and construction of a high-speed passenger train system and complementary improvements to other specified rail systems in the state.
- 4) Authorizes, through enactment of the American Recovery and Reinvestment Act of 2009 (the recently enacted federal economic stimulus package), \$8 billion for high-speed rail passenger services throughout the nation. Also, the federal stimulus package provides additional intercity and commuter rail passenger discretionary funding that potentially could benefit the state.

FISCAL EFFECT: Unknown.

COMMENTS: According to the author, "the development of California's high-speed rail system is key as we move forward to becoming a greener state. Equally important and conducive to our green agenda, is our ability to understand and prepare for the most efficient and effective means in powering all aspects of high-speed rail. With proper planning, we can avoid the energy crisis that took place in 2001."

1) Background: The proposed California high-speed rail passenger train network consists of an 800+ mile high-speed rail system capable of a speed up to 220 miles per hour (mph), initially serving the major metropolitan market of San Francisco through the Central Valley into Los Angeles and Orange County (Phase 1). The system is required by statute to transport people from San Francisco to Los Angeles in two hours and forty minutes. Eventually the service would be extended to Sacramento, the Inland Empire, and San Diego. Further, improved rail service over the Altamont Corridor would be implemented.

In August 2008, the Legislature passed and the Governor signed AB 3034 (Galgiani), Chapter 267 that laid the framework for improving the oversight of the Authority's high-speed rail project. That bill also clarified and modified bond provisions that were eventually approved by the California voters in November 2008 with the passage of the Bond Act. With that endorsement, \$9.95 billion state general obligation bond funds were authorized for eventual sale, providing initial capital seed funds for the completion of the entire statewide system. The law requires the Authority to pursue other federal, local, and private funds to augment the state bond revenues.

Additionally, AB 3034 established significant oversight processes and control mechanisms for the independent review and approval of financing and engineering plans for the construction of California's high-speed train system. Reporting and other oversight mechanisms were also required by subsequent Budget Act requirements.

Following the statewide voter approval of the Bond Act authorizing \$9.95 billion for the development of a high-speed rail system in California, the Authority is transitioning from a small study and planning organization to a multi-billion dollar engineering and construction entity. Together with the passage of the Bond Act and California's approval and pending receipt of \$2.25 billion in federal ARRA high-speed rail funds, the Authority will soon be tasked to approve major purchases of train rolling stock and equipment.

2) Power supply: This bill would require the CRB, in consultation with the FRA, the Authority, PUC, DOE, the CEC, and the LAO, to develop an energy consumption profile. The profile will detail the baseload and peak power needs necessary to power and facilitate the system; and will identify carbon-free base load power supply's available and online when the system enters operation in 2020 and full operation in 2030.

Current studies conducted by the Authority indicate that the high-speed rail train will use approximately 3,380 GWh per year by 2030. However, this estimate does not include all aspects of the system such as the signaling system, radio network, truck intrusion protection equipment, telecommunications, heavy maintenance facilities, electrical needs for passenger services on high-speed rail.

REGISTERED SUPPORT / OPPOSITION:

Support

None on file.

Opposition

None on file.

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