UNITED STATES COURT OF APPEALS
FOR THE FIFTH CIRCUIT

No. 95-60326

WRT ENERGY CORPORATION,

Petitioner,

versus

FEDERAL ENERGY REGULATORY COMMISSION,

Respondent.

Petition for Review of Order of
Federal Energy Regulatory Commission

February 28, 1997

Before HIGGINBOTHAM, BARKSDALE and EMILIO M. GARZA, Circuit Judges.

RHESA HAWKINS BARKSDALE, Circuit Judge:

The principal issue at hand is whether natural gas wells, which previously produced from a gas cap and were subsequently fitted with new technology for removing gas from the brine in the aquifer, qualify as producing "high-cost natural gas" pursuant to the Natural Gas Policy Act, 15 U.S.C. § 3301 *et seq*.(*repealed* 1989). Reversing determinations by the Louisiana Department of Natural Resources, Office of Conservation, the Federal Energy Regulatory Commission ruled that the gas did not qualify. We **AFFIRM**.

I.

WRT Energy Corporation has five wells in Louisiana which extract brine from an aquifer and then use recently-developed

vortoil hydrocyclones to separate natural gas from the brine. Prior to installation of this new technology, each well had produced natural gas by tapping a "cap" of gas which had broken free from the brine and migrated to the top of the aquifer.

As the gas cap was depleted, however, the pressure in the well decreased. This pressure reduction allowed gas which had been dissolved in the brine to resolve out of it; but, it also allowed the brine which occupied the underlying aquifer to move upward, replacing all or part of the area previously occupied by the gas cap. This resulted in fewer well perforations exposed to free gas, and the well began to produce more and more brine with the gas, until the well "watered out". As a result, the wells were going to be plugged.

WRT's new process reaches more gas by allowing the production of gas which never broke free of the brine, but it is more costly than the usual extraction of natural gas; and, as with any new application of technology, there is an amount of risk involved. Accordingly, WRT applied for special treatment of these five wells under the Natural Gas Policy Act (NGPA).

The purpose of this special treatment is to encourage the production of natural gas sources, such as geopressured brine, which would not otherwise be economical to exploit. 1978 U.S.C.C.A.N. 8800, 9003. WRT sought relief under § 107 of the NGPA, 15 U.S.C. § 3317, which provided an incentive to produce "high-cost natural gas". For qualifying gas, the producer could elect either a pricing benefit under the NGPA, or a tax benefit.

15 U.S.C. § 3317(d); 26 U.S.C. § 29(c). One way to qualify -- the route taken by WRT -- is if the gas is "produced from geopressured brine". 15 U.S.C. § 3317(c)(2). Because the NGPA was repealed effective 1 January 1993, the pricing benefits are no longer of use. Natural Gas Wellhead Decontrol Act of 1989, Pub. L. 101-60, 103 Stat. 157 (1989). But, remaining is the potential tax benefit, which is not directly at issue in this proceeding, as discussed *infra*. 26 U.S.C. § 29(c).

As defined by the FERC, "geopressured brine" is subsurface fluid that has at least 10,000 parts of dissolved solids for every million parts water, and has an initial reservoir geopressure gradient over .465 pounds of pressure per square inch for each vertical foot of depth. 18 C.F.R. § 272.103. By FERC regulation, in order for gas to qualify as being "produced from geopressured brine", the gas must be "dissolved [in the brine] before initial production". 18 C.F.R. § 272.103(c).

Gas exists in brine in two states: (1) in solution--when the gas is dissolved in the brine; and (2) in free but immobile form--when the gas has fallen out of solution (or resolved) but remains trapped in the brine, without migrating to the top to form or join a gas cap. The NGPA and its regulations make no mention of the treatment of gas which is not dissolved in the brine, but exists instead in free immobile form in the brine without rising to form or join a gas cap. On the other hand, the FERC has expressly rejected the possibility that gas cap gas could qualify as gas "produced from geopressured brine"; early on, it required that, in

order to qualify, the gas had to be dissolved in the brine. Interim Rules Defining and Deregulating Certain High-cost Natural Gas, FERC Regulations Preambles 1977-81, 44 Fed. Reg. 61,950 (29 October 1979); Final Rules Defining and Deregulating Certain High-cost Natural Gas, FERC Regulations Preambles 1977-81, 45 Fed. Reg. 28,092 (28 April 1980).

WRT faced two hurdles in order for the gas to be classified as being "produced from geopressured brine": (1) the wells had previously successfully produced gas cap gas, before "watering out"; and (2) the brine now being extracted carried natural gas in two different states: dissolved gas which met the FERC's definition as having come from brine, and free immobile gas. Exacerbating matters is the fact that it is not known with certainty how much of each type of gas is produced and no one seems to be able to measure how much of the free immobile gas resolved as a result of the prior gas cap production.

There is a two-step process for deciding whether natural gas qualifies as "high-cost". 15 U.S.C. § 3317(c). First, the appropriate state or federal agency makes a determination; next, the FERC makes the conclusive determination, reviewing the earlier determination for substantial evidence. 15 U.S.C. § 3413(b)(1)(A). The FERC's determination is reviewable in a United States Court of Appeals. 15 U.S.C. § 3413(b)(4)(B).

Consistent with this process, after WRT installed a vortoil hydrocycone at one of its wells as a test subject, it received a determination from the Louisiana Office of Conservation (LOC) that

the well qualified as producing high-cost natural gas. The vortoil units were then installed at the other four wells; the LOC also certified them as producing high-cost gas. It found that, although all the wells had previously produced gas cap gas, the gas now produced is not from caps, but is either dissolved, or is in free immobile form, in the brine.

These positive determinations were transmitted to the FERC in April and May 1994. That August, it issued an adverse notice of preliminary finding, after requesting and receiving more information from the LOC and WRT about the wells. This preliminary finding provided: (1) that the wells would not qualify because they had previously produced gas cap gas; and (2) that the gas which was not dissolved in the brine, but instead was in free immobile form, was not produced "from" the brine.

After the FERC's preliminary finding, the LOC addressed some of the FERC's concerns about the technical and other aspects of the wells' production. The FERC held an informal technical conference and accepted additional post-conference comments.

The FERC's final order was issued in April 1995. Unlike the preliminary finding, it reversed the LOC determinations on the sole ground that the FERC "did not intend to allow any gas in an aquifer associated with a gas cap to qualify as geopressured brine gas if gas from the gas cap was produced *before significant amounts of brine [were] produced*". (Emphasis added.) As a result, the FERC did not reach whether free immobile gas (broken free of the brine but not part of a gas cap) would qualify as high-cost.

II.

In order to determine whether the gas qualifies as high-cost, we must first consider the prior gas cap production issue. But, the second issue, whether the free immobile gas qualifies as high-cost, bears on this first issue. In any event, before reaching the merits, we will confirm our jurisdiction.

A.

Concerning, *inter alia,* a high-cost determination,

> [a]ny person aggrieved or adversely affected by a final finding of the [FERC] ... may ... file a petition for review of such finding.... The reviewing court shall reverse any such finding of the [FERC] if the State or Federal agency determination involved is supported by substantial evidence.

15 U.S.C. § 3413(b)(4)(B). The FERC urged in an earlier motion to dismiss that, because the NGPA pricing had been repealed, and therefore the FERC does not control the price at which WRT may sell its natural gas, any determination by the FERC regarding the status of the wells has no effect on WRT. And, FERC contended that the mere possibility that, for tax credit purposes, the IRS will defer to the FERC in determining whether the gas is produced from geopressured brine is too conjectural to give standing to WRT.

The motion was denied by another panel of our court. Although the FERC did not formally raise this issue again, it was noted in its brief on the merits, citing an opinion rendered after the motion was denied; and, at oral argument, it urged lack of standing. In any event, because the issue concerns jurisdiction, we will, of course, address it.

The new case cited by FERC, ***Marathon Oil Co. v. Federal Energy Regulatory Commission***, 68 F.3d 1376 (D.C. Cir. 1995), is inapposite. There, the FERC refused to rule on a state agency determination in that the wells in question were reentered after 1 January 1993, the cutoff date for petitions that the FERC would review. ***Id.*** at 1378. The court held that plaintiffs lacked standing to challenge the FERC's refusal to accept (or reject) the state agency's determinations. ***Id.*** at 1379. No action by the FERC was exactly that; plaintiffs were not aggrieved, because the FERC had neither reversed the determination nor remanded the case to the state agency.

Needless to say, the case at hand presents a far different scenario; the FERC has made a final determination detrimental to WRT's efforts at obtaining a tax benefit. Therefore, we agree with the earlier panel ruling. In short, the FERC ruled against WRT; pursuant to 15 U.S.C. § 3413(b)(4)(B), WRT is "aggrieved or adversely affected". The FERC ruling is part of this record and will doubtless play a part in any IRS proceeding. True, it is not dispositive; the IRS will determine for itself whether the wells are producing gas from geopressured brine, and it is not bound to follow the FERC's ruling. IRS Private Ruling 9035034 (1 June 1990)(FERC determinations "not dispositive" about Section 107 qualification). But, as stated, the FERC ruling will be in play; WRT will have to counter it. It has standing.

B.

As discussed, under the NGPA, the FERC reviews state or federal agency determinations whether gas qualifies as high-cost for "substantial evidence in the record upon which such determination was made". 15 U.S.C. §§ 3413(a)(1)(D), (b)(1)(A). The standard for judicial review of FERC final findings is also for substantial evidence. ***Id***. § 3413(b)(4)(B). Regardless of this non-deferential standard of review of factual finding, in promulgating and interpreting its regulations, the FERC has acted, with Congress' authorization, to administer and interpret the NGPA. ***Id***. § 3411. The FERC is due deference in this *legal* area.

In reviewing an agency's interpretation of its *statute*, "if the intent of Congress is clear, that is the end of the matter ... [otherwise we ask] whether the agency's answer is based on a *permissible* construction of the statute." ***Chevron U.S.A., Inc. v. Natural Resources Defense Council, Inc.***, 467 U.S. 837, 843-44 (1984)(emphasis added); *see also* ***Pacific Gas Transmission Co. v. Federal Energy Regulatory Commission***, 998 F.2d 1303, 1308 (5th Cir. 1993). Likewise, in reviewing an agency's interpretation of its *regulations*, unless a regulation's plain language is to the contrary, we defer to the interpretation of that regulation by the agency which promulgated it. *E.g.,* ***Thomas Jefferson University v. Shalala***, 512 U.S. 504 (1994). As discussed *infra*, such deference is due the final finding in issue.

As noted, this case concerns two questions: (1) whether wells which first produced gas cap gas can later qualify as producing

high-cost gas; and (2) if so, how to factor in the gas coming out of the brine that is not dissolved and instead is trapped (free immobile). As explained, although the LOC ruled that neither of these circumstances were disqualifiers, the FERC reversed, ruling that, pursuant to the NGPA and its regulations, prior gas cap production precluded qualification, and that, accordingly, it was unnecessary to reach "WRT's request that we clarify whether the 'immobile' free gas being produced through the [new technology] is not gas that has broken free from the brine". (Such "broken free" gas arguably would not qualify as high-cost.)

This much is certain: the NGPA is a complex statute, one that was designed to control natural gas pricing and yet allow sufficient flexibility so that prices would encourage the production of gas that is more difficult to produce. *See, e.g.,* Preamble to Final Rules, FERC 1977-81, 45 Fed. Reg. 28,093. The Act concerned, among other things, pricing for new and high-cost natural gas. 15 U.S.C. §§ 3312, 3317. There are numerous corresponding terms, definitions and contingencies. *E.g.,* ***id***. §§ 3301 ("Definitions"), 3316 ("Ceiling price for sales under rollover contracts").

To this end, the FERC is given quite a bit of discretion. For example, for the first sale of high-cost natural gas, the FERC could set a price above "the otherwise applicable maximum lawful price to the extent that such special price is necessary to provide reasonable incentives for the production of such ... gas." ***Id.*** § 3317(b). Furthermore, the FERC is expressly authorized to perform

"any and all acts" and to "issue, amend and rescind" any rules necessary for the enforcement of the NGPA. ***Id.*** § 3411(a). This expressly includes the authority to define any technical and trade terms used in the NGPA. ***Id.*** § 3411(b).

Obviously pertinent to whether wells which previously produced gas cap gas can qualify as high-cost is the fact that the NGPA enumerated four methods for producing gas that might qualify as high-cost:

> (1) produced from any well the surface drilling of which began on or after February 19, 1977, if such production is from a completion location which is located at a depth of more than 15,000 feet;
>
> (2) produced from geopressured brine;
>
> (3) occluded natural gas produced from coal seams;
>
> (4) produced from Devonian shale....

15 U.S.C. § 3317(c)(1)-(4). Each of these types involves higher cost to produce than usual gas production. Moreover, this section contains a fifth "catch-all" category; the FERC could determine that a well presented "extraordinary risks or costs". ***Id.*** § 3317(c)(5).

And, this section on high-cost gas contained another qualifier: "the term 'high-cost natural gas' means natural gas *determined in accordance with section 3413*" which was produced under one of the five above described methods. ***Id.*** § 3317(c) (emphasis added). Section 3413, as previously discussed, provides for the initial state or federal agency finding, followed by FERC, and possible judicial, review. This is yet another instance of

discretion being placed with the FERC for interpreting this section.

Certainly, § 107 of the NGPA, 15 U.S.C. § 3317, does not provide expressly that gas can qualify as high-cost *only if* it is produced, unlike here, by a "new well". And, the NGPA deals extensively with production from a "new well", defined as one for which

> (A) The surface drilling ... began on or after February 19, 1977; or
>
> (B) the depth ... was increased, by means of drilling on or after February 19, 1977, to a completion location which is located at least 1,000 feet below the depth of the deepest completion location of such well attained before February 19, 1977.

15 U.S.C. § 3301(3). In fact, one of the four listed methods for possibly qualifying as high-cost is through a certain type of new well -- one for which "surface drilling began on or after February 19, 1977, if such production is from a completion location which is located at a depth of more than 15,000 feet". This type of "new well" has a different, probably more costly, production depth than for other "new wells". Therefore, it can be maintained quite persuasively that, because 15 U.S.C. § 3317 does not mention a "new well" in conjunction with gas "produced from geopressed brine", such gas need not be from a "new well" in order to qualify.

But, this section, 15 U.S.C. § 3317, cannot be read in isolation; it must be read in the light of the NGPA as a whole. *See, e.g.*, ***Medtronic, Inc. v. Lohr***, ___ U.S. ___, 116 S. Ct. 2240 (1996). When read as a whole, the complexity of the NGPA, as well

as the earlier discussed discretion vested with the FERC by 15 U.S.C. § 3317, precludes reading § 3317 as providing the complete answer to the post-gas cap production question at hand. Accordingly, we must look to the FERC's interpretation of the section.

The apparent intent of Congress, as discussed by the FERC for its final finding, was to reward producers who incurred, "the high-costs of brine disposal from the start", and to grant the FERC a great deal of authority over the way in which the incentives are implemented. In fact, as discussed *infra*, the FERC noted in its final finding that the NGPA and its regulations have never been read to intend to reward a producer for a well, all or part of the cost of which had been recouped by producing from a gas cap, and which later produces, as an added bonus, the gas both dissolved and trapped (free immobile) in the brine.

