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FISCAL IMPACT REPORT

SPONSOR Sanchez ORIGINAL DATE 3/3/17
 LAST UPDATED 3/10/17 HB _____

SHORT TITLE Renewable Energy Tax Credit Changes SB 432/aSCONC

ANALYST Graeser

REVENUE (dollars in thousands)

Estimated Revenue					Recurring or Nonrecurring **	Fund Affected
FY17	FY18	FY19	FY20	FY21		
		(\$1,250.0)	(\$3,100.0)	(\$4,600.0)	Recurring	General Fund

(Parenthesis () Indicate Revenue Decreases)

See long-term fiscal impact in “Fiscal Implications Section

SOURCES OF INFORMATION

LFC Files

Responses Received From

Public Regulation Commission (PRC) on original bill
 Renewable Energy Transmission Authority (RETA) on 2015 HB 242
 Energy, Minerals and Natural Resources Department (EMNRD)
 Taxation and Revenue Department (TRD)

SUMMARY

Synopsis of SCONC Amendment

Senate Conservation Committee amended the applicability date of the provisions of the credit to January 1, 2018. However, this does not alter the provision of the bill, as amended, to extend the duration of the credit for both solar and wind to 10 full years of credit, irrespective of when the credits were certified. See Technical Issues for further discussion of this point.

Synopsis of Bill

Senate Bill 432 amends the Renewable Energy Production Tax Credit to provide wind and solar projects with guaranteed, but delayed credits for projects that begin production before January 1, 2023. The most significant change is that producers will ultimately receive 10 years of credits beginning at the eligibility date.

TRD has provided a complete, concise description of the provisions of this bill:

This bill amends Section 7-2-18.18 NMSA 1978 and Section 7-2A-19 NMSA 1978 for the renewable energy production tax credit. Wind-, biomass-, and/or geothermal-derived energy production are affected by one schedule of rates and timelines, while solar-light and solar-heat energy production are affected by a different schedule. The bill defines the process for issuance of a certificate of eligibility from Energy, Minerals, and Natural Resources Department (EMNRD), which is the mechanic required to receive the tax credit.

Changes affecting wind-, biomass, and/or geothermal-derived energy to include:

- Limiting the types of tax credits that can be claimed in tandem with this credit;
- The addition of geothermal-derived energy as a qualifying renewable energy production method;
- Increases the amount of production capacity available to qualify for the credit;
- Standardizes the tax credit rate schedule to Megawatt hours (MWh);
- Establishes a tax credit schedule based on the first date of energy production;
- Lowers the tax credit rate schedule from current amounts; and
- Guarantees industry 10 consecutive years of tax credits at the new fixed rates;

Changes affecting solar-light- or solar-heat-derived energy to include:

- Limits the types of tax credits that can be claimed in tandem with this credit;
- Doubles, over a period of 5-years, the production capacity available to qualify for the credit;
- Guarantees producers certified before January 1, 2015 the current law, multi-year, tax credit schema;
- Establishes a new flat-rate tax credit schedule based on the first date of energy production;
- Lowers the tax credit rate schedule from current amounts; and
- Guarantees industry 10 consecutive years of tax credits at the new fixed rates.

The bill establishes a final expiration date whereby neither tax credits accrued as carry-forward nor tax credits accrued for refund can be redeemed after January 1, 2033. Lastly, the bill moves definitions to the end of relevant sections, and it includes a definition for geothermal.

FISCAL IMPLICATIONS

TRD reports the fiscal impact of this bill as follows:

Estimated Revenue Impact*					R or NR**	Fund(s) Affected
FY2017	FY2018	FY2019	FY2020	FY2021		
0	0	(\$1,200)	(\$2,400)	(\$3,600)	R	General Fund

The LFC model allows producers that begin production of both solar and wind prior to January 1, 2018 the full ten years of credit irrespective of when the project was certified subject to the capacity caps. This model shows the following fiscal impacts:

	FY 17	FY 18	FY 19	FY 20	FY 21
Wind			(800.0)	(2,200.0)	(2,900.0)
Solar			(500.0)	(1,600.0)	(2,700.0)
Total			(1,300.0)	(3,800.0)	(5,600.0)

Essentially the TRD and LFC models are predicting the same fiscal impacts. The methodology for both models is similar, with the only differences the assignment of when the production limits are reassigned from one producer to the next producer in the queue. The amount shown in the table on page 1 of this review is a simple average of the two models.

