# IN THE SUPREME COURT, STATE OF WYOMING

## 2013 WY 32

## **OCTOBER TERM, A.D. 2012**

March 15, 2013

#### EXXON MOBIL CORPORATION,

Appellant (Petitioner),

v.

S-12-0140

WYOMING OIL AND GAS CONSERVATION COMMISSION and DENBURY ONSHORE, LLC,

Appellees (Respondents).

## Appeal from the District Court of Natrona County The Honorable W. Thomas Sullins, Judge

#### **Representing Appellant:**

Walter F. Eggers, III, P.C., and Patrick R. Day, P.C., of Holland & Hart LLP, Cheyenne, Wyoming. Argument by Mr. Eggers, III.

#### *Representing Appellee Wyoming Oil and Gas Conservation Commission:* No appearance.

Representing Appellee Denbury Onshore, LLC:

John A. Masterson and Alaina M. Stedillie of Rothgerber Johnson & Lyons LLP, Casper, Wyoming. Argument by Mr. Masterson.

Before KITE, C.J., and HILL, VOIGT, BURKE, and DAVIS, JJ.

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## DAVIS, Justice.

[¶1] The Wyoming Oil and Gas Conservation Commission approved Cimarex Energy Company's plan to reinject waste carbon dioxide and hydrogen sulfide into a producing natural gas formation in southwest Wyoming, over the objection of Appellant Exxon Mobil Corporation. Exxon unsuccessfully sought to overturn the Commission's decision in the District Court for the Seventh Judicial District, and now appeals the district court's order affirming that decision to this Court.<sup>1</sup>

[¶2] The parties present a number of issues in their comprehensive briefs, but review of the complete record and oral argument allow us to distill the issues which we must decide down to two, which we restate below. As to the second issue, we will affirm. As to the first, we reverse and remand to the district court with directions that this case be remanded to the Commission for the purpose of making appropriate findings.

## ISSUES

[¶3] 1. Did the Commission provide adequate findings of fact as to whether Cimarex's plan to reinject carbon dioxide and hydrogen sulfide would result in waste of natural gas and improperly interfere with Exxon's correlative rights?

2. Should the Commission have granted Exxon's petition for a rehearing due to Denbury Onshore's acquisition of Cimarex's interests in the production unit where the proposed injection well would be located and its announcement of a plan to eventually sell carbon dioxide produced on that unit?

## FACTS

[¶4] Cimarex and Exxon hold mineral interests which permit them to produce gas on the Moxa Arch, a large anticline located in the Green River basin of southwest Wyoming. Since 1986, Exxon has produced natural gas from the Madison strata underlying its Lake Ridge and Fogarty Creek units, which are to the south of Cimarex's much smaller Riley Ridge unit. The Madison strata, which are 15,880 feet to 16,778 feet below wellhead in this field, consist primarily of porous and permeable dolomite and limestone and have historically yielded Exxon an average gas stream composed of 21% methane, 7.4% nitrogen, 0.6% helium, 66% carbon dioxide, and 5% hydrogen sulfide.

<sup>&</sup>lt;sup>1</sup> Wold Oil Properties, Inc., intervened in the proceedings before the Commission and supported Cimarex's application. Subsequently, Appellee Denbury Onshore, L.L.C., acquired the interests of Cimarex and Wold and was substituted as the proper respondent party in the proceedings before the district court. For the sake of simplicity and continuity we will refer to those interests as having been represented by Cimarex.

[¶5] The "methane cut" or percentage of methane in the gas stream available to Cimarex is four to five percent lower than that available to Exxon because Exxon's Lake Ridge and Fogarty Creek units sit atop the crest of the Moxa Arch while Cimarex's Riley Ridge unit is located on the downslope of the anticline. This geologic feature and the effect of gravity cause higher concentrations of heavier carbon dioxide under Riley Ridge than are found under the higher Exxon Lake Ridge and Fogarty units, where lighter methane gas has been more concentrated.