As noted, the regulations define "produced from geopressured brine" as

> natural gas which is *dissolved before initial production of the natural gas* in subsurface brine aquifers with at least 10,000 parts of dissolved solids per million parts of water and with an initial reservoir geopressure gradient in excess of .465 pounds per square inch for each vertical foot of depth.

18 C.F.R. § 272.103(c) (emphasis added). Furthermore, the question at hand was touched on by the FERC in the preamble to its interim regulations:

> Gas not dissolved in brine, *such as gas caps*, may be economically produced through less expensive conventional production techniques and is not a high-cost gas. Therefore, *if the*

> *gas has broken free from the brine before initial production (before any fluids are withdrawn from the reservoir)*, it will not qualify under this definition.

44 Fed. Reg. 61,950 (emphasis added). In the preamble to the final regulations, the FERC did not alter this position, stating in relevant part that "qualification under this category of gas relates *only* to whether the gas is dissolved gas produced from geopressured brine"; and that

> [i]n the interim regulations the Commission considered the possibility of qualifying "free gas" caps found in association with brine. For the same reasons elucidated therein, the Commission will not include such free gas in its definition of "natural gas produced from geopressured brine."

FERC 1977-1981, 45 Fed. Reg. 28,093.

As noted, portions of the gas in issue are dissolved in the brine, but other portions are free, yet immobile. This finding is not challenged by WRT, and is supported by substantial evidence. Restated, it is undisputed that all of the gas is not dissolved in the brine. The above quoted interim rules' preamble merely lists gas cap gas as one example of gas ("such as gas caps") which can be produced in association with brine, but which is not dissolved in it.

The regulation provides that "'natural gas produced from geopressured brine' is natural gas which is dissolved before initial production". 18 C.F.R. § 272.103(c). In conjunction with this, the interim rules' preamble's definition of "initial production" is of assistance: "before any fluids are withdrawn from the reservoir". This seems to preclude post-gas cap production,

because fluids (brine) would probably, if not certainly, be withdrawn during gas cap production, as the brine moved upward because of the resulting pressure reduction caused by removal of gas from the gas cap. But, there may be ambiguity in the interim rules' preamble's statement that, if the gas has "broken free", it will not qualify. There is no definition for when the gas has "broken free": when it resolves out of the brine and becomes free immobile gas, or when it actually escapes the brine and forms or joins a gas cap. In the light of such questions, we defer to the promulgating agency. For example, as quoted earlier from the preamble to the final rules, and consistent with the regulation, "qualification under this category of gas relates *only* to whether the gas is dissolved gas produced from geopressured brine".

Based on the NGPA, the FERC's arguments here, and its admission that the new technology was not available and therefore not considered during its rule making, there is reason to believe that it had not fully considered the question of free immobile gas. But, in the face of the clear statement in the regulation that, in order to qualify as high-cost, the gas must be "dissolved before initial production", we must apply it as written. Therefore, we rely on this plain language that the gas must be dissolved in the brine in order to qualify as coming "from" the brine.

In conjunction with this, the FERC contends that once some of the gas produced has been shown not to be "from geopressured brine", all of the gas must be disqualified, regardless of how much was in fact dissolved in the brine. This maintains the NGPA's

basic approach of regulating wells, not gas molecules. *See e.g.*, 15 U.S.C. 3317(a)(regulating gas "produced from any *well*")(emphasis added). Moreover, this requirement finds substantial support in the record. It avoids the impossible task, as stated in the FERC's final order, of "trying to distinguish free gas molecules from dissolved gas molecules". This task would be made even more difficult under the circumstances presented here, because, as noted, the regulation provides that the gas must be dissolved *at the time of initial production*. 18 C.F.R. § 272.103(c). As also discussed, "initial production" is defined in the interim rules' preamble as "before any fluids are withdrawn from the reservoir". Therefore, where there has been, as here, production from the gas cap, then that is the "initial production".

Along this line, the private study of the wells at issue placed the percentage of dissolved gas being produced at 1.4% volumetrically, but placed the production of free immobile gas at between 1 and 7% of volume of brine production. This disparity between dissolved gas and free immobile gas indicates that the ruling which WRT seeks would not have the profound effect on its gas production which it claims is needed in order to make the production cost-effective. In other words, there is little evidence that a favorable ruling in this instance *as to the dissolved gas* would affect the well costs significantly.

Another, earlier noted, factor in the record which provides compelling support for the FERC's ruling is that, according to the FERC, the LOC determination in issue is the first finding that

post-gas cap production qualifies as high-cost. In its final order, the FERC stated that,

> [w]hile the preambles to the Interim and Final Rules did not specifically so state, the [FERC] intended, and it is the [FERC's] understanding the jurisdictional agencies and producers in general interpreted the regulations to mean, that if gas was produced from a gas cap before the onset of fluids production from the underlying aquifer, none of the gas subsequently produced from the gas cap and/other underlying aquifer could qualify under the [FERC's] regulations. Thus, under this interpretation, gas produced through secondary recovery operations was precluded from qualifying as geopressured brine gas.

As a result, according to the FERC, "[it] received no affirmative geopressured brine gas determinations between 1979, when [its] Interim Rule was adopted, and 1994, when Louisiana's affirmative determinations for WRT's wells were received." Therefore, as quoted *supra*, the FERC "affirm[ed] that it did not intend to allow any gas in an aquifer to qualify as geopressured brine gas if gas cap gas was produced *before significant amounts of brine [were] produced*." (Emphasis added.)

This reading by the FERC takes into consideration a number of factors bearing on the production of natural gas, including hydro-geological and other pertinent data about aquifers, economic efficiency, and wellhead technology. Needless to say, the FERC is far better able than we to evaluate such factors; this is one of the reasons why it is entitled to deference under the NGPA. In sum, we defer to its conclusion that

> Congress deregulated gas produced from geopressured brine to provide an incentive for drilling wells into previously unproduced

> geopressured aquifers to tap gas dissolved in brine, not for producing gas from partially depleted or nearly depleted gas reservoirs.

In the light of this conclusion, which is consistent with both the NGPA and its regulations, and is within the discretion of the FERC, we affirm its ruling that the wells in issue, which previously produced gas cap gas, do not qualify as high-cost natural gas producers.

WRT contends that the FERC's final finding, if upheld, is impermissibly retroactive. We recognize that this is the first time the FERC has squarely addressed these issues, and it comes years after the NGPA was repealed. But, WRT does not challenge the FERC's making a final finding. Although the NGPA was repealed in pertinent part by the Wellhead Decontrol Act, the FERC continued to make determinations regarding high-cost status through the date of its rule rescinding Part 275 of its NGPA regulations, 28 July 1994. The FERC received the LOC's determinations in this case in April and May 1994, before the effective date of the rescission. 59 Fed. Reg. 40,240 (28 July 1994).

Concerning this retroactive-rule-making contention, we note that WRT apparently relied, perhaps imprudently, on the affirmative LOC determination as to the first well when it subsequently installed the new technology on its other four wells, prior to receiving a final determination from the FERC as to that first well. In any event, the fact that the final determination followed repeal of the NGPA and installation of the new technology does not render it retroactive. Moreover, as noted, long before the new

technology was installed and production resumed, the FERC had spoken -- certainly in part -- to the issues at hand. 18 C.F.R. § 272.103(c); 44 Fed. Reg. 61,950. The application of the language from the regulations and preambles, and indeed from the statute itself, to this record cannot be said to be retroactive.

III.

For the foregoing reasons, the final finding of the Federal Energy Regulatory Commission is

AFFIRMED.