

**STATE OF NEW MEXICO
BEFORE THE ENVIRONMENTAL IMPROVEMENT BOARD**

**IN THE MATTER OF PROPOSED NEW REGULATION,
20.2.350 NMAC – *Greenhouse Gas Cap and Trade Provisions***

No. EIB 10 -04 (R)

ORDER & STATEMENT OF REASONS FOR ADOPTION OF REGULATIONS

This matter comes before the New Mexico Environmental Improvement Board (“Board”) upon a petition filed by the New Mexico Environment Department (“NMED” or “Petitioner”), proposing new regulation 20.2.350 NMAC – *Greenhouse Gas Cap and Trade Provisions*. A public hearing was convened in Santa Fe, New Mexico on September 20, 2010 and continuing through September 30, 2010. The Board heard technical testimony from Petitioner and other interested parties and admitted exhibits into the record. On November 2, 2010, the Board having familiarized itself with the record and the transcript of the proceedings, deliberated and adopted the proposed new regulations with one amendment by an affirmative vote of 4 to 3 for the reasons that follow:

PROCEDURAL HISTORY

1. The Department filed its petition for the proposed rule on June 4, 2010. PL 1.
2. On June 18, 2010, the New Mexico Oil and Gas Association (“NMOGA”), the City of Farmington and the Public Service Company of New Mexico (“PNM”)/Southwestern Public Service Company (“SPS”) filed responses in opposition to the Petition. PL 5, 7, & 8.
3. On June 21, 2010, El Paso Electric Company filed a response in opposition to the Petition. PL 10.

4. On June 21, the Department filed a Motion to Set Schedule and Assign Hearing Officer. PL 11.

5. On June 21, 2010, the Department filed a Notice of Rule Revisions. PL 9.

6. On June 21, 2010 a quorum of the Board voted to set the Department's Petition for hearing.

7. On June 22, 2010, the Board issued an Order scheduling the hearing for September 20, 2010, setting due dates for technical testimony and designating Ms. Felicia Orth as Hearing Officer. PL 12.

8. On July 16, 2010, the Department filed its direct testimony. PL 18.

9. On August 12, 2010, NMOGA filed a Motion to Stay Proceedings and an Expedited Motion to Amend Scheduling Order. PL 29a & 29b.

10. On August 16, 2010, other parties filed responsive testimony. PL 30-33, 35-40.

11. On August 27, 2010 the Department filed a Consolidated Response to NMOGA's Motions to Stay and Amend Scheduling Order. PL 43.

12. On August 30, 2010, the Department filed a Motion for Procedural Order. PL 52.

13. On August 30, 2010, the Department filed rebuttal testimony, as well as a revised rule reflecting changes made in response to the testimony of other parties. PL 51. Four other parties also filed rebuttal testimony. PL 47-50.

14. On September 7, 2010, NMOGA, El Paso Electric, PNM, SPS, Farmington, Farmington Electric Utility System ("FEUS"), the New Mexico Gas Company, Grupo Cementos de Chihuahua ("GCC") and Tri-State filed a joint response in opposition to the Department's Motion for Procedural Order. PL. 57

15. On September 7, 2010, the Department filed its Notice of Filing of Affidavits of Publication. PL 55.

16. On September 8, 2010, the Coalition of Arizona/New Mexico Counties (“Coalition”) filed a response to the Departments Motion for Procedural Order. PL 61.

17. On September 8, 2010 the Department filed a Motion to Consolidate Entries of Appearance filed by FEUS. PL 58.

18. On September 8, 2010, the Department filed a Motion to Strike Testimony of William Balgord. PL 59.

19. On September 10, 2010, the Department filed a Motion to Strike Testimony of Doug Roark and a Motion to Strike Testimony of James Taylor. PL 62 – 63.

20. On September 13, 2010, the Coalition filed a Response to Motion to Strike Testimony of William Balgord. PL 65.

21. On September 13, 2010, the Hearing Officer issued an Order on Motion for Procedural Order. PL 66.

22. On September 16, 2010, the Department filed a reply in support of its motion to strike testimony of Balgord and a Reply in Support of Motion to Consolidate Entries of Appearance filed by FEUS. PL. 73 – 74.