[¶6] Riley Ridge methane has been siphoned up the anticline to Exxon's wells as a result of a pressure gradient created by twenty-five years of production by Exxon and no production by the leaseholders of Riley Ridge. Due to Exxon's production, bottom-of-the-well pressure throughout the Madison strata has been reduced by three to fifteen percent of its original level, with the greatest decreases on the crest of the Moxa Arch.

[¶7] While Exxon produced and processed methane gas at its Shute Creek sour gas plant some forty miles to the south of the units discussed above, Cimarex's predecessors and eventual partners in interest, including Wold Oil Properties, had to acquire and consolidate numerous Riley Ridge working and overriding royalty interests over time in order to own interests sufficient to make production on that unit economically viable. Once the required acquisition and consolidation were achieved, the Riley Ridge interests had to find a way to transport and process any methane and carbon dioxide they might produce. They tried to negotiate with Exxon to have the Riley Ridge gas processed and moved through Exxon's system, but Exxon rejected those proposals, responding that it had more than enough of its own gas to process, and that it saw no advantage to working with the Riley Ridge owners.

[¶8] Cimarex eventually developed a plan to remove the final obstacle to production. The plan involved building an innovative gas processing plant on the Riley Ridge unit and reinjecting the separated carbon dioxide and hydrogen sulfide into the Madison formation until a market which would allow it to sell stored carbon dioxide for use in enhanced oil recovery operations developed. In 2010, Cimarex applied to the Commission for a permit to use its Riley Ridge No. 20-14 well, which was located near the new processing facility, to reinject those "waste" gases back into the Madison formation at a point close to the southern boundary of the Riley Ridge unit.

[¶9] Exxon objected to the Cimarex plan, claiming that it would cause waste and compromise Exxon's correlative rights. "Correlative rights" means "the opportunity afforded the owner of each property in a pool to produce, as far as it is reasonably practicable to do so without waste, his just and equitable share of the oil or gas, or both, in the pool." Wyo. Stat. Ann. § 30-5-101(a)(ix) (LexisNexis 2011). A pool is "an underground reservoir containing a common accumulation of oil or gas, or both." § 30-5-101(a)(ii). There is no dispute that the gas described above lies in a pool as the statute defines that term. Waste is defined as pertinent to this case as follows:

(i) The term "waste" means and includes:

(A) Physical waste, as that term is generally understood in the oil and gas industry;

(B) The inefficient, excessive or improper use, or the unnecessary dissipation of, reservoir energy;

(C) The inefficient storing of oil or gas;

(D) The locating, drilling, equipping, operating, or producing of any oil or gas well in a manner that causes, or tends to cause, reduction in the quantity of oil or gas ultimately recoverable from a pool under prudent and proper operations, or that causes or tends to cause unnecessary or excessive surface loss or destruction of oil or gas;

(E) The production of oil or gas in excess of (I) transportation or storage facilities; (II) the amount reasonably required to be produced in the proper drilling, completing, or testing of the well from which it is produced, or oil or gas otherwise usefully utilized: except gas produced from an oil well pending the time when with reasonable diligence the gas can be sold or otherwise usefully utilized on terms and conditions that are just and reasonable;

(F) Underground or aboveground waste in the production or storage of oil, gas, or condensate, however caused, and whether or not defined in other subdivisions hereof;

30-5-101(a)(i). Waste of oil and gas is statutorily prohibited, and the Commission is charged with preventing waste and protecting correlative rights. § 30-5-102; § 30-5-104(d)(iv).

. . .

[¶10] Exxon did not object to Cimarex reinjecting carbon dioxide and hydrogen sulfide into the Madison strata in general, but only to its plan to inject them at the No. 20-14 well into a particular stratum of that formation. Exxon contended that the injected carbon dioxide plume would dilute the concentration of valuable methane gas it was currently producing from its Lake Ridge and Fogarty Creek wells. In other words, the methane would be diluted by hydrogen sulfide and carbon dioxide, requiring the processing of more gas to produce the same net quantity of methane that it was currently producing.

