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FISCAL IMPACT REPORT

SPONSOR Tripp DATE TYPED 3/16/05 HB 348/aHJC/aSJC

SHORT TITLE Require Water Plans for Certain Power Plants SB _____

ANALYST Rosen

APPROPRIATION

Appropriation Contained		Estimated Additional Impact		Recurring or Non-Rec	Fund Affected
FY05	FY06	FY05	FY06		
	NFI		Indeterminate for Office of State Engineer, \$90.0 for PRC	Recurring	General Fund

(Parenthesis () Indicate Expenditure Decreases)

SOURCES OF INFORMATION

Responses Received From

Public Regulation Commission (PRC)

Energy, Minerals and Natural Resources Department (EMNRD)

Department of Environment (DOE)

SUMMARY

Synopsis of SJC Amendment

Senate Judiciary Committee amendment to House Bill 348, as amended, exempts dry-cooled power plants whose units have a combined power rating of 325 megawatts or less and for which all required air and water permits have been issued before October 1, 2006. The SJC amendment also defines the effective date of Section 1 as January 1, 2006 and of Section 2 as July 1, 2005.

Synopsis of HJC Amendment

House Judiciary Committee amendment to House Bill 348 requires the applicant to distribute public notice of the hearing, inserting “by the applicant” after “distributed” (page 9, line 5).

Synopsis of Original Bill

House Bill 348 gives PRC the power to approve or deny the location of new electric generating facilities designed for or capable of operation at a capacity of fifty thousand kilowatts (50 mega-

watts) or more, rather than the current authority limited to facilities with a capacity of three hundred thousand kilowatts (300 MW) or more. In conjunction with this expanded authority, PRC is given an additional three months to issue its order granting or denying an application for locating an electric power plant in New Mexico, a total of 9 months rather than the current 6 months.

The bill proposes a new section of the Public Utility Act prohibiting initiation of construction or expansion of an electric power plant that will use more than 100 acre-feet of water per year until an application for such construction or expansion has been approved by PRC. In considering the application, PRC must require the applicant to submit a water utilization plan that : 1) compares alternate water management practices, including effects on capital and operating costs, water use, wastewater management and energy efficiency; and 2) contains information about alternative power plant cooling methods, including dry cooling, hybrid wet-dry cooling and the use of produced or other sources of water or degraded water.

The bill directs PRC to submit the water utilization plan to the Office of the State Engineer (OSE). Within 45 days OSE must evaluate the plan and provide PRC with a determination of whether the plan is consistent with conservation of water within the state. OSE may recommend to PRC any alternatives for consideration and must comment on whether the plan meets certain criteria to be developed by PRC. These criteria shall include: 1) total all-in life-cycle costs for water acquisition, treatment, pumping, use and disposal; 2) total all-in life-cycle costs for construction and operating costs; 3) estimated impact of these costs on the retail cost of electric power; 4) energy efficiency gains or losses; and 5) any other derivative effects such as air pollution increases or decreases. PRC shall reject an application for construction or expansion of a power plant consuming more than 100 acre-feet of water annually if it does not meet these criteria.

Within 30 days of receiving the OSE determination PRC must establish a date for a public hearing on the application and provide public notice of the hearing at least 30 days but no more than 45 days prior to that established date. Applicants shall serve, by certified mail copies of the application to owners of property within one-half mile of the proposed plant and to all municipalities, counties and tribal organizations within a ten-mile radius, to publish it once in a newspaper of general circulation, to post it in four publicly accessible and conspicuous locations, and to mail it to all persons requesting a copy of it.

PRC must issue its order granting or denying the application within 9 months of the date said application is filed with PRC. If PRC doesn't issue its order within the 9 months the application shall be deemed approved.

The bill specifies that its provisions apply only to electric power generating units placed into service on or after July 1, 2005, and not to units under construction before that date. In addition, any expansion of a plant placed in service prior to July 1, 2005 that results in a plant capacity of three hundred thousand kilowatts (300 MW) or less is exempted from the bill's requirements.

Significant Issues

EMNRD indicates existing conventional electric generation facilities in New Mexico currently consume more than 60,000 acre-feet of water per year. Almost half of the power produced by these facilities is exported to out-of-state markets, with a correspondingly substantial amount of New Mexico's water consumed in the process. Given New Mexico's historic growth rate in

electricity demand of 2% per year over the past decade, several new power plants are planned or already in the regulatory permitting process. These new capacity additions will consume significant new quantities of precious water resources without the application of water saving technologies.

DOE indicates electric generating stations consumer large volumes of water for cooling purposes and concurrently generate large volumes of wastewater. This bill provides a mechanism for the state to evaluate these issues, allows the state to encourage conservation of water and exert authority over potentially wasteful use of water during electric generation, and encourages electric generating stations to investigate the reuse of oilfield produced water or other sources of waste water, thereby promoting recycling of wastes.

According to DOE, alternative water management practices and technologies that are available for use by the plant, including dry cooling, will conserve water. Conserving water will produce less wastewater discharge, which will aid in reducing the incidence of ground water contamination and depletion of aquifers. Although dry cooling methods do produce nitrogen oxide emissions, which can degrade air quality, the wet cooling method releases particulates into the atmosphere, another air quality concern; each of these concerns would be addressed in air quality permitting procedures.

PERFORMANCE IMPLICATIONS

EMNRD believes this bill will help raise awareness of the substantial consumptive water use of electric power generating plants, thereby focusing attention on the environmental benefits of renewable energy and energy efficiency technologies. Promotion, planning, and implementation of such technology applications are key components of the Strategic Plan of EMNRD's Energy Conservation and Management Division.

FISCAL IMPLICATIONS

PRC indicates the need of one FTE, an engineer, and associated costs (\$90.0) to implement the provisions of the bill.

ADMINISTRATIVE IMPLICATIONS

PRC indicates lowering the size limit from 300,000 kW to 50,000 kW will increase the workload of PRC considerably and the agency estimates one additional FTE, an engineer, will be required.

TECHNICAL ISSUES

According to DOE, water utilization plans will be required to address wastewater management and include information about alternative power plant cooling methods, including the use of produced or other sources of waste or degraded water. DOE believes this bill implies the state engineer would comment on these waste management issues and make recommendations to PRC but OSE does not have statutory authority for regulation of these issues. While OSE is the only agency tasked with making recommendations and comments to PRC, DOE, not OSE, is responsible for permitting of wastewater activities within the state, pursuant to the Water Quality Act and Water Quality Control Commission regulations. Since OSE does not have authority for waste management issues, DOE believes water utilization plans should also be submitted to

DOE, whereby DOE can provide PRC with comments and recommendations on reuse of wastewater and waste management issues.

PRC indicates the forty-five day time limit set for OSE to determine whether the proposed plan is consistent with the conservation of water within the state but may be too brief if OSE needs to conduct public meetings.

ALTERNATIVES

PRC suggests amending the bill so that the applicant must first obtain OSE's determination before submitting an application to PRC, thus giving OSE more time for evaluation.

PRC believes the PRC notice requirements should be modified. PRC is located in Santa Fe and posting its notices at the entrance of the proposed power plant, as required by Subsection D, may be impractical and burdensome. Alternative language that remedies the situation could read, "The commission shall direct the applicant to publish and distribute the commission notice pursuant to the requirements of Subsection D of this section".

WHAT WILL BE THE CONSEQUENCES OF NOT ENACTING THIS BILL?

New electric generation facilities, including those that export power from New Mexico to other states, may be permitted and constructed in New Mexico without use of water saving technologies that could preserve New Mexico's water resources for future generations of New Mexicans.

JR/njw:yr:lg