23. On September 16, 2010, NMOGA filed a Reply in Support of Motion to Stay Proceedings and Amend Scheduling Order. PL. 75 - 76.

24. On September 16, 2010, GCC filed a Response to Motion to Strike Testimony of Doug Roark. PL 77.

25. On September 17, 2010 NMED filed a Reply in support of its motion to strike testimony of Roark. PL 78.

26. At the start of the hearing on September 20, 2010, the Department submitted a revised rule reflecting nonsubstantive changes. NMED Hearing Exhibit 1.

27. At the start of the hearing on September 20, 2010, the Hearing Officer recommended denying NMOGA's Motion for Stay and Motion to Amend Procedural Order. The Board voted to affirm the Hearing Officer's recommendation denying the two Motions. Tr. 14:16 – 16:2.

28. At the start of the hearing on September 20, 2010 the Hearing Officer recommended denying NMED's Motion to Consolidate Entries of Appearance by FEUS. Tr. 17:21. The Chair agreed. Tr. 17:25.

29. At the start of the hearing on September 20, 2010, the Hearing Officer recommended denying NMED's Motion on Doug Roark. Tr. 19:14. There was no opposition from the Board.

30. At the start of the hearing on September 20, 2010, the Hearing Officer recommended granting NMED's Motion on Dr. Balgord Tr. 20:1 – 9. Board member Green expressed concern with the recommendation. Dr. Balgord's testimony was ultimately excluded. Tr. 24:12.

31. At the start of the hearing on September 20, 2010, the Hearing Officer recommended granting NMED's Motion on Taylor. Tr. 26:17. The Board expressed no opposition to this decision.

32. On September 21, 2010, Tri-State filed an Objection to NMED's Notices of Compliance with Small Business Regulatory Relief Act. PL 79.

33. On September 22, 2010, NMED submitted a Notice of Withdrawal of Portion of Rebuttal Testimony of Mark Fesmire. PL. 80

34. On September 22, 2010 IPANM Karin Foster raised objections to NMED witness Mark Fesmire's testimony. Various Board members expressed concerns as well. After a short recess the Department decided to withdraw Mr. Fesmire's testimony. Tr. 891:11 – 901:9

35. On September 27, 2010, the Department moved to enter Mr. Fesmire's testimony as public comment. The Hearing Officer recommended granting the motion and the Board agreed. Tr. 2176:19 – 2181:10.

36. On September 27, 2010, El Paso Electric filed an Unopposed Motion to Admit Testimony of William P. Patton. PL 81.

37. At the conclusion of the hearing, the Department submitted a revised rule containing responsive changes in legislative format and then presented surrebuttal testimony in support. NMED Hearing Exhibit 2. The changes reflected changes requested by Board members and other parties.

38. The Department presented a clean version of the revised rule, with one exception described below, identified as NMED Brief Exhibit 1 to its closing argument.

39. On October 6, 2010, the Hearing Officer issued an Order on Post Hearing Procedures. PL 82.

40. On October 12, 2010, the Board Administrator issues a Notice of Transcript Filing. PL 83.

41. On October 26, 2010, all parties filed closing arguments.

42. On November 2, 2010, the Board deliberated and voted 4 to 3 to adopt NMED's proposed regulation with one amendment.

STATUTORY AUTHORITY

1. The Board is authorized by the Air Quality Control Act ("AQCA") to adopt regulations "to prevent or abate air pollution...within the geographic area of [its] jurisdiction."

NMSA 1978, § 74-2-5(B). "Air pollution" is defined as:

the emission, except emission that occur in nature, into the outdoor atmosphere of one or more air contaminants in quantities and of a duration that may with reasonable probability injure human health or animal or plant life as may unreasonably interfere with the public welfare, visibility or the reasonable use of property.

"Air contaminant" is defined as "any substance, including but not limited to any particulate matter, fly ash, dust, fumes, gas, mist, smoke, vapor, micro-organisms, radioactive material, any combination thereof or any decay or reaction product thereof." NMSA 1978, § 74-2-2(A). This definition is broad enough to include GHGs, including carbon dioxide, methane, nitrous oxides, perfluorocarbons, hydrofluorocarbons, and sulfur hexafluoride. The Board relied on this section to adopt regulations restricting GHG emissions from motor vehicles, 20.2.88 NMAC - *Emission Standards for New Motor Vehicles*, and reporting rules for GHGs, 20.2.73 NMAC - *Notices of Intent and Emission Inventory Requirements*, and 20.2.87 NMAC - *Greenhouse Gas Emissions Reporting*, as well as a cap-and-trade program, 20.2.81 - *Western Backstop Sulfur Dioxide Training Program*. Tr. 1867, ll.1-17.

2. The U.S. Supreme Court has held, in the context of similar language in the federal Clean Air Act, that greenhouse gases are "air pollutants" that should be regulated. *Massachusetts v. EPA*, 127 S.Ct. 1438, 1460 (2007)("The Clean Air Act's sweeping definition of 'air pollutant' includes 'any air pollution agent or combination of such agents, including any physical, chemical substance or matter which is emitted into or otherwise enters the ambient air....' §7602(g)(emphasis added). On its face, the definition embraces all airborne compounds

of whatever stripe, and underscores that intent through the repeated use of the word 'any.' Carbon dioxide, methane, nitrous oxide, and hydrofluorocarbons are without a doubt 'physical [and] chemical substance[s] which [are] emitted into the ambient air.'").

3. The Department presented substantial evidence at the hearing that GHGs constitute "air pollution". The emission of these air contaminants are warming the planet and disrupting the climate, and their continued emission in any quantity and for any duration will prolong and exacerbate the harm.

4. Section 74-2-5(E) of the AQCA requires the Board to consider several factors before adopting a regulation. Specifically, the Board:

must give weight to all facts and circumstances deemed appropriate, including but not limited to:

- 1) character and degree of injury to or interference with health, welfare, visibility and property;
- 2) the public interest, including the social and economic value of the sources and subjects of air contaminants; and
- 3) technical practicability and economic reasonableness of reducing or eliminating air contaminants from the sources involved and previous experience with equipment and methods available to control the air contaminants involved.

5. Pursuant to section 74-2-9 of the AQCA, the Board's decision was supported by substantial evidence. Substantial evidence is evidence that a reasonable mind would recognize as adequate to support the conclusions reached by a fact-finder. *Wagner v. AGQ Consultants*, 2005-NMAC-016, ¶85, 137 N.M. 734, 114 P.3d 1050; *Regents of the Univ. of N.M. v. N.M. Fed'n of Teachers*, 1998-NMSC-020, ¶17, 125 N.M. 401, 962 P.2d 1236.

6. The Board is authorized by the AQCA to adopt the proposed rule, and this authority is not affected by the Department's previous efforts to clarify or expand that authority.

PL 51 - Norton at 11, ll.1-18, 12, l.7 - 13, l.10. The Board's inability to regulate some sources does not negate its authority to implement a cap-and-trade program for the large number of sources already regulated under the Act.

7. Administrative bodies are created by statute and must therefore find its authority and jurisdiction conferred upon it either expressly or by necessary implication from the same statutory authority. *New Mexico Elec. Serv. Co. v. New Mexico Pub. Serv. Comm'n*, 81 N.M. 683, 684 (1970). The Board's authority to "prevent or abate air pollution" is broad enough to implement a statewide GHG emission cap and trade program as it is a necessary implication from that authority.

STATEMENT OF REASONS

The Board hereby adopts the Department's Statement of Reasons filed with its Petition (PL 1) and hereby makes the following additional findings:

A. CHARACTER AND DEGREE OF INJURY TO HEALTH, WELFARE, VISIBILITY AND PROPERTY.

1. There is compelling evidence that climate change is real and continuing, and that it is caused by anthropogenic emissions of GHGs. PL 18 - Gutzler at 1-9; Tr. 49 - 56.