[¶11] At a contested case hearing before the Commission, Cimarex introduced evidence that its plan would reduce but not eliminate Exxon's draining of gas from under Riley Ridge, and that it would also reduce the drop in reservoir pressure which would result from Exxon's methane production. It contended that as reservoir pressure dropped without reinjection, operators would be required to expend more energy to produce and process methane and transport it to gas plants. It claimed that reinjection of carbon dioxide would reduce pressure depletion in the pool to one-quarter of what it would be without reinjection and therefore delay the date on which operators would have to use other gases for compression in order to maintain their production by a factor of four.

[¶12] Cimarex's experts testified that the current rate of pressure reduction would eventually cause all operators to abandon their wells while hydrocarbon-bearing gas remained in the reservoir. Reinjecting the carbon dioxide, however, would delay that process and push hydrocarbon-bearing gas toward producing wells, so that when the reservoir reached abandonment pressure only carbon dioxide would remain between Cimarex's leaseholds and those belonging to Exxon.

[¶13] Exxon's experts agreed that maintaining reservoir pressure would enhance methane production in most cases, and that Cimarex's reinjection of carbon dioxide would help maintain pressure in the Madison formation. They also agreed that the injected carbon dioxide would force methane-bearing gas up the anticline toward Exxon's holdings and that it would also cause it to move "downdip" toward Cimarex's wells. The injected plume would almost entirely displace the hydrocarbon-bearing gas, pushing the latter to producing wells and mixing with it – or diluting it – only gradually at the leading edges of the plume.

[¶14] However, Exxon also introduced evidence that Cimarex's plans would affect longterm production from Exxon's Lake Ridge and Fogarty Creek wells. That evidence primarily addressed a computerized simulation which divided the Madison formation into forty-one discrete strata and projected how Cimarex's injected carbon dioxide plume would spread over time if it was injected into "Layer 25," the most permeable and therefore the most productive of those forty-one layers.<sup>2</sup> Exxon's experts contended that the plume in Layer 25 would eventually reach its wells, gradually reduce the methane content of the gas it was producing, and ultimately force it to shut in wells due to the increased costs of production while producible hydrocarbons remained in the ground.

[¶15] Even though injected carbon dioxide would move most quickly in Layer 25 due to its comparatively high permeability, Exxon's model predicted that only three wells would

<sup>&</sup>lt;sup>2</sup> Layer 25 is ten to fifty times more permeable than the surrounding strata.

be affected by that plume within ten years of Cimarex's proposed injection into that layer. Two of those belonged to Cimarex and one belonged to Exxon. After fifty years, the projected lifespan of Cimarex's Riley Ridge gas plant, eight additional producing wells would be affected. One of those belonged to Cimarex and seven to Exxon, but four of the seven were projected to suffer only minor dilution from the plume created by injection.

[¶16] Exxon asserted that it would have to progressively shut in the four wells that would be most quickly and seriously affected by the diluting effects of the Layer 25 plume, that it would stop producing from the first well once the percentage of methane started to rapidly drop off or reached unacceptable levels, and that it would first increase production from the remaining three. However, it would then lose that production as the injected carbon dioxide reached those wells.

[¶17] From the testimony of Exxon's experts and the exhibits it presented to the Commission, it appears that it anticipated closing its Lake Ridge No. 5-32 well as early as seven to twelve years after Cimarex began injecting the carbon dioxide into Layer 25. While this is less clear, Exxon seems to have contended that a similar fate would befall its Fogarty Creek No. 22-01 well approximately eight years later, when the percentage of methane drawn from that well began a precipitous twenty-year decline. Little can be discerned with certainty about the Fogarty Creek No. 23-12 and Lake Ridge No. 8-11 wells, but Exxon's exhibits suggest that it would not have to shut them in - if at all - until approximately forty-five years after Cimarex began reinjecting carbon dioxide into Layer 25.