TRD describes its methodology for Estimated Revenue Impact in some detail:

The Taxation and Revenue Department (TRD) analyzed the expenditure liabilities under current law as well as the changes proposed in this bill. The fiscal impact was estimated using queue data provided by EMNRD and the rate schedules prescribed in the bill.

New production capacity is introduced for wind, bio-mass, and geothermal on January 1, 2021. The increase is 500 thousand megawatt-hours (MWh). By extending the credit production capacity that becomes available prior to the expansion, the credit can be claimed by new producers. Thus, approximately \$811,000 of the fiscal impact in FY2020 is attributed to wind. The current production capacity for wind and biomass energy is 2 million MWh; the current annual tax expenditure liability is \$20 million. When the production capacity limit is increased by 500,000 MWh, the annual tax expenditure liability will increase by \$5.0 million.

New production capacity for solar-light or solar-heat derived energy is added January 1, 2018. Capacity is added every year thereafter until the current production capacity limit is doubled. The current limit is 500 thousand MWh; the limit grows to a maximum of 1.0 million MWh after January 1, 2022. The fiscal impact estimated is based on factors pertaining to EMNRD’s existing production queue and the tax benefits a solar-energy producer would receive based on production year.

The bill enables qualifying taxpayers to be profit-maximizers with respect to the tax credit. The changes to the start date to receive tax credits guarantee each qualifying taxpayer 10 years of credit receipts. Thus, the most significant fiscal impact will begin outside the five-year window of this analysis, peaking in FY 2028, and declining thereafter until the credit expires in FY 2033.

Finally, there are at least three wind projects identified in the EMNRD queue that are identified and meet the criteria but are not producing. If these projects begin energy production before January 1, 2018, then the fiscal impact starting in FY2019 will increase. These projects were forecast by TRD as qualifying for a \$5/MWh tax credit. If the projects come online this year, they will be eligible for a \$10/MWh rate.

This is an interesting tax expenditure to analyze, since it one of the two tax expenditures that have had a full analysis of the costs and benefits. A recent report prepared by O’Donnell Economics and Strategy updated an HDR analysis published in 2014.¹

¹ The Economic Impact Of The Renewable Energy Production Tax Credit In New Mexico, prepared by O’Donnell

Executive Summary: The Economic Impact Of The Renewable Energy Production Tax Credit In New Mexico,

This analysis estimates the economic impact of New Mexico's Renewable Energy Production Tax Credit (REPTC). The REPTC, originally implemented in 2003, is a credit against New Mexico personal or corporate income tax that is available to companies that produce electricity from renewable resources for commercial sale. Although a variety of renewable resources qualify for the REPTC, all current recipients are either solar installations or wind farms.

A total of \$120 million in Renewable Energy Production Tax Credits have been claimed over the past 13 years. During that time, New Mexico has made significant progress in developing its wind and solar power capacity, gaining 13 commercial wind facilities with nameplate capacity of 1.1 gigawatts and 46 solar photovoltaic (PV) facilities with nameplate capacity of 452 megawatts.¹ Also during that time, REPTC-certified power producers have spent over \$1 billion in New Mexico to construct, equip, operate, and maintain 31 generation facilities.

Expenditures by REPTC-certified power producers have supported 11,771 full and part time jobs, \$611 million in employee compensation, and \$1.6 billion in economic activity statewide. Our analysis finds that for every \$1 in state tax expenditure, REPTC-certified projects generated over \$5 in labor income. These results are fairly consistent with those of a similar analysis conducted by other independent consultants in 2014.

The results presented in this report cannot be attributed to the REPTC alone. REPTC is one of many factors, including New Mexico's Renewable Portfolio Standard, that help to determine when and where renewable generation facilities will be developed. The availability of the REPTC may have been the deciding factor for some projects, while others may have progressed without the credit. Therefore, the economic impact can only be attributed to total investment in REPTC certified projects.

These economic impacts have generated state and local tax revenue totaling \$74.6 million and averaging \$6.8 million annually.

Without a thorough review of the analysis, LFC staff hesitate to criticize the methodology.

However, a couple of questions remain ...

- 1) Since a typical wind installation involves both out-of-state purchase of high technology equipment and local site based construction and installation, we ask the question have all of the 11,000 jobs be created in New Mexico?
- 2) What proportion of the 11,000 jobs created were in the nature of short-term construction jobs and what proportion permanent operating positions?
- 3) What proportion of the 11,000 jobs can be considered direct, indirect and induced?
- 4) What paradigm was used to estimate the state and local tax revenues?

Per the LFC model, long term, this credit will cost the general fund over \$200 million:

General Fund Impact			
	Wind	Solar	Total
FY 17			0.0
FY 18			0.0
FY 19	(800.0)	(500.0)	(1,300.0)
FY 20	(2,200.0)	(1,600.0)	(3,800.0)
FY 21	(2,900.0)	(2,700.0)	(5,600.0)
FY 22	(5,300.0)	(2,900.0)	(8,200.0)
FY 23	(7,800.0)	(200.0)	(8,000.0)
FY 24	(8,000.0)	700.0	(7,300.0)
FY 25	(7,200.0)	(900.0)	(8,100.0)
FY 26	(8,100.0)	(300.0)	(8,400.0)
FY 27	(7,400.0)	(700.0)	(8,100.0)
FY 28	(13,900.0)	(6,200.0)	(20,100.0)
FY 29	(22,200.0)	(11,300.0)	(33,500.0)
FY 30	(21,700.0)	(11,500.0)	(33,200.0)
FY 31	(19,900.0)	(11,400.0)	(31,300.0)
FY 32	(15,100.0)	(11,900.0)	(27,000.0)
FY 33	(10,600.0)	(11,900.0)	(22,500.0)
FY 34	(4,600.0)	(5,900.0)	(10,500.0)
			(236,900.0)

On the other hand, if \$120 million in REPTCredits has created 11,000 full and part time jobs, will the additional \$237 million in credits over the next 17 years generate proportionally that many jobs. Depending on the answers to the questions posed above, the static cost per job would range from \$10,000 to \$30,000. This is about mainstream subsidy for economic development tax incentives.

But this is a tax expenditure. This bill may be counter to the LFC tax policy principle of adequacy, efficiency, and equity. Due to the increasing cost of tax expenditures, revenues may be insufficient to cover growing recurring appropriations.

For both the wind credit and the solar credit, the wait list of projects that have been planned, but, perhaps, not yet completed, will be cleared by the delayed repeal production date of December 31, 2022. The provisions of this bill have been carefully calculated to allow currently planned projects full access to decreased credits per megawatt hour, but to remove any incentives for competitive projects to enter the market.

EMNRD reports it will incur an operating budget impact to administer the credit, including the development of regulations and the review of eligibility for each potential renewable energy resource generator. EMNRD estimates an additional \$60 thousand per fiscal year in the operating budget would be required for technical, legal, and administrative staff to support this program, and the agency reports it currently has limited staff resources to review and process applications and amend program rules.

SIGNIFICANT ISSUES

TRD notes that renewable energy costs have declined for both wind and solar:

The bill extends the renewable energy production tax credit program an additional fifteen (15) years. Firms are provided five additional years to make qualifying investments; the state will have fiscal obligations through FY2033. Additionally, the bill increases the production capacity limits, thereby increasing the state's investment in the renewable energy sector.

The genesis for this program was to subsidize renewable energy at a time when renewable energy electricity production was significantly more expensive than fossil fuel electricity production. Over the past 15-20 years, the cost difference between renewable energy electricity production and fossil fuel electricity production has closed substantially. The bill recognizes this by lowering the tax benefit offered per MWh.

LFC staff make similar observations:

The original Renewable Energy Production Tax (REPTC) credit was intended to encourage development of additional renewable energy sources in the state. However, the provisions of this bill will only encourage the developers of planned projects that have already applied to lock up a place in the waiting list to complete the project and bring on line the substantial amount of commercial scale renewable energy production. It is likely that the majority of the 1,022.7 megawatts of wind energy capacity in the queue would not be completed in the absence of passage of this bill. Although difficult to quantify in terms of construction jobs, or long-time permanent employment, this 1,022.7 megawatts of wind energy capacity comes at a cost to the general fund of \$71 million in total over the next 20 years.

The Renewable Energy Transmission Authority (RETA) reported the following information in 2015's HB-242 regarding proposed renewable energy projects that would be impacted by the bill.

A number of significant transmission lines are being studied in New Mexico that, once built, will provide for more development of wind, solar and geothermal resources. If constructed, the Western Spirit Clean Line project will allow for an additional 1,500 MW of projects to be built, SunZia will allow for an additional 3,000 MW, the Lucky Corridor will allow for an additional 700 MW, the Centennial West Clean Line will allow for an additional 3,500 MW, and the Southline Transmission Project will allow for an additional 1,500 MW. The state is well poised to develop its natural resources and create a complimentary industry to the oil and gas resources. Similarly to those resources, the majority of the natural resources are likely to be sold out of state while New Mexico realizes the benefits of increased jobs and tax revenues. The extension of the tax credits contained in the bill will increase the development of the state's natural resources.

EMNRD reported the following information regarding REPTC and proposed renewable energy projects in its analysis.

The REPTC is currently fully subscribed for both wind/biomass and solar energies at the current caps of 2 million MWh and 0.5 million MWh respectively. In addition to certified projects that fill the REPTC energy production cap, there are applicants pending

certification by EMNRD. For wind/biomass applicants there is an additional 2,373,460 MWh pending certification; for solar applicants there is an additional 2,368,990 MWh pending certification. These pending applications have met the application criteria but have not been certified due to the unavailability under the current renewable energy production cap.

If the cap for wind, geothermal, and biomass were increased from 2 million to 2.5 million MWh, all projects currently on the wind/biomass waiting list would be eligible to complete their certification process. All current projects on the waiting list could receive at least seven years of REPTC. Approximately four projects on the current waiting list would be eligible for 10 consecutive years of credit with the remaining three to receive limited REPTC.

HB 440 would increase the solar energy cap from 0.5 million MWh to 1 million MWh. This would allow all current projects on the waiting list to receive at least one year of REPTC. Approximately 21 projects on the current waiting list would be eligible for 10 consecutive years of credit with the remaining 15 eligible to receive limited REPTC.

ADMINISTRATIVE ISSUES

EMNRD indicates that the agency would need no additional resources to administer this program:

Administrative implications for EMNRD include updating existing rules to comply with changes. Since the tax credit is currently in place, EMNRD has an existing program to review applications and provide certifications.

TECHNICAL ISSUES

TRD and LFC are concerned about the original applicability date. The SCC amendment did not change the fiscal impact. The bill as amended will increase the duration of the credit from ten years after beginning production, irrespective of when the certification occurred to ten full years after certification. TRD notes as follows:

There is tension in the bill regarding eligibility versus certification. Under current law, firms become eligible for tax credits after making an investment, constructing a facility, and producing energy. Firms become certified for the tax credit when production capacity becomes available in the EMNRD queue. Current law manages the state's level of investment through the production capacity limit. The tax benefit was designed to incentivize early investors. This bill creates a new and different policy objective. This bill rewards early investors with a higher tax benefit, but requires the state to guarantee those benefits for ten consecutive years. Thus, this bill significantly increases the state's investment in the renewable energy sector.

The bill does not provide transition rules for taxpayers eligible under current law. Under current law, tax benefits are gained when production capacity becomes available; the period of eligibility begins when the facility first began production. Thus, there are qualifying projects "in the queue" that will not receive tax benefits until late in their eligibility period. As noted above, the bill changes the period of eligibility from when a facility produces to when compensable production capacity becomes available. This

disproportionately favors late investors under current law and penalizes early investors who, under current law, received less than ten years of tax credits because they invested after production capacity was filled. The current rules regarding eligibility and certification would provide the continuation of more equitable treatment.

Similarly, there is tension between the incentive for firms to make their investment and the state's limits on production capacity. Under the current regime firms were incentivized on a first-come, first-served basis. Early investors realized a greater return on investment. Under this bill the incentive to invest can be deferred, without significant loss of value. Late investors will be guaranteed 10 years of tax credits – albeit at a lower rate – as are early investors. As noted above, this is a policy change that significantly increases the state's investment in the renewable energy sector.

The new legislation guarantees each qualifying facility will be a profit-maximizer; taxpayers will earn a credit for ten consecutive tax years. However, there is tension between the old law and the new such that some taxpayers might gain additional years of eligibility. Regardless, no qualifying taxpayer may receive more than 10 consecutive years of tax credit.

EMNRD notes that HB 440 does not define geothermal energy nor does it prohibit existing geothermal facilities from claiming the credit; that is, a geothermal facility that is already producing could join the queue but credit would not be available for geothermal projects until 2027. In this case, the credit would not bring additional economic or other benefits to New Mexico and its electricity ratepayers.

WHAT WILL BE THE CONSEQUENCES OF NOT ENACTING THIS BILL

Currently, the 10 years of tax credit eligibility begins upon first production, not the date the project is certified by EMNRD to receive the credit. EMNRD reports many projects are on the waiting list and begin production before they are certified, losing years of tax credit eligibility, and it is possible that some projects will use up their 10-year window before cap space becomes available. There is potential the state will face a legal liability from applicants who do not receive the full 10-year tax credit eligibility. In addition, though the existing statute requires production to begin before January 1, 2018, there is no final sunset of the credit, and EMNRD anticipates that administration of REPTC will continue significantly beyond the 2018 expiration, possibly beyond 2044.

DETAILED DESCRIPTION – Provided by EMNRD

For wind, biomass, and geothermal projects, HB 440 increases the cap of total annual energy production that can claim the credit from 2 million megawatt-hours (MWh) to 2.5 million MWh on January 1, 2021. HB 440 subdivides the tax credit rates for wind, biomass, and geothermal projects into time periods:

- 1) the current rate of \$10 per MWh for projects first producing power prior to January 1, 2018,
- 2) \$5 per MWh for projects first producing power after December 31, 2017 until prior to January 1, 2020,
- 3) \$3 per MWh for projects first producing power after December 31, 2019 and prior

- to January 1, 2023, and
- 4) no credit for projects producing power after January 1, 2023.

For solar projects certified on or after January 1, 2015, the tax credit is subdivided into three time periods as follows:

- 1) the rate is \$12 per MWh for projects first producing power prior to January 1, 2017,
- 2) the rate is \$8 per MWh for projects first producing power after December 31, 2016 and prior to January 1, 2019, and
- 3) the rate is \$4 per MWh for projects first producing power after December 31, 2018 and prior to January 1, 2023.

HB 440 increases the solar annual cap from 0.5 million MWh to 1 million MWh as follows:

Tax Year	2017	2018	2019	2020	2021	2022
MWh	500,000	600,000	700,000	800,000	900,000	1,000,000

For solar projects, HB 440 does not change the tax credit for projects that first produced power prior to January 1, 2015. The current REPTC rate for qualified solar energy resources production gradually increases and then gradually phases down again for an average tax credit of \$27.50 per MWh:

	KWh	MWh
1st year	\$.015	\$15.00
2nd year	\$.02	\$20.00
3rd year	\$.025	\$25.00
4th year	\$.03	\$30.00
5th year	\$.035	\$35.00
6th year	\$.040	\$40.00
7th year	\$.035	\$35.00
8th year	\$.030	\$30.00
9th year	\$.035	\$25.00
10th year	\$.02	\$20.00

EMNRD may only issue a certificate if the total electricity produced by all qualified generators does not exceed the caps in the bill.

In another change from current law, a qualified energy producer may claim credits for projects financed in part with a local industrial revenue bond (IRB), but not if the producer claims any other credit that is based on the investment in, or the volume of electricity produced by, the generator.

LG/al/jle