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FISCAL IMPACT REPORT

ORIGINAL DATE 01/30/13

SPONSOR Wirth LAST UPDATED _____ HB _____

SHORT TITLE Santa Fe Smart & Micro Grid Programs SB 105

ANALYST Roberts

APPROPRIATION (dollars in thousands)

Appropriation		Recurring or Nonrecurring	Fund Affected
FY13	FY14		
	\$1,000.0	Nonrecurring	General Fund

(Parenthesis () Indicate Expenditure Decreases)

SOURCES OF INFORMATION

LFC Files

Responses Received From

Higher Education Department (HED)
 Santa Fe Community College (SFCC)
 Santa Fe Microgrid Systems Lab (MSL)

SUMMARY

Synopsis of Bill

Senate Bill 105 appropriates \$1 million dollars from the general fund to the higher education department to fund the Santa Fe community college for the purpose of designing and developing a smart grid workforce training program and a microgrid innovation laboratory, research park and testing center.

FISCAL IMPLICATIONS

The appropriation of \$1 million dollars contained in this bill is a nonrecurring expense to the general fund. Any unexpended or unencumbered balance remaining at the end of 2014 shall revert to the general fund.

SIGNIFICANT ISSUES

The SFCC reports that this project requires \$1 million to develop a project whose mission is to accelerate the commercial deployment of microgrid systems worldwide. The initial funds will be used to seek \$50-100 million in implementation funding from a federal public/private

partnership. Funds will be used to define and develop workforce and professional training programs, to identify facility and equipment needs, to develop a consortium of private and public sector members, and to design a testing center. This is both an economic development and workforce project that could result in direct jobs for New Mexico and bring professionals from around the world to New Mexico for training and professional development.

The MSL adds:

Microgrids are modern, small-scale versions of the centralized electricity system. They achieve specific local goals such as reliability, carbon emission reduction, diversification of energy sources, and cost reduction, established by the community being served. Like the bulk power grid, smart microgrids generate, distribute, and regulate the flow of electricity to consumers, but do so locally. Smart microgrids are an ideal way to integrate renewable resources on the community level and allow for customer participation in the electricity enterprise.

Many experts believe that microgrids are a critical component of an effective smart grid strategy. Microgrids will serve as enabling infrastructure for many advanced energy system goals, including: large-scale penetration of intermittent renewable and electric vehicle integration; intelligent energy efficiency applications; combined heat and power efficiencies; and system resiliency and security.

The key elements of the lab are: the microgrid innovation consortium, developed and operated by the Santa Fe Innovation Park (SFIP), for applied R&D, cross-sector collaboration, human factors, and simulation and modeling; the global microgrid center, a comprehensive testing and certification facility, for performance and interoperability standards at the system and sub-system module levels; and a workforce training and professional development program, operated by Santa Fe Community College, to meet future human resource needs. In summary, the lab brings three components, innovation, education and certification, together in one integrated complex.

The initiative is endorsed by the New Mexico federal congressional delegation and the city and county of Santa Fe have passed resolutions in support.

The microgrid innovation consortium is assembling its initial cohort of members, including New Mexican, national and international stakeholders. It has begun work on developing innovative solutions to practical challenges in the field, the lab and consortium support the U.N. Sustainable Energy for All program and are collaborating with Sandia National Laboratories on challenges related to this initiative. MSL also supports ongoing commercial microgrid development programs in Kenya, Uganda, and elsewhere.

ADMINISTRATIVE IMPLICATIONS

The HED would need to administer these funds to SFCC and ensure that they are spent consistently with the intent of the bill.

MIR/bm