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## FISCAL IMPACT REPORT

**SPONSOR** Garcia, R.                      **ORIGINAL DATE** 01/24/13                      10/aHENRC/  
**LAST UPDATED** 03/14/13                      **HJM** aSCONC  
**SHORT TITLE** Renewable Energy Storage Incentives                      **SB** \_\_\_\_\_  
**ANALYST** Weber/Cerny

### ESTIMATED ADDITIONAL OPERATING BUDGET IMPACT (dollars in thousands)

	FY13	FY14	FY15	3 Year Total Cost	Recurring or Nonrecurring	Fund Affected
<b>Total</b>		\$20.0			Nonrecurring	General

(Parenthesis ( ) Indicate Expenditure Decreases)

### SOURCES OF INFORMATION

LFC Files

#### Responses Received From

Public Regulation Commission (PRC)

Energy Minerals and Natural Resources Department (EMNRD)

### SUMMARY

#### Synopsis of SCONC Amendment

The Senate Conservation Committee amendment deletes language in the memorial as follows:

1. On page 1, strikes lines 23 through 25 in their entirety
2. On page 2, strikes lines 1 through 3 in their entirety and strike lines 17 through 19 in their entirety.

Together these deletions eliminate the language which stated:

WHEREAS, renewable energy projects provide improved system reliability, improved infrastructure for economic development and enhanced diversity of power storage technologies that lead to lower or stabilized energy costs; and

WHEREAS, it is clear that with today's technology, much more energy can be harvested from the sun and wind, but the sun and wind do not always produce energy when it is needed; and,

## House Joint Memorial 10/aHENRC/aSCONC – Page 2

WHEREAS, the use of renewable energy resources is of vital importance to New Mexico's future; and

### Synopsis of HENRC Amendment

1. On page 2, line 10, strike “or subsidize”.
2. On page 2, strike lines 20 through 22 in their entirety and insert in lieu thereof “WHEREAS, storage technologies can advance the use and benefits of renewable energy by making it available to customers 24 hours a day; and”.
3. On pages 2, strike lines 23 through 25 in their entirety which stated: “
4. On page 3, strike lines 1 through 3 in their entirety.

Items 3 and 4 delete the following:

WHEREAS, in the history of wind energy, the tax and legislative incentives that began in the 1970s have produced such a vibrant wind industry today that wind energy is now more competitive with conventional generation methods, so that tax and legislative incentives are being actively phased out across the nation; and

### Synopsis of Original Bill

House Joint Memorial 10 requests that the Energy, Minerals and Natural Resources Department:

- convene a working group of representatives of energy-related state offices, including the Energy, Minerals and Natural Resources Department, the Department of Environment, the New Mexico Renewable Energy Transmission Authority, the Economic Development Department, The Public Regulation Commission and the Office of the Governor, as well as representatives of New Mexico's national laboratories and the private and nonprofit sectors;
- organize the working group to compile an inventory of major existing renewable energy storage policies and regulations;
- develop legislative and regulatory recommendations and alternatives that can incentivize renewable energy storage technologies and infrastructure development to benefit New Mexico, with the recommendations drawing on successful planning practices utilized in other states; and
- present the report to the appropriate interim committee of the legislature by October 2013.

## **FISCAL IMPLICATIONS**

EMNRD estimates a fiscal impact of \$20,000 for conducting the work for this memorial. The estimate is based on using an equivalent of 500 hours for two staff members to conduct the research, convene the working group, evaluate existing incentives of other states and provide a report to the Legislature. (Calculation: 500 hours for an average salary \$29.95 per hour plus benefits). The cost will likely be higher (approximately \$50,000) if EMNRD hired a contractor but existing employees cannot absorb the additional duties of this complexity.

## SIGNIFICANT ISSUES

The PRC offers the following commentary on renewable resources and storage issues:

This memorial provides impetus to further pursue research and development of an infant industry and technology that has the potential to provide long term jobs and promote further development of the renewable energy industry in New Mexico and nationally. The longer term benefit lies in the potential development of the renewable energy industry, of which New Mexico has significant resources that remain untapped. In addition it would promote development of the storage technology which is being addressed, but not as rapidly as it might.

Renewable energy as a resource provides significant benefits over conventional fossil fuel resources used for electric generation. Renewable energy does not require fossil fuel combustion and as a result does not generate the pollutants resulting from fossil fuel electric generation. One of the shortfalls of renewable generation is that it is not “dispatchable”, rather it is what is referred to as a must run resource which must be used as it is generated. It is a resource that is used as it is available because the fuel cost of generation is zero, a generator must take advantage of it whenever that resource is available. Because electric energy is not readily stored and must be used when it is generated renewable resources do not have the generating capacity value that fossil fueled resources have – they can be dispatched as necessary, which provides a significant resource to the utility. With storage, even limited storage, renewable energy becomes more “dispatchable”, adding a greater capacity value to the utility by extending the availability of renewable energy beyond the period in which it was originally generated.

EMNRD adds the following similar sentiment:

Because of the intermittent nature of renewable energy resources, utility-scale wind and solar power plants need energy storage to compete with conventional fossil-fuel power plants in the consistent and reliable delivery of electricity. Approximately 900 megawatts (MW) of utility-scale wind and solar power plants are now operating or planned in New Mexico, but only one 5-MW plant is currently coupled with storage (it is a federally-funded demonstration). These utility-scale projects may currently take advantage of state and federal incentives and policies to be directly competitive with conventional sources for intermittent periods of time. However, complementary storage systems that would make renewable energy systems competitive at all times are not incentivized and are therefore not economically viable. The technology, economics, and strategic planning for development of renewable energy storage should be evaluated to determine a package of incentives that will attract investment in storage, specifically to benefit New Mexico.

MW/svb:blm