

SCOMM

#14: 11

EXCERPT FROM THE TESTIMONY OF JOE MOORE

April 5, 1978

CHAIRMAN MILES:

Joe, a couple of questions, I think, -- if you could put on your oil consultant hat for a moment. How serious is the possibility that the royalty oil contract will short circuit any gas, any possibilities of in-state gas process?

You seem to indicate that --

MR. MOORE:

Putting it in that sequence, I don't think it would make any difference.

That is if the royalty oil contract is approved and the process goes along, as I assume it will be scheduled to go along. I would estimate that a substantial chemical company, if they could be interested in the utilization of gas for a chemical plant -- I think that they would not consider the royalty oil contract as being inhibitive there. I think they would look at it as a certainty.

CHAIRMAN MILES:

Okay, that's what I don't understand. If there's going to be marketing problems of the two facilities; one facility is essentially substantially less expensive to build, it seems like there's going to be a problem downstream.

MR. MOORE:

Well I guess if you think about the ALPETCO cake as (Indiscernible) as ALPETCO has said, they're not committed to any particular product slate and in order for ALPETCO to build the plan on the scale that they have envisioned, that they have indicated that they would build, they have not built -- their investment schedule envisions building a big petrochemical plant. They could build something that would otherwise meet the state's criteria, having built something significant for a lot less -- see a billion and a half I think is their first cutoff point. Now what that really does, it ties them into building something pretty darn elaborate. (Indisc.) Now to build that petrochemical plant they have got to in some way market this product in a market which they participate. They have to penetrate a market that they're not involved in, that they're not in right now. I suppose that their strategy really would be that this penetration would be through some kind of joint venture. I don't know this, I'm just interpreting what I think I've heard Hugh Spitz and Gordon Cain say, that they would be looking for people who are presently in that market but who would come in as some kind of a joint venture on the

plan with ALPETCO. Now if that were the case, then a joint venture partner would be -- well there would be ARCO, there would be EXXON, it would be SHELL, it would be GULF, it would be CARBIDE, it would be MONSANTO (ph) or it would be DOW. Now I don't think any of those people would go into partners with ALPETCO.

CHAIRMAN MILES:

Where does that leave ALPETCO then? Insofar as proceeding with the contract.

MR. MOORE:

I think to proceed on the full scale that they envision, I think they have real problems as I have said in my report. They may proceed -- they may very well find that niche that they can proceed on and I think it's fair to say that their thinking is probably pretty wide open on that point. But the project that was proposed originally by John Barbour which I think is the only really written version we have seen with the scope of what the ALPETCO project would be -- I think they can't do that. Now I'm not saying they can't do something, but I don't think they can do that.

CHAIRMAN MILES:

Well what do you envision them doing?

MR. MOORE:

Well it would be feasible for them to build a fuel refinery and a third stage to which they would start adding some petrochemical operations.

CHAIRMAN MILES:

Based on crude oil or --

MR. MOORE:

Yeah, crude oil. I mean let's just take -- forgetting the gas for just a moment, let's just take one of the scenarios which is most likely of success for ALPETCO. Well I think the first criteria will be that the most successful thing they can do would be something that would be simple. And the simplest thing they could do would be something that would be essentially a fuels refinery, a core plant to start with. What's the next simplest thing that they could do? Well probably produce some aromatics. What's the next simplest thing that they could do beyond that -- a few specialty chemicals. Now you're building up to the point that can they at some point develop a position in the

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market such that they could competitively go up against the real big companies and force their way into the (indisc.) market. Well with some financial substance behind them, the plant in place, they've got lots -- they've got maybe a chance for doing that. What I have felt was wrong with the plan that they originally proposed was that there was no way that they could go into that market with those big companies and succeed. That those companies would keep them out and in my report I pointed out that in the chemicals business, unlike the fuels business, market share is guarded very carefully by those people who are in the market. And they really fight for market sharing on a competitive basis. And they don't really in the fuel oil business. I mean a few of them do but, you know, fundamentally EXXON and ARCO aren't out fighting for fuel oil business. If somebody wants to sell fuel oil, undercut them \$.10 a barrel, fine they'll do something else with their oil, they won't really fight them for it. But in the chemicals business, because of the high profit margin during the good times, they'll fight for their share of the market. And they fight by cutting the price. But ALPETCO is going to run against them. If they start trying to sell ethylene, they're going to run up against a situation where (a) they're unproven suppliers and where they're going to go to is being supplied to somewhere else. Now they're going to be able to woo them away from that alternate supplier either by cutting their price below the price at which their present supplier will cut price and they can't cut the price as low as their present supplier will cut price or they're going to have to (indisc.) say ALPETCO has a -- represents an assurance of future supply, which is better than their alternate supplier and furthermore that they will be willing to pay enough more for that future assured supply since there's the fact that their competitor's going to cut price more than ALPETCO can cut price, will still give them the incentive to come with ALPETCO. But ALPETCO will never be able to cut the price as low as EXXON will cut the price or as ARCO will cut the price or MONSANTO and so forth will cut the price, they just can't do it. So they've got to figure out another way to attract somebody to buy from them. And that's pretty hard to do. When somebody else will cut the price to whatever it takes to keep the business, it's hard to get away from it. And that's the fundamental problem they're going to have.

