J. O. SETH
A. K. MONTGOMERY
OLIVER SETH
WM. FEDERICI
FRANK ANDREWS
FRED C. HANNAHS

SETH, MONTGOMERY, FEDERICI & ANDREWS
ATTORNEYS AND COUNSELORS AT LAW
301 DON GASPAR AVENUE
SANTA FE, NEW MEXICO

POST OFFICE BOX 828
TELEPHONE 3-7315

February 17, 1958

RE: Case 1327
Jalmat

New Mexico Oil Conservation Commission
State Capitol
Santa Fe, New Mexico

Gentlemen:

Please find herewith a Motion for Rehearing in the above case submitted on behalf of Shell Oil Company.

Very truly yours,

OS:ms
Enc.

BEFORE THE OIL CONSERVATION COMMISSION
OF THE STATE OF NEW MEXICO

IN THE MATTER OF THE HEARING
CALLED BY THE OIL CONSERVATION
COMMISSION OF THE STATE OF NEW
MEXICO FOR THE PURPOSE OF
CONSIDERING:

CASE NO. 1327

APPLICATION OF TEXAS PACIFIC COAL &
OIL COMPANY FOR AN ORDER IMMEDIATELY
TERMINATING GAS PRORATIONING IN THE
JALMAT GAS POOL: OR IN THE ALTERNATIVE,
REVISING THE SPECIAL RULES AND REGULATIONS
FOR THE JALMAT GAS POOL IN LEA COUNTY,
NEW MEXICO.

MOTION FOR REHEARING BY SHELL OIL COMPANY

TO THE COMMISSION:

Now comes Shell Oil Company, one of the operators in the Jalmat Gas Pool, who appeared and participated in the hearings of this matter and applies for a re-hearing with reference to Order No. R-1092-A, entered in this case on January 29, 1958, on the following grounds, to-wit:

1. The Commission erred in making Finding 6 of the said order for the reason that its authority to regulate production of oil or gas is limited to that necessary to prevent waste and protect correlative rights, and it is without authority to regulate such production for the purpose of meeting a market demand that is greater than the pool's capacity when regulated so as to prevent waste and protect correlative rights.

2. That part of Finding 5 of said order reading: "The applicant has proved that there is a general correlation between deliverability of the gas wells in the Jalmat Gas Pool and the gas in place under the tracts dedicated to said well", is erroneous and without substantial evidence to support it.

The applicant offered not one word of proof that the gas in place under a tract dedicated to a well is the gas being produced by such well or even equivalent to the gas that said well might produce. To the contrary, Mr. Keller, the applicant's reservoir expert, stated that (Tr.(10-17-57) p. 59, 61, 62 and 64 and Tr. (later hearings) p. 61 to 62, 69, 78, 129, 133 and 135) his testimony was based on well figures and well reserves and a material balance approach, and that (Tr. (later hearings) p. 464) where the volume of gas measured by the

material balance equation is located in respect to the lease lands, is not determinable from such a calculation. In his testimony he at no time tried to state where the gas was located. On the contrary, he said (Tr.(later hearings) p. 78) that correlative rights would be fully protected in his opinion if the takes as between two wells bore some reasonable relationship to the reserves of the two wells, and that (Tr.(later hearings) p. 133) he rejected the use of gas in place as a basis for protecting correlative rights because it was impossible to measure the gas in place with the information at hand in the Jalmat field. It is apparent, therefore, that his whole approach to the matter of correlative rights differs from the statutory definition thereof, which is as follows:

> "(a) The rules, regulations or orders of the Commission shall, so far as it is practicable to do so, afford to the owner of each property in a pool the opportunity to produce his just and equitable share of the oil or gas, or both, in the pool, <u>being in an amount</u>, so far as can be practicably determined, and so far as such can be practicably obtained without waste, <u>substantially in the proportion that the quantity of the recoverable oil or gas, or both, under such property bears to the total recoverable oil or gas, or both, in the pool</u>, and for this purpose to use his just and equitable share of the reservoir energy." (New Mexico Statutes 65-3-14).

He at no time said that any "well reserve" discussed by him was under the tract on which that well was located.

As a matter of fact, it would be impossible to associate the deliverability of a well with the gas in place under the tract on which the well is located without piling inference on inference and making the conclusion so speculative, illogical and unsound that it should be rejected by this Commission. From Mr. Keller's equation that Deliverability = $T \times (P_s^2 - P_w^2)^n \times K \times C_2$ (Applicant's Ex. 7). It is obvious that in associating deliverability with gas in place (this is gas in place in the well's reserve not that under the tract) he assumed that permeability (K) and the well completion factors (C_2) were relatively constant throughout the field and that variations in deliverability represented variation in net thickness of pay; for permeability and well completion factors do not affect the gas in place at all as testified by Mr. Keller (Tr.(later hearings)p. 71-72), and if either of them varied widely as between wells, the variations in the deliverabilities of the wells would be relatively meaningless

in so far as the net thickness of pay (the reserve affecting factor in said equation) is concerned. The way Mr. Keller related the deliverability to reserves was to say it represented net thickness in pay by transposing the said equation thusly:

$$T = \frac{\text{Deliverability}}{(P_s^2 - P_w^2)^n \times K \times C_2}$$

Obviously, in such an equation unless K (permeability) and C_2 (well completion factors) are constant T will vary not only as deliverabilities vary but also as K or C_2 vary. To attribute the reserve of a well to the tract on which it was located, he had further to assume that the quality of the reservoir under all of the tract was constantly that attributable to the well by his comparisons of deliverability. We, therefore, have a case of inference piled upon inference in reaching the conclusion that the deliverability of a well is in general correlation with the gas in place under the tract on which the well is located. Such reasoning is so speculative that it cannot form the basis of a conclusion.