[¶18] Those exhibits, when viewed in light of the testimony of Exxon's experts, also suggest that Exxon might shut in those four wells once the concentration of methane drawn from them began a steep decline but had been diluted only to somewhere between eighteen and twenty percent. Exxon's model also showed that the gas currently underlying Riley Ridge contained sixteen to twenty percent methane.

[¶19] Cimarex exposed a number of weaknesses in Exxon's model. The model did not account for fractures or faults which could provide an avenue of vertical migration of any carbon dioxide injected into Layer 25 into surrounding strata, thereby slowing the progress of the injected plume toward Exxon's wells. Cimarex also pointed out that Exxon's calculations regarding the methane-diluting effect of the plume created by reinjection rested on the questionable assumption that the current concentrations of methane throughout the crest of the Moxa Arch were the same as they had been some twenty-four years earlier, prior to any production in that area.

[ $\P$ 20] Exxon's model also rested on the incorrect assumption that Cimarex would begin reinjecting carbon dioxide at twice the rate called for in its published plans. Furthermore, the model failed to account for the fact that carbon dioxide is heavier than – and would

therefore tend to sink downdip of – the methane and helium bearing gas that both parties would be producing. Nothing in the record indicated whether Exxon's model accounted for the likelihood that Cimarex's gas production might include the later removal and sale of some of the reinjected carbon dioxide. If Cimarex sold some of the carbon dioxide it had reinjected or planned to reinject, the size of the plume would be reduced, as would the degree of dilution of methane by carbon dioxide.

[¶21] Notwithstanding what Cimarex viewed as serious defects in Exxon's model, it advised the Commission that due to the model's implications it would likely refrain from injecting any waste gas into Layer 25. The Commission generally ruled in Cimarex's favor and granted its request to turn its Riley Ridge No. 20-14 well into a waste injection well, provided that it did not inject carbon dioxide into Layer 25. This decision allowed injection into other strata above Layer 25. Exxon contends that this decision had the improper purpose of allowing Cimarex to obtain more production at its expense because Exxon had a long history of producing gas from the pool.

[¶22] Shortly thereafter, Exxon petitioned the Commission for a rehearing, relying in part on news that Denbury Onshore had acquired Cimarex's rights in Riley Ridge, and that Denbury had announced plans to sell some of the carbon dioxide it was allowed to reinject at some point in the future. The Commission denied that petition. Exxon then sought to overturn the Commission's rulings permitting the waste disposal well and denying the request for rehearing in a petition for review to the district court. The district court affirmed the Commission's orders.

## **STANDARD OF REVIEW**

[¶23] When this Court reviews agency decisions which arise from contested case hearings, we ordinarily are able to confine our inquiry to the question of whether the agency's findings of fact are supported by substantial evidence. However, we may also inquire into whether the agency's actions were arbitrary and capricious. *Wilson Advisory Comm. v. Bd. of Cnty. Comm'rs, Teton Cnty.*, 2012 WY 163, ¶ 18, 292 P.3d 855, 861 (Wyo. 2012). We resort to the latter "safety net" standard when challenged agency action cannot be easily categorized or easily fit to any of the other review standards set out in Wyoming's Administrative Procedures Act. *Newman v. State ex rel. Wyo. Workers' Safety & Comp. Div.*, 2002 WY 91, ¶ 23, 49 P.3d 163, 172 (Wyo. 2002). Among such actions is an agency's alleged failure to provide sufficient findings of fact. *Dale v. S & S Builders, LLC*, 2008 WY 84, ¶ 23, 188 P.3d 554, 561 (Wyo. 2008).

[¶24] When an agency's procedural rules permit it to rehear contested cases, we review its disposition of motions for rehearing under the abuse of discretion standard. *Louisiana Land & Exploration Co. v. Wyo. Oil & Gas Conservation Comm'n*, 809 P.2d 775, 781 (Wyo. 1991).

