

STATE OF MICHIGAN
COURT OF APPEALS

In re Antrim Shale Formation re Operation of
Wells Under Vacuum.

RIVERSIDE ENERGY MICHIGAN, LLC,
JORDAN DEVELOPMENT COMPANY, LLC,
HRF EXPLORATION & PRODUCTION, LLC,
and TRENDWELL ENERGY CORP.,

Appellants,

v

MICHIGAN PUBLIC SERVICE COMMISSION,
LINN MIDWEST ENERGY, LLC, LINN
OPERATING, INC., TERRA ENERGY
COMPANY, LLC, BREITBURN OPERATING,
LP, BREITBURN MANAGEMENT, LLC,
ENERVEST MANAGEMENT PARTNERS, LP,
BELDEN & BLAKE CORP., doing business as
WARD LAKE ENERGY, ENERVEST
INSTITUTIONAL FUND IX, LP, MERIT
ENERGY COMPANY, LLC, DCP ANTRIM
GAS, LLC, and DCP GRANDS LACS, LLC,

Appellees,

and

MUSKEGON DEVELOPMENT COMPANY,

Intervenor-Appellee.

In re Antrim Shale Formation re Operation of
Wells Under Vacuum.

RIVERSIDE ENERGY MICHIGAN, LLC,
JORDAN DEVELOPMENT COMPANY, LLC,

FOR PUBLICATION
March 21, 2017
9:00 a.m.

No. 327723
MPSC
LC No. 00-016230

HRF EXPLORATION & PRODUCTION, LLC,
and TRENDWELL ENERGY CORP.,

Appellants,

v

No. 330161
MPSC
LC No. 00-016230

MICHIGAN PUBLIC SERVICE COMMISSION,
DCP ANTRIM GAS, LLC, DCP GRAND LACS,
LLC, LINN MIDWEST ENERGY, LLC, LINN
OPERATING, INC., TERRA ENERGY
COMPANY, LLC, BREITBURN OPERATING,
LP, BREITBURN MANAGEMENT, LLC,
ENERVEST MANAGEMENT PARTNERS, LP,
BELDEN & BLAKE CORPORATION, doing
business as WARD LAKE ENERGY, ENERVEST
INSTITUTIONAL FUND IX, LP, and MERIT
ENERGY COMPANY, LLC,

Appellees.

Before: BECKERING, P.J., and O'CONNELL and BORRELLO, JJ.

PER CURIAM.

Appellants, oil companies operating within the Antrim Shale Formation, appeal as of right the order of the Michigan Public Service Commission (the Commission) granting natural gas producers approval to operate wells in the Antrim Shale Formation under vacuum. The Commission considered the entire shale formation and its decision permitted all operators who were drilling in the formation to operate their wells under a vacuum. We affirm.

I. BACKGROUND

Natural gas production has occurred in the Antrim Shale Formation since the 1940s. Natural gases, primarily methane and carbon dioxide, have absorbed into the shale. The fractures in which this gas resides may be short or long. Water in the system effectively traps the gas in the reservoir, but as water is pumped out of the fracture system, it lowers the reservoir pressure and releases the gas from the organic matter in the shale. By August 2010, more than 10,000 wells owned by 32 companies operated in the formation.

Appellees, who are natural gas producers, applied to the Commission in August 2009 for permission to operate their natural gas wells in the Antrim Shale Formation under vacuum. The Michigan Administrative Code provides that the Commission must approve any placement of gas wells under vacuum:

No gas well, pool or field shall be placed under vacuum by the use of compressors, pumps or other devices except with the approval of the commission. If and when the placing of a vacuum in any well, pool or field is planned, application for approval shall be made to the commission, and the adjoining lease holders and operators of a pool or field who may be affected shall be given notice. The commission may call a hearing on the subject, or may take such action as it deems advisable. [Mich Admin Code, R 460.867 (“Rule 17).]

Several parties intervened in the applications, with nine companies favoring operating wells under vacuum and six companies opposing it. Those in favor argued that operating under vacuum would increase the amount of gas recovered and reduce waste, while those opposed argued that operating wells under vacuum would effectively drain gas from adjacent areas, infringing on the correlative rights of adjacent well operators.

In April 2010, the Commission decided that it would open a docket to consider an appropriate response to the question of “proposals by all interested persons regarding whether the Commission should permit gas wells to be operated under vacuum from the Antrim Shale Formation” rather than resolving issues on a case-by-case basis. Applicants and interveners in previous cases were consolidated into the new case.

The Commission took evidence, including 24 evidentiary hearings and 250 exhibits, before an administrative law judge issued a proposal for decision. The proposal for decision noted that the Commission and Michigan Department of Environmental Quality (DEQ) shared authority to regulate gas wells, and there was no understanding regarding which agency would exercise that authority. The proposal recommended that the Commission dismiss the applications until the applicants had obtained DEQ approval to operate their wells under vacuum.

On May 14, 2015, the Commission rejected the proposal for decision and instead granted all applications to operate gas wells in the Antrim Shale Formation under vacuum, subject to certain enumerated conditions. Concerning correlative rights, the Commission determined that existing guidelines, which provided that wells must be drilled at least 330 feet from adjoining projects, sufficiently protected the interests of adjacent leaseholders since data showed that few wells in the Antrim Shale Formation communicated and the lack of communication lessened the risk that a well operating under a vacuum would drain gas from a neighboring well. Finally, the Commission determined that allowing wells to operate under vacuum would not alter the status quo because all well operators would be allowed to operate under a vacuum if they so chose.

Regarding other considerations, the Commission found that vacuum well operations were safe and reduced waste because total production would increase and producers would gain more gas than they expended in recovering gas from the wells. Ultimately, the Commission ordered that “[a]ll current and future natural gas wells produced from the Antrim Shale formation may operate under a vacuum” subject to requirements the Commission outlined in an attachment.

Appellants, those parties opposed to operating wells under vacuum, now appeal.

II. STANDARD OF REVIEW

“The standard of review for PSC orders is narrow and well defined.” *In re Application of Mich Electric Transmission Co*, 309 Mich App 1, 9; 867 NW2d 911 (2014). When appealing a decision of the Public Service Commission, the appellant has the burden “to show by clear and satisfactory evidence that the order of the commission complained of is unlawful or unreasonable.” MCL 462.26(8).

An order is unlawful if the Commission failed to follow a statute or abused its discretion. *In re MCI Telecom Complaint*, 460 Mich 396, 427; 596 NW2d 164 (1999). “[A]gency interpretations are entitled to respectful consideration, but they are not binding on courts and cannot conflict with the plain meaning of the statute.” *In re Rovas Complaint*, 482 Mich 90, 117-118; 754 NW2d 259 (2008). We review de novo whether the Commission exceeded the scope of its authority. *In re Pelland Complaint*, 254 Mich App 675, 682; 658 NW2d 849 (2003). We also review de novo issues of statutory construction. *Mich Electric Transmission Co*, 309 Mich App at 10.

An order is unreasonable if the evidence does not support it. *Id.* An agency’s findings of fact must be “supported by competent, material, and substantial evidence on the whole record.” *Id.* Substantial evidence is “evidence that a reasoning mind would accept as sufficient to support a conclusion.” *Dignan v Mich Pub Sch Employees Retirement Bd*, 253 Mich App 571, 576; 659 NW2d 629 (2002). The Commission is entitled to weigh conflicting evidence and opinion testimony in order to determine in which direction the evidence preponderates. *Mich Electric Transmission Co*, 309 Mich App at 12. The testimony of one expert constitutes substantial evidence. *Id.*

III. SCOPE OF THE COMMISSION’S AUTHORITY

Appellants argue that the Commission’s order exceeded the scope of its statutory authority and that the Commission may not issue a blanket order covering production in the Antrim Shale Formation because its decision was a contested case that can only apply to those parties to the case. We disagree.

The Commission derives its authority from its underlying statutes and possesses no common-law authority. *In re Pub Serv Comm Guidelines For Transactions Between Affiliates*, 252 Mich App 254, 263; 652 NW2d 1 (2002). The Commission is authorized to enact regulations “for the equitable purchasing, taking and collecting of all . . . gas . . . which regulations shall apply to all persons affected thereby in like manner . . .” MCL 483.105. In addition, the Commission is authorized to

prevent the waste of natural gas in producing operations . . . and to make rules and regulations for that purpose. It is hereby authorized and empowered to do all things necessary for the conservation of natural gas in connection with the production . . . and to establish such other rules and regulations as will be necessary to carry into effect this act, to conserve the natural gas resources of the state and to preserve the public peace, safety, and convenience in relation thereto. [MCL 483.114.]

The Commission may set standards “either pursuant to the rule-making provisions of the [Administrative Procedures Act, MCL 24.201 *et seq.*,] or case-by-case through adjudication.” *Northern Mich Exploration Co v Pub Serv Comm*, 153 Mich App 635; 396 NW2d 487 (1986). The Administrative Procedures Act provides that a rule is “an agency regulation, statement, standard, policy, ruling, or instruction of general applicability that implements or applies law enforced or administered by the agency, or that prescribes the organization, procedure, or practice of the agency, including the amendment, suspension, or rescission of the law enforced or administered by the agency.” MCL 24.207.

Generally, a contested case is a proceeding that determines the legal rights, duties, or privileges of the named parties. MCL 24.203(3). Such a case “is required by law to be made by an agency after an opportunity for an evidentiary hearing.” MCL 24.203(3). Generally, an agency may not make a generally applicable statement in an order in contested cases. *In re Pub Serv Comm Guidelines*, 252 Mich App at 265. “Where a statute provides that an agency may proceed by rule-making or by order and an agency proceeds by order in lieu of rule-making, the order shall not be given general applicability to persons who were not parties to the proceeding or contested case before the issuance of the order, *unless the order was issued after public notice and a public hearing.*” MCL 24.232(6) (emphasis added).

In this case, while the controversy over vacuum well operation in the Antrim Shale Formation began as contested cases, the Commission later stated its intent to consider “proposals by all interested persons regarding whether the Commission should permit gas wells to be operated under vacuum from the Antrim Shale Formation” rather than resolving the issues. The Commission then took extensive public testimony, not only from those involved in the prior contested cases but from others, and acted only after such public hearings. We conclude that the Commission’s generally applicable orders were not outside its authority because they were issued after public notice and a public hearing under MCL 24.232(6).

IV. LAWFULNESS OF THE COMMISSION’S ORDER

Appellants next argue that the Commission’s order was unlawful because it failed to protect the correlative rights of other owners of wells in the Antrim Shale Formation by apportioning the natural gas from the common pool. We disagree because there was no evidence that a common pool existed.

Generally, surface owners of oil and gas rights are only entitled to proportionate shares of the common oil and gas reserves underlying the land:

Absent regulation, natural gas and oil are subject to the rule of capture under which, essentially, the first person to take them is entitled to them even though the well drains natural resources from under the land of another. In most American jurisdictions, the rule has been modified by the “fair share” or “ownership in place” rule. Michigan is an ownership-in-place state. Under the rule, “each owner of the surface is entitled only to his equitable and ratable share of the recoverable oil and gas energy in the common pool in the proportion which the recoverable reserves underlying his land bears to the recoverable reserves in

the pool.” [*Northern Mich Exploration Co v Pub Serv Comm*, 153 Mich App 635, 638-639; 396 NW2d 487 (1986) (internal citations omitted).]

The ownership-in-place rule only limits the application of the rule of capture, it does not eliminate it. *Wronski v Sun Oil Co*, 89 Mich App 11, 22; 279 NW2d 564 (1979).

In this case, Steven Kohler testified that because of the nature of the fracturing in the Antrim Shale Formation, there is no way to determine “where any of the gas that enters any of the wellbores really comes from” There was no contrary testimony to establish that a common pool of gas existed. Accordingly, we conclude that the Commission properly determined that the ownership-in-place rule did not apply in this case because there was no common pool from which to apportion equitable shares.

V. REASONABLENESS OF THE COMMISSION’S ORDER

Appellants argue that the Commission’s order was unreasonable because competent, material, and substantial evidence did not support its findings regarding the safety, lack of waste, and impact on correlative rights associated with operating natural gas wells under vacuum. We disagree. As previously stated, the testimony of one expert constitutes substantial evidence, and the Commission is entitled to accept it even if contrary evidence exists. *Mich Electric Transmission Co*, 309 Mich App at 12.

Regarding the safety of vacuum well operation, the Commission specifically relied on the testimony of Daniel Cooper, an independent engineering expert. According to Cooper, operating the wells under vacuum could pull oxygen into the system, but because the gases in the Antrim Shale Formation were composed of 70% methane and 30% carbon dioxide, the oxygen level would have to rise to 17% in order for the mixture to become flammable. Equipment monitoring and prompt repair of leaks would prevent combustible mixtures from forming. Additionally, safeguards could be built into the equipment to shut down parts of the system if the oxygen content rose to dangerous levels. We conclude that competent, material, and substantial evidence existed because reasonable minds could rely on Cooper’s testimony to conclude that wells could be operated safely under vacuum.

Regarding waste, the Commission relied on the testimonies of two engineers, Todd Tetrick and Steven Kohler. Tetrick testified that using vacuums increased net gas recovery by leaving less gas in the fractures at the point that the wellheads were abandoned. According to Kohler, who used data from 18 wells that included wells operated under vacuum, if 50% of the wells in the Antrim Shale Formation were operated under vacuum, the total recoverable gas from the formation would increase by 3.7% to 8.9%. Kohler testified that this increased production would prevent waste because it would result in more gas recovery. The Commission found Kohler’s testimony more credible than the contradictory testimony of Vello Kuuskraa because Kohler used actual data to reach his conclusions while Kuuskraa used simulations. Again, competent evidence supported the Commission’s findings because reasonable minds could rely on the evidence to conclude that vacuum wells would increase gas production and reduce waste.

Finally, regarding correlative rights, the Commission relied on the testimonies of Kohler and engineer Chet Ozgen. Brian Door, a division manager for Breitburn Operating, testified that

DEQ rules require at least 330 feet of space between wellheads. Kohler testified that the greater the distance between the wells, the less likely it would be that the wells would communicate and drain gas from each other. According to Ozgen, wells must have a strong connection through the fracture system in order for drainage to occur. In a system of complex fractures, such as is found in the Antrim Shale Formation, it could take years for communication between wells to develop. Additionally, gas producers typically drilled wells along leasehold boundary lines to reduce the change of drainage. In sum, the evidence was sufficient to support a conclusion that existing measures sufficiently protected correlative rights, and the Commission was entitled to accept this evidence even though contrary evidence existed.

We affirm.

/s/ Jane M. Beckering

/s/ Peter D. O'Connell

/s/ Stephen L. Borrello