2. Current levels of GHGs in the atmosphere, coupled with new emissions, will result in a rise in global temperatures between 3-7 degrees Celsius by the end of the century. PL 18 - Gutzler at 6, ll.3-15. These fundamental conclusions are supported by the vast majority of climate scientists and every major scientific society in the United States. PL 18 - Gutzler at 2, l.17 - 3, l.22; PL 51 - Overpeck at 4, l.1 - 5, l.30; PL 51 - Norton at 2, ll.5-9.

3. EPA recently confirmed these conclusions after a thorough review of the scientific evidence. Tr. 55, ll.18-24; PL 51 - Gutzler at Exhibit 2; PL 36 - Wehrum at 9, ll.12-17.

4. Climate change caused by anthropogenic emissions of GHGs will have a particularly severe impact of the American Southwest, including New Mexico. PL 51 - Overpeck at 7, 1.1 - 11, 1.6. The warming trends in this region are double the annual global average. PL 18 - Gutzler at 4, 1.1 - 5, 1.10. Already, water supply and snowpack have diminished; major reservoirs are drying out; soil moisture is dropping; vegetation death rates are increasing; and wildfires are becoming more frequent and severe. PL 18 - Gutzler at 6, 1.17 - 9, 1.5, 2, 1.4, 14, 1.11; PL 51 - Overpeck at 7, 1.1 - 11, 1.6. These changes are consistent with the climate models, Tr. 2258-2259, but are happening faster than predicted. Tr. 2265, 11.22 - 23, 2269, 11.12-16.

5. Climate change is causing adverse impacts to the public health, and these impacts are expected to intensify in the coming years. PL 18 - Patz at 2, 11.3-21. Climate change is unlike any other health threat because it affects multiple pathways. PL 18 - Patz at 1, 1.30 - 2, 1.2.

6. In the United States, climate change has caused an increase in deadly heatwaves, exacerbated air pollution such as ozone which is especially dangerous for children with asthma, caused an increase in pollen and allergies, and increased the rate of infectious diseases, particularly those resulting from flood-affected sewage systems. PL 18 - Patz at 3, 1.7 - 5, 1.23.

7. Contrary evidence was presented by the Independent Petroleum Association of New Mexico's witness, Howard Maccabee, who testified that climate change may have positive health benefits. PL. 37.

8. NMED witness, Jonathan Patz, a recognized public health expert and Nobel laureate, testified that Maccabee misconstrued data, ignored other data, relied heavily on unproven theories, and erroneously suggested that climate change and its impacts would be incremental and therefore manageable from a public health perspective. PL 51 - Patz at 1, 1.14 - 5, 1.14.

9. Climate change will have a serious adverse effect on other pollutants of concern in New Mexico such as ozone. Climate change will exacerbate ozone pollution. Pl 18 - Uhl at 1, 1.28 - 3, 1.21. Ozone, which is both a respiratory irritant and a factor in cardiopulmonary distress, will be a serious problem for the state if the EPA tightens the applicable standards as expected in the near future. The warming climate will exacerbate noncompliance in nonattainment areas and make it more difficult to attain the applicable standards. A similar situation is expected for particulate matter in southern New Mexico, as reduced soil moisture and more wildfires increase the number and severity of exceedances of the applicable standards. *Id.*

10. Tri-State witness Christy and Farmington witness Kappelmann suggested that "Climategate" - the publication of stolen emails written by a small number of climate scientists - and a few errors in published reports undermined the conclusions of the Intergovernmental Panel on Climate Change ("IPCC"). However, several scientific bodies, including the National Academy of Science and EPA, have thoroughly investigated the allegations and found no evidence of scientific misconduct. Moreover, the emails - which were taken out of context - had no meaningful impact on the fundamental conclusions regarding climate change. Tr. 2240, 1.12 - 2241, 1. 15; PL 51 - Gutzler at 15, ll.1-23, 27, 1.10 - 28, 1.12 & Exhibit 2; PL 51 - Overpeck at 2, 1.16 - 5, 1.7. In fact,

B. PUBLIC INTEREST

11. Climate change is expected to result in large economic costs, which for New Mexico are estimated at \$3.2 billion per year, or \$3,430 per household in 2020, rising to \$5,410 per household in 2040. PL 18 - Norton at 16, ll.5-11.

12. Sandia National Laboratory recently analyzed the data and concluded that between 2010 and 2050, climate change in New Mexico would result in the loss of \$12.7 to

\$26.1 billion in Gross State Product ("GSP"), 217,600 labor-years, and 8,300 residents who migrate to less impacted states. PL 51 - Norton at 14, ll.3-10.

13. Preventing or abating climate change will minimize harm to the state's water resources, PL 18 - Gutzler at 9, l.7 - 17, l.6, and the public health of its citizens, PL 18 - Patz at 6, l.14 - 8, l.20, and bring co-benefits for ozone and PM pollution. PL 18 - Norton at 16, ll.13-21; PL 18 - Uhl at 3, l.14-21. In fact, GHG reductions under the rule could contribute to demonstrating compliance with federal ozone standards, averting more stringent requirements for industrial sources in New Mexico. *Id.*

14. The Department's proposed rule would have a small but significant effect on climate change. PL 18 - Ely at 5, ll.13-21. The rule is limited to sources within the Board's jurisdiction in New Mexico, covering two-thirds of their emissions. PL 51 - Norton at 4, ll.4-19. The rule is anticipated to cover approximately 63 of the largest sources in the electrical generation and oil and gas sectors, which represent 97 percent of the total emissions from Title V sources in New Mexico. PL 18 - Schneider at 3-6; PL 18 - Norton at 9, ll.18-20.

C. TECHNICAL PRACTICABILITY

15. The Department's proposed rule provides sources with several compliance options. PL 18 - Sahu at 2, ll.9-13.

16. Aside from receiving free allowances for most emissions, sources can purchase allowances and transfer allowances from other facilities owned by the same company. PL 18 - Weaver at 6, l.11 - 7, l.14.

17. Sources also may use offsets to satisfy up to 49 percent of their total emission reduction obligation. PL 51 - Ely at 12, l.5 - 13, l.20; PL 51 - Weaver at 18, ll.11-23; NMED Hearing Exhibit 3. This limit balances the benefit of offsets as a cost containment strategy with

the encouragement of actual reductions at sources in New Mexico. Tr. 1894, ll.12 - 1895, l.2. These offsets can be obtained from approved jurisdictions and external trading programs. PL 51 - Weaver at 17, l.13 - 19, l.18.

18. The Department's limit is more generous than RGGI, PL 51 -Litz at 3, ll.7-19, and the failed federal legislation, which would have allowed offsets up to 30 percent of the total compliance obligation, but required a source to purchase all or a portion of its allowances at auction. PL 51 - Ely at 13, ll.3-13, 15, ll.13-15; TR 1790, ll.9-25.

19. The Department in the proposed rule expressed the offset limit as 4 percent of the source's total compliance obligation between 2012 and 2020. NMED Hearing Exhibit 1; PL 51 - Weaver at 18, ll.18-19 & Appendix A. The Department distributed this limit evenly over three compliance periods, which allows sources to use more offsets earlier in the program. PNM proposed to ramp up the offset limit in each compliance period, resulting in phased limits of 1, 4, and 7 percent of the reduction obligation, which allows sources to use more offsets later in the program. NMED Hearing Exhibit 2. At the hearing, the Department described its method, Tr. 1942, l.5 - 1946, l.15, and presented a side-by-side comparison with PNM's proposal. NMED Hearing Exhibit 3; Tr. 3057, l.21 - 3059, l.5. The Board prefers the single offset limit of 4 percent, as reflected in NMED Brief Exhibit 1, because it is consistent with the approach being taken by other WCI jurisdictions and therefore will help to assure New Mexico's ability to link with their programs.

20. A certification program is not necessary because offset certifiers will come to the project regardless where it is, rather than requiring the developer to go to the issuing state. Tr. 1681, l.22-1682, l.1, 1756, l.16 - 1757, l.6, 1961, ll.19-25. Once the offsets have been approved

by another jurisdiction, they are available for any source - including a source in New Mexico - to satisfy its reduction obligation. Tr. 1962, ll.1-4.

21. In addition to obtaining allowances or offsets, a source may meet its obligation by reducing its emissions. In some cases, a source may prefer to reduce emissions because it would be less expensive than purchasing allowances or offsets, particularly in light of the ancillary benefits. PL 18 - Sahu at 3, ll.6-13.

22. Electric utilities can reduce GHG emissions by managing energy demand, reducing transmission and distribution losses, reducing electricity loss at generating stations, improving fuel conversion efficiency, using lower carbon intensity fuels, deploying optimization technologies, developing carbon capture and storage projects, and integrating renewable energy supplies to reduce system-wide carbon intensity. PL 18 - Sahu at 4, l.3 - 8, l.10.

23. Oil and gas facilities can reduce GHG emissions by improving energy efficiency, reducing flaring, and developing acid gas injection. PL 18 - Sahu at 8, l.12 - 9, l.12.

24. Many of these methods can be achieved at a minimal cost but a significant economic benefit to the facility. PL 51 - Sahu at 12, ll.4-18. Several industry witnesses acknowledged that their facilities have achieved significant reductions using these methods and plan to do more in the future. PL 18 - Sahu at Exhibits 1-3, 11; PL 31 - Patton at 8, ll.11-15, 9, ll.5-15; PL 39 - Darnell at 13, l.7 - 14, l.11; PL 39 - Ihle at 4, ll.7-13; PL 36 - Chicanowicz at 5, l.9 - 8, l. 4, 8, l.8 - 9, l.5, 9, l.12 - 10, l.23, 13, ll.11-14.

25. With respect to carbon capture and sequestration ("CCS"), Department witness Ron Sahu and Tri-State witness Ed Chicanowicz both testified that the technology takes several forms, including pre- and post-combustion processes and the related technology of oxycombustion. PL 18 - Sahu at 7, l.18 - 8, l.13; PL 36 - Chicanowicz at 9, ll.12-16. It is not

necessary to capture all exhaust gases from a facility for CCS to effectively reduce GHG emissions. Tr. 783, ll.1-3. CCS is being implemented in a number of locations in the United States and around the world. PL 51 - Sahu at 10, l.14 - 11, l.6.

26. The Department established a threshold of 100 million metric tons of allowances in the trading system before the proposed rule can take effect. This threshold reflects the Department's intent that New Mexico participate in a regional trading program; the Department never intended for New Mexico to establish a state-only program. PL 18 - Norton at 17, l.24 - 18, l.2. The threshold ensures that the trading system will have sufficient liquidity to control compliance costs for affected sources. Tr. 1274, l.21 - 1275, l.1. In this regard, liquidity is provided by the market size of the jurisdictions, not the number of jurisdictions. Tr. 1457, ll.7-20. The threshold, which is limited to North American jurisdictions, Tr. 1600, l.21 - 1601, l.16, would be satisfied if California adopted a trading program. *Id.* Notably, the 100 million metric ton threshold value is roughly equivalent to the metric tons in the RGGI system, which has operated successfully since January 2009. Tr. 1458, l.12-17, 1459, l.2 - 1460, l.9.

27. The Department's proposed rule established an effective date of January 1, 2011, which allows the Department enough time to develop the administrative framework for allocations before the initial cap year of 2012, PL 18 - Weaver at 3, ll.2-5, and to create links with other trading programs, as well as allowing regulated sources to prepare for participation in the program. Tr. 1242, l.12 - 1243, l.8. PNM witness Dirk Forrister suggested that the program could not be developed within one year, Tr. 1438, ll.12-16. The Department and other WCI jurisdictions will work cooperatively to establish the trading system, using off-the-shelf computer programs developed by EPA and other trading systems such as RGGI. PL 51 - Ely at 11, l.1 - 12, l.3; PL 51 - Litz at 3, l.21 - 4, l.20; Tr. at 1438, l.17 - 1439, l.6. Even RGGI, the first

GHG cap-and-trade program in the United States, successfully established the allowance baseline for sources less than 4 months before trading was commenced, considerably less time than available in New Mexico. Tr. 1391, ll.10-13.

28. The Department proposed to "sunset" the proposed rule if the federal government adopts an equally effective cap-and-trade program. PL 18 - Weaver at 3, ll.7-12. The Department's sunset provision would require that a federal program obtain an emission reduction commensurate with the proposed rule.

29. The Department clarified that it had no intent to aggregate oil and gas wells and associated equipment for the purpose of designating a source that exceeds the 25 thousand metric ton threshold. PL 51 - Weaver at 6, ll.2-18. The Department added language to the August 30 version of the proposed rule and testified consistently with this position at the hearing. Tr. 1676, l.18 - 1677, l.8. The two parties representing oil and gas interests, NMOGA and Independent Producers Association of New Mexico ("IPANM"), acknowledged the Department's position. Tr. at 2925, ll.13-23, 1677, l.8.

D. ECONOMIC REASONABLENESS

30. The Department's analysis found that the rule will have a slight positive effect under the two most likely scenarios, and at worst, a small negative effect under the other scenarios.

31. The Department's economic analysis by Karl Hausker's found that a \$33 allowance price would achieve the WCI reduction objective. PL 18 - Hausker at 18.

32. Dr. Rose conducted seven policy runs using different combinations of allowance prices and complementary policies. PL 18 - Rose at 2, l.12 - 3, 14, 4 ll.1-10, 10, l.16-13, l.14. Two runs showed slightly positive results for the state economy by 2020, including an increase

in employment of 2,500 jobs (0.18%) and an increase in GSP of \$542 million (0.13%). The runs also predicted no impact on state tax revenues in 2020, no increase in electric rates, and a minimal increase (less than one percent) in the cost of transportation fuels. Rose considered these runs to be the most likely scenarios because they closely resembled the Department's proposed cap-and-trade program with free allowances and complementary policies. The remaining runs showed only a small negative impact on the state economy, including a maximum loss of 3,100 jobs and a fractional decrease in GSP. Given New Mexico's GSP of \$70 billion, this decrease would retard growth by a few months at most. Tr. 500, ll.14-23. These results were consistent with the findings for other cap-and-trade programs. Tr. 1284, ll.16 - 25.

33. The results represented the lower bound of potential economic outcomes because the model did not account for the avoided or reduced damages from climate change and emissions of other pollutants, the reduced use of natural resources, the reduced amount of traffic damage, and avoided impacts to water supply, tourism, ranching, and forestry, PL 18 - Rose at 3, ll.15-19; Tr. at 2321, ll.19-23, as well as the long-term impacts on the agricultural and industrial base and the exodus of population and jobs predicted by Sandia National Laboratory. PL 51 - Norton at 14, ll.3-10. The model also overestimated the negative impacts because it assumed that New Mexico would auction allowances, increasing the overall costs to industry. PL 18 - Rose at 13, ll.15-21.

34. The Department's analysis expressly addressed the impact on the oil and gas sector. Energy 2020 modeled the sector's economic activity to the extent possible with the available data. Tr. 708, l.7 - 712, l.4. Specifically, the REMI analysis included all capped facilities in the sector, the annualized process investment, and the sectors' projected revenue contribution to the General Fund. Tr. 1666, ll.3-7. The REMI model predicted that the sector

would experience a small negative effect of one-tenth to one percent by 2020. While this impact would fall more heavily on the petroleum refining industry, other parts of the sector - such as natural gas production and processing - should expect to benefit significantly from a cap-and-trade program. Tr. 489, ll.2-20, 504, ll.3-16. Natural gas is considered to be the transition fuel in a carbon-constrained economy, PL 51 - Norton at 14, ll.11-21, and will be especially favored when coal-fired power plants near large natural gas fields begin to switch fuels. Tr. 2980, l.12 - 2981, l.2.

35. Some parties conducted their own economic analyses. While they used different models with more negative assumptions, they predicted GSP and employment results slightly more negative but similar to the Department's. Tr. 500, l.24 - 501, l.6. From the long-term perspective, these results meant that for a given growth rate, there would be only a small temporal delay in reaching the same GSP. Tr. 501, ll.7-18.

36. Farmington witness Robert Kappelmann calculated Farmington's compliance costs using a worst case scenario, but did not contradict the Department's conclusion that a cap-and-trade program would have a minimal effect on the state economy. Tr. 2024, l.25 - 2025, l.5.