#### **DISCUSSION**

#### The Commission's Findings

[¶25] When it passed the Oil and Gas Conservation Act, the Wyoming Legislature created a comprehensive regulatory program intended to prevent the waste of Wyoming's oil and gas resources while also protecting the correlative rights of property owners. It charged the Commission with accomplishing those goals. *Union Pacific Res. Co. v. Texaco, Inc.*, 882 P.2d 212, 223 (Wyo. 1994).

[¶26] The Commission is required "to make findings of basic facts upon all of the material issues in the proceeding and upon which its ultimate findings of fact or conclusions are based." *Larsen v. Oil & Gas Conservation Comm'n*, 569 P.2d 87, 90-91 (Wyo. 1977) (quoting *Pam Am. Petroleum Corp. v. Wyo. Oil & Gas Conservation Comm'n*, 446 P.2d 550, 555 (Wyo. 1968) (emphasis omitted); *see also* Wyo. Stat. Ann. § 16-3-110 (LexisNexis 2011) (a final decision in a contested case must contain findings of fact which, if set out in statutory language, are accompanied by an explicit statement of the underlying facts supporting those findings). That requirement is critical to meaningful judicial review because courts are ill-equipped to evaluate whether decisions are supported by substantial evidence and otherwise reasonable without appropriate findings. *Larsen*, 569 P.2d at 91. As this Court explained many years ago:

To aid a reviewing court in the performance of such a function and other limited functions assigned to it by  $\S$  14(c) of the Administrative Procedure Act, Ch. 108, S.L of Wyoming, 1965 (§ 9-276.32(c), W.S. 1957, 1967 Cum. Supp.), and particularly with reference to technical factual issues which must be resolved, § 10 of such Act (§ 9-276.28, supra) wisely requires an agency in a contested case to include in its final decision "findings of fact and conclusions of law separately stated." Such requirement imposes upon an agency the duty to make findings of basic facts upon all of the material issues in the proceeding and upon which its ultimate findings of fact or conclusions are based. Unless that is done there is no rational basis for judicial review. Colorado-Wyoming Gas Co. v. Federal Power Commission, 324 U.S. 626, 65 S.Ct. 850, 89 L.Ed. 1235 [(1945)]; California Motor Transport Co. v. Public Utilities Commission, 59 Cal.2d 270, 28 Cal.Rptr. 868, 379 P.2d 324, 326, 327 [(1963)]; Cities Service Gas Company v. State Corporation Commission, 201 Kan. 223, 440 P.2d 660, 671 [(1968)]; 2 Davis. Administrative Law Treatise, § 16.01, p. 436 (1958).

To illustrate, one of the duties charged to courts, on review of agency action, is to ascertain whether or not such findings of fact are supported by substantial evidence. To afford the court an opportunity informatively and intelligently to discharge that function it must first be known what underlying evidentiary facts the agency relied upon for a finding or conclusion of ultimate facts. Findings of those basic facts will not be implied from ultimate findings. Fallon v. Wyoming State Board of Medical Examiners, Wyo., 441 P.2d 322, 327 [(1968)], rehearing denied 443 P.2d 135. As clearly pointed out in California Motor Transport Co. v. Public Utilities Commission, supra, 379 P.2d at 327, if that were not true there could be no assurance that an agency has made a "reasoned analysis" of all the material evidence. The duty so imposed serves a further purpose. Ultimate facts can only "be reached by a process of legal reasoning based on the legal significance to be afforded primary evidentiary facts," Braun v. Ribicoff, 3 Cir., 292 F.2d 354, 357 [(1961)]; and it is the duty of the reviewing court to satisfy itself that an agency determination has been reached "upon consideration of the whole record or such portion thereof as may be cited by any party," as required by § 8(a) of the Act (§ 9-276.26(a), supra) on "a reasonable basis in law." Braun v. Ribicoff, supra. In other words, orderly review requires that the primary basic facts must be settled before it can be determined that ultimate facts found by an agency conform to law. Failure of an agency to meet its responsibilities in the premises makes its determination susceptible to the charge that the order entered is contrary to law.

*Pan Am. Petroleum Corp.*, 446 P.2d at 555. The statements in the above quote are particularly true when a court must review an agency's evaluation of extremely complex technical information utilizing highly specialized expertise, as this Court must do in this case. It cannot simply launch itself rudderless into a foggy sea of petroleum geology and production methods.

[¶27] Exxon argued before the Commission that operation of Cimarex's proposed carbon dioxide injection well would result in waste of methane contained in the Madison formation of the Moxa Arch and thereby inappropriately deprive Exxon of its correlative rights in that reservoir. The Commission's "findings of fact" in this regards were as follows:

16. Cimarex and Wold presented rebuttal testimony challenging [Exxon's] model. Cimarex and Wold argued that no waste would occur if its application were approved and that its proposed operation prevented waste at least in the following ways: (1) allowing recovery of Riley Ridge Unit methane; (2) allowing recovery of Riley Ridge Unit helium; (3) manage reservoir pressure decline and preventing unnecessary dissipation of reservoir energy; and (4) retaining a valuable product, CO<sub>2</sub>, for possible subsequent sale rather than venting it into the atmosphere.

17. Cimarex and Wold introduced a graph in Rebuttal Exhibit E-1 which showed that their Riley Ridge reserves have been and currently are being drained by ExxonMobil, and argued that the approval of the injection well at the Riley Ridge #20-14 Well site would decrease, but not eliminate, the ongoing drainage of Cimarex and Wold's reserves and thereby protect Cimarex and Wold's correlative rights.

18. The Commission found generally in favor of the application for an aquifer exemption and approval of use of the well for disposal of waste. However, out [of] abundance of caution and in order to address any possible adverse effect on correlative rights, found that absent advance Supervisor approval and consent from ExxonMobil, Cimarex and Wold should not complete/perforate the Riley Ridge #20-14 into "Layer 25." "Layer 25" is located from 16,275' MD<sup>3</sup> to 16,350' MD in the Riley Ridge #20-14 wellbore.

The Commission confined its "conclusions of law" in those regards to the following:

6. We further conclude that approval of the Riley Ridge #20-14 Well for disposal purposes should be granted with the following stipulations:

e) that the interval defined as "Layer 25" (as defined above, Findings of Fact, ¶18), not be completed or perforated

. . .

<sup>&</sup>lt;sup>3</sup> MD refers to the depth measured along the path of the borehole. *Measured depth*, Schlumberger Oilfield Glossary, <u>http://www.glossary.oilfield.slb.com/en/Terms/m/measured\_depth.aspx</u> (2013); *Depth in a well*, Wikipedia, http://en.wikipedia.org/wiki/Depth\_in\_a\_well (last modified 2/2/2013, 21:15).

by the Applicant for injection absent advance Supervisor approval and consent from ExxonMobil;

f) that Applicant run a radioactive tracer during initial injection to demonstrate that no injectate is leaving the wellbore into "Layer 25[.]"

[¶28] The Commission's decision tells us virtually nothing about the facts on which it relied to resolve Exxon's two primary challenges to the Cimarex proposal. In paragraph 17 of its findings, the Commission tells us it found that Cimarex had introduced a graph and had argued that carbon dioxide injection would protect Cimarex's correlative rights by slowing Exxon's drawing of methane from under Riley Ridge. It did not say that this evidence and argument convinced it that Cimarex's allegations were true; nor did it suggest the part those facts may have played in balancing the correlative rights of Cimarex and Exxon.

[¶29] The Commission came somewhat closer to the mark in paragraph 18 of its findings and in subparagraphs 6(e) and (f) of its conclusions. In those portions of its report, the Commission implied that prohibiting the injection of carbon dioxide into Layer 25 would protect Exxon's correlative rights. However, it never expressly said as much, and more importantly, never gave any hint as to what findings of fact may have led to that conclusion nor what evidence those findings could have been based upon.

[¶30] We could look to the record in this case and conclude that Exxon's case regarding the loss of its correlative rights rested almost entirely on the notion that, if Cimarex injected carbon dioxide into Layer 25, a raging plume of that substance would quickly cripple production from Exxon's Lake Ridge and Fogarty Creek wells. We could also reasonably find from the record that the projected damage would be substantially abated, if not largely eliminated, by prohibiting injection into that part of the Madison formation.

[¶31] Cimarex comes close to asking us to do just that and to affirm the Commission's ruling. We must decline that invitation. We have long held that we cannot properly make findings of fact; that task falls to the administrative agency. *N. Laramie Range Found. v. Converse Cnty. Bd. of Cnty. Comm'rs*, 2012 WY 158, ¶ 11, 290 P.3d 1063, 1070 (Wyo. 2012). Because we must respect the fact-finding role statutorily assigned to agencies like the Commission because of their specialized expertise, we do not speculate as to what the factual findings by an agency might have been when they are nonexistent or so general as to prevent a reasonable comparison to the evidence on which they may have been based.

[¶32] The absence of reviewable findings is perhaps even more pronounced in the Commission's resolution of Exxon's assertion that reinjecting carbon dioxide into the Madison formation would waste a portion of the methane available for production. In

paragraph 16 of the Commission's findings, it noted that Cimarex presented rebuttal testimony relating to the model used by Exxon to support its claim of waste, but the Commission did not say whether it found that testimony convincing or identify any aspects of the testimony that caused it to reject Exxon's claim. That is also true of the portion of paragraph 16 which summarized Cimarex's argument that its proposed operation would prevent waste by allowing recovery of Riley Ridge methane and helium, by retaining carbon dioxide for sale, and by slowing the decline in reservoir energy.

[¶33] As already noted, this Court could look to the record and conclude that Exxon's case regarding waste rested almost entirely on the notion that dilution caused by a plume of carbon dioxide injected into Layer 25 might eventually force Exxon to prematurely shut in a number of its Lake Ridge and Fogarty Creek wells while producible methane remained accessible by those wells. We could also perhaps find from the record that the most reasonable course for avoiding waste might be to permit Cimarex to maintain or slow the decline of reservoir energy by injecting carbon dioxide into the Madison formation while prohibiting injection into Layer 25 of that formation.

[¶34] For the reasons discussed above, we will not embark upon that path. Instead, as we have done in similar cases, we will return this matter to the Commission to make findings of fact sufficiently specific to permit meaningful judicial review of whether the Commission's decision was supported by substantial evidence and consistent with its statutory obligations. *See Larsen*, 569 P.2d at 93. We do not imply that the Commission must hold another contested case hearing in this case, however. It may well be that the existing record is sufficient to allow the required findings to be made, and we leave that decision to the Commission.

# The Petition for Rehearing

[¶35] A month after the hearing described above, Denbury Resources, an affiliate of Denbury Onshore, announced plans to purchase Wold's interests and to eventually remove and sell the carbon dioxide produced by the Riley Ridge wells. Denbury ultimately acquired Cimarex's right to operate the gas plant and the remaining working interests in the field, and it announced its intention to build a pipeline to transport at least some carbon dioxide rather than reinjecting it, although it planned to reinject until the pipeline was completed.

[¶36] Exxon petitioned for a rehearing on the theory that the acquisition by Denbury and the announcement of plans to build a pipeline and sell carbon dioxide was newly discovered evidence. The Commission found that a change in ownership made no difference to the decision rendered.