Manning v. John Hancock Mutual Life Ins. Co., 100 U.S. 697, 25 L. Ed. 761;
De Baca v. Kuhn, 161 Pac. (2) 630, 49 N. M. 225;
Lumbermens Mutual Casualty Co. v. Vaughn, 174 S.W.(2) 1001 (Tex.Civ.App.).

3. The part of Finding 5 of said order reading "That the inclusion of a deliverability factor in the proration formula for the Jalmat Gas Pool would, therefore, result in a more equitable allocation of the gas production in said pool than under the present gas proration formula" is erroneous and without substantial evidence to support it because it is based on the false premise set forth in the first part of the said Finding 5.

4. Because the uncontradicted evidence shows that the Jalmat Gas Pool was developed under rules and/or practice whereby proration of production in said field was on a straight acreage basis, the changing of the pool rules to include a deliverability factor is erroneous, there being no evidence that clearly establishes that the change in the rules is necessary to protect the correlative rights of the operators in that pool or to prevent waste. The burden of proof should be much greater where changes in established rules are proposed and in such cases the Commission should not make changes unless the

evidence that they are needed to prevent waste or protect the correlative rights of the operators (not to allow a market to be met) is clear and convincing.

5. The inclusion of a deliverability factor in the proration formula of the Jalmat Gas Pool violates the correlative rights of the operators and is erroneous.

6. The Application of Texas Pacific Coal & Oil Company in Case No. 1327, to the extent that it sought the inclusion of a deliverability factor in the proration formula of the Jalmat Gas Pool, constituted a collateral attack upon Order No. 520 in Case No. 6731 of this Commission entered on the 12th day of August, 1954, and therefore should not have been entertained by the Commission and cannot be made the basis of a valid Order in Case No. 1327 in so far as the inclusion of deliverability in the proration formula is concerned.

7. The evidence introduced in this proceeding provides no basis upon which a valid order could be entered by the Commission changing the basis for the allocation of production from the Jalmat Gas Pool from a 100% acreage basis to the basis provided in Order No. R-1092-A for the reason that Order No. R-520 entered by this Commission in Case No. 673 constituted a final determination that deliverability should not be included in the proration formula of the Jalmat Gas Pool. Texas Pacific Coal & Oil Company was a party to Case No. 673 and supported the inclusion of deliverability in the proration formula, which request was considered by the Commission, and Order No. 520 was entered denying the request of said Texas Pacific Coal & Oil Company for the inclusion of deliverability in said formula. No appeal was taken by Texas Pacific Coal & Oil Company from the final decision of the Commission so ordered. On the basis of the record in this case, the Commission is without authority to modify or change the decision so reached in Case No. 673.

8. Even if it were conceded that there was substantial evidence to support Finding 5 of said Order, and we do not so concede, this Commission erred in amending the Jalmat Gas Pool's rules to place a deliverability factor in the proration formula because thereby it has jeopardized its very excellent reputation for fairness, wisdom and common sense. The addition of a deliverability "new deal"

in the proration formula of the Jalmat Gas Pool after the pool has been developed on the understanding that proration would be on a straight acreage basis is unfair to those who so developed their properties in the pool. Admittedly, at the time they made their investments they knew that the rules might be changed. However, we believe that they were entitled to assume that the rules would not be changed unless it was clearly shown first, that they resulted in waste or violated correlative rights, and second, that no change based on a violation of correlative rights would be made against the expressed will of the vast majority of operators in the pool who should know better what protects their correlative rights than anyone else. At the hearings on this matter, no issue of waste was raised and the vast majority of the operators, the ones whose correlative rights are involved, opposed the inclusion of deliverability in the proration formula. Furthermore, even it be conceded that there was some proof of some "general" correlation between the deliverability of a well and the gas in place under the tract on which the well is situated (which correlation we do not admit but deny), the proof thereof was not clear, but based upon inference upon inference. In a case of such doubtful correlation between well deliverability and tract reserve gas, it isn't wise, even if it is legal, to upset existing equities or to override the ideas of the majority of the operators in the pool concerning how best to protect their correlative rights.

This deliverability "new deal" in the Jalmat rules is not a safe step forward but a step backward toward the early proration attempts to interfere with the law of capture only so much as a limited market required by prorating the market demand between wells on the basis of their relative potentials or deliverabilities or productivity, however it may be phrased. Such a method of proration allowed a high potential or deliverability well on a small tract to produce not only the oil or gas under that tract but under much of the surrounding tracts. The New Mexico Statutes reject the idea of any such method of proration. Obviously, an owner does not have a fair chance to recover the oil or gas under his land where the proration formula contains a potential or deliverability factor and non-marginal wells are allowed to produce at different rates based on their different potentials or deliverabilities rather than on

differences in their productive acreages.

WHEREFORE your petitioner prays that the Commission grant a rehearing in this case and set aside its Order No. R-1092-A in so far as a deliverability factor is thereby placed in the proration formula for the Jalmat Pool.

SETH, MONTGOMERY, FEDERICI & ANDREWS

By Olen Seth

301 Don Gaspar Avenue
Santa Fe, New Mexico

Richard L. Hughston

RICHARD L. HUGHSTON
Box 1509, Midland, Texas

ATTORNEYS FOR PETITIONER
SHELL OIL COMPANY