37. The Department's proposed rule contains provisions that minimize leakage, such as free allowances and delayed compliance obligations. PL 51 - Ely at 15, ll.10-16, Tr. 1315, ll.3-20. There is no evidence that RGGI's cap-and-trade program has caused any leakage in the electric generation industry, Tr. 1408, ll.11-16. Moreover, the risk of economic leakage due to regulation is not significant compared to other factors, such as commodity prices, fuel costs, and regulations in other states, which can be more onerous than those in New Mexico. PL 51 - Ely at 15, l. 18 - 17, l. 4; PL 51 - O'Hare at 10, ll.5-17; Tr. 1408, ll.4-6. The Department proposed to

monitor and reassess leakage in consultation with the stakeholders and report back to the Board.

PL 51 - Ely at 15, ll.18-22.

38. The Board, in response to industry concerns that the rule would be too expensive and in order to address economic reasonableness, amended 20.2.350.17(H) NMAC to read: “additional cost containment provisions, and if for a period of six (6) continuous months the average price per metric ton of CO₂ for offsets and allowances exceeds forty-five (45) dollars in 2010 dollars as adjusted annually by the consumer price index the department shall automatically return to the board with a cost containment proposal.”

E. PUBLIC NOTICE AND DUE PROCESS

39. The Department conducted an adequate and appropriate public process for the proposed rule. PL 18 - Ely at 2, l.18- 4, l.8. The WCI process, which developed the Design Document template, involved extensive stakeholder input, including regional events, telephone conferences, and a series of meetings in New Mexico. Tr. 1693, ll.3 - 1694, l.13, 1958, l.19 - 1959, l.5. The Department also conducted a second round of meetings and presentations across the state regarding New Mexico's climate change work in general, as well as a full stakeholder process for the proposed rule. Tr. 1959, l.6 - 1960, l.15. For each event, the Department sent electronic notification to more than 900 persons. Tr. 1966, l2 - 1967, l.18.

40. With respect to the proposed rule, the Department in March 2010 issued a draft white paper to solicit comments on the methods for allocating allowances, issued the draft rule for public comment, and hosted a series of meetings around the state, including Santa Fe, Farmington, Clovis, Roswell, Las Cruces, and Albuquerque. Unfortunately, with minor exceptions, the rule opponents refused to participate in the public process. PL 51 - Ely at 17, ll.7-16.

41. The Board's procedural rule promulgation requirements are provided by statute. First, a public hearing required pursuant to NMSA 1978, 74-2-6(B). This requirement meet was met as the Board conducted 9 days of hearing as well as taking public comment in various cities throughout the state. Second, notice is required 30 days prior to hearing date pursuant to NMSA 1978, 74-2-6(C). The public hearing was properly noticed as evidenced by the affidavits of publication. PL 55. Third, "At the hearing, the environmental improvement board or the local board shall allow all interested persons a reasonable opportunity to submit data, views or arguments orally or in writing and to examine witnesses testifying at the hearing." NMSA 1978, 74-2-6(D). The Board exceeded its own requirements by requiring the Department to file direct testimony and exhibits more than 60 days before the hearing and allowed the other parties 30 days to submit responsive testimony and exhibits and an additional 14 days to submit rebuttal testimony, which two parties actually used to supplement their responsive testimony.

42. Tri-State objected to the notice provided to the Small Business Regulatory Committee. Tri-state's argument is highly technical argument and it is undisputed that the Department twice filed the proposed rule with the Commission (June 4, 2010 & July 16, 2010). This notice is evidence that the Committee received actual notice.

ORDER

By an affirmative vote of 4 to 3, the proposed new regulation was approved by the Board on November 2, 2010 with an amendment to 20.2.350.17NMAC that would require the Department to come back to the Board if the \$45.00 allocation or offset was reached. The proposed new regulation is to be set forth in Section 350 of 20.2 NMAC with any appropriate corrections of typographical errors, formatting, or other changes necessary to file these

regulations with the New Mexico State Records Center. The regulations described in this Order are hereby adopted, to be effective 30 days after filing with the State Records Center.


Gay Dillingham, Chair
On Behalf of the Board

Dated: 11-10-10