[¶37] Denbury argues in this appeal that it has never sought permission to operate in any manner other than that permitted as a result of the contested case hearing described

above, and that it would be required to do so by the Commission's rules and regulations. Therefore, it contends, Exxon will have an opportunity for a hearing if and when Denbury actually seeks permission to stop reinjecting carbon dioxide into well No. 20-14 or to otherwise operate that well in a manner not previously approved by the Commission. Exxon has not disputed that it would be entitled to a hearing if and when Denbury ever does seek to alter the way it operates No. 20-14, but argues instead that the information would have mandated a different result as to the permit to reinject carbon dioxide if known at the time.

[¶38] After reviewing the record and the Commission's regulations, we find it unclear whether Denbury would have to apply for permission to sell carbon dioxide rather than reinject it. However, we agree with Denbury that the Commission did not abuse its discretion in declining to grant a rehearing. *See* Wyoming Oil and Gas Conservation Commission Rules, ch. 5, § 14 (Aug. 17, 2010) (upon a timely request for rehearing, the Commission **may** order a rehearing). The possibility that at some undetermined future time Denbury might decide to sell rather than reinject some carbon dioxide does not require a rehearing now. Those issues can be addressed if and when they ever arise.

[¶39] If we go further and consider the merits, the result is the same. Exxon contends that the Commission should have granted its petition for rehearing because it was not until after the contested case hearing that Denbury published its plan to obtain and sell carbon dioxide stored under the Riley Ridge unit. Contending that its petition presented what was essentially a newly-discovered evidence claim, Exxon suggests that Cimarex never advised the Commission that it or its successors in interest might sell Riley Ridge carbon dioxide. It argues that such sales would materially undercut Cimarex's assertion as to the pressure maintenance benefits of reinjecting carbon dioxide into the Madison formation, because in fact substantial amounts of gas would be sold rather than reinjected.

[¶40] At the hearing on Exxon's petition, Cimarex reminded the Commission that its plan to convert its Riley Ridge No. 20-14 well to an injection well had always been motivated, at least in part, by its desire to store carbon dioxide for later sale. That point hardly needed restating. Cimarex's pleadings and the evidence it presented at the contested case hearing repeatedly indicated that Cimarex hoped to sell as yet unknown quantities of the carbon dioxide it was separating from the methane it produced at some future unknown and unspecified time. The fact that such plans became somewhat more concrete when Denbury entered the picture did not make them new.

[¶41] Nor can one say that Cimarex's plan to sell some of the carbon dioxide materially enhanced Exxon's position that reinjection would result in waste and also damage Exxon's correlative rights. There can be little doubt that while reinjecting carbon dioxide into the Madison formation could tend to prevent waste by slowing the depletion of reservoir energy, selling some of that carbon dioxide instead of reinjecting it could diminish the projected benefit of increased pressure in the gas-bearing formations.

[¶42] However, Exxon's arguments at the contested case hearing rested on the notion that waste and damage to its correlative rights would increase with an increase in the amount of carbon dioxide injected by Cimarex, particularly if it was injected into Layer 25. At the hearing on Exxon's petition for rehearing, one of the commissioners pithily established that the grounds stated in the petition could not be reconciled with the position staked out during the contested case hearing. The commissioner asked, "[I]f in fact the party took the  $CO_2$  and did something else with it other than inject it, that would in fact significantly mitigate by a factor of 90 percent the concern that Exxon argued at the hearing, would it not?" Counsel for Exxon conceded that the commissioner's assessment was accurate.

[¶43] Even if by some stretch of the imagination the prospective sale of Riley Ridge carbon dioxide could be deemed new information in light of the record produced at the hearing, that change would only reduce the basis for Exxon's objection to Cimarex's plan. The Commission therefore reasonably exercised its discretion in denying the petition for rehearing.

# CONCLUSION

[¶44] Because the Commission's decision would force this Court to speculate as to its findings of both basic and ultimate facts, we reverse and remand to the district court with directions that this case be remanded to the Commission for the purpose of making appropriate findings. However, we affirm the Commission's decision to deny Exxon's petition for rehearing.