CHAIRMAN MILES:

Well I'm still unclear as to how that statement relates to what your report says. Liquids availability at the right price would likely require that the oil project be abandoned and converted to the use of NGL (ph). Either it's -- and maybe I'm just making this too black and white, but it seems to me it's going to short circuit NGL development or it's not. I don't get what the balance is or what the ratio is.

MR. MOORE:

Well I don't have a certain answer to the question either. I would say this though that if you had -- let's take ARCO, they're a big ethylene producer and they produce on the North Slope. Now if ARCO decides that it made sense to them to supply the West Coast ethylene market growth with gas liquids, I don't think that ALPETCO's -- the fact that ALPETCO is out there also, would deter them a moment. I think that they could figure that they could kick ALPETCO out of any situation that ALPETCO was in. They've got the financial muscle, the marketing muscle and everything else to do it. If it were the other way around, I think there would be a problem. I think the fundamental issue in the chemicals business is the -- not in the chemical business in general -- but the ethylene business, particularly, is that that is a very big company business. And pretty big companies have been forced out of that business because they didn't have the financial resources. And if you look at people who are in it now. It's nothing but the very largest corporations because it has gotten to require so much capital and willingness to absorb substantial downside risks under poor market conditions. It's just a game that small companies can't play.

CHAIRMAN MILES:

You're not answering my question.

MR. MOORE:

Alright, phrase it again.

CHAIRMAN MILES:

I'm trying to find out how approval of the ALPETCO contract will affect the development of gas or gas liquids in the state? Well that does seem contrary to what you said in your report.

MR. MOORE:

The report -- oh, okay I see what your problem is. If these were two separate activities (a) you had the ALPETCO contract you sign it then (b) you wanted to do something to develop the gas liquids thing. When you sign the ALPETCO contract you have not said that. What you have signed is a contract to develop a petrochemical complex. I think that is a very important understanding.

CHAIRMAN MILES:

Do you want to repeat that last one.

MR. MOORE:

Well ALPETCO has a guarantee it can build a petrochemical complex.

CHAIRMAN MILES:

I just want to make sure I heard you right.

MR. MOORE:

That's what their intention is. And that's what everybody hopes that they're able to do. But it could well turn out that the thing they -- if they put something together it may be something that does not involve a petrochemical complex initially. So that's the first point. You haven't necessarily said you're going to build a -- create a petrochemical complex by ALPETCO. And the second thing is that if you could find someone who is -- if you had a good deal on a gas liquids side, and you really were -- and you had made a policy decision that ALPETCO was the group that you were essentially cooperating with in this kind of development, then you probably would want to give them this favorable opportunity. Now if you did not choose to do that, if you said well, ALPETCO's on their own, you know, the state has no more relationship with them other than just having signed this contract guaranteeing them a supply of royalty crude and now we want to set up a -- want to entice a big chemical company to come into the state and use these gas liquids, I don't think the existence of the ALPETCO contract would deter per se would deter, you know, an ARCO or a DOW to come into here and looking at the gas liquids, if they were otherwise inclined to do so. I just don't think that the ALPETCO contract -- they would weigh it one way or the other.

CHAIRMAN MILES:

Okay. Let me put it this way then. If ALPETCO entered the contract and it's approved, does what it says it's going to do, 30,000 barrels of fuel and the rest in petrochemicals, would you recommend to a major client that they go in and develop a gas liquids facility?

MR. MOORE:

If I was sure that ALPETCO would do that?

CHAIRMAN MILES:

Yeah.

MR. MOORE:

No, I wouldn't.

MR. CHATTERTON:

Is that because the market in other words is full enough now, saturated enough now that one plant might break in but two would be doggone (indisc.)

MR. MOORE:

And so fundamentally I'd just repeat that I think that ALPETCO -- I think it's unlikely that ALPETCO in their first realization and what their affect on the market is over the next two years or 18 months or whatever it is, I think it's unlikely that they will really be a factor in the ethylene market or the ability of a major present supplier to promote a new plant. I just don't think they'll be a factor.

MR. CHATTERTON:

If ALPETCO -- if there weren't the strings attached, why ALPETCO was trying to penetrate this market, why would they be in a much more competitive position to do so if the state's royalty share of the oil was transported to California to a petrochemical plant on the West Coast?

MR. MOORE:

Well I think the whole problem -- the point I'm trying to get across is that I see the biggest deterrent as being one that your logic in coming must be that ALPETCO -- you're going to try to keep them out of the market, regardless of their feed stocking, regardless (indisc. -- cough).

MR. CHATTERTON:

But whether it be Valdez, Kenai or the West Coast, that would be under the terms of the contract with the State of Alaska, but there is some other thing where ALPETCO could -- there is permissiveness in the contract where ALPETCO could knock anybody else out of the market.

MR. MOORE:

The contract, yeah, but not in the bank book.

MR. CHATTERTON:

But in the contract why it's permissive -- I mean presupposing they could get their feed stock at \$.50 a barrel. They could do a pretty good job, (indisc.). Even if we gave them the oil?

MR. MOORE:

Well I'd say it's in the range of feasible alternatives. I

think that it doesn't help. I don't think that they are particularly helpful one way or the other.

MR. CHATTERTON:

I see, thank you.

MR. MOORE:

We have worked with so many projects where people have tried to break into the ethylene market, people double the size of ALPETCO or even some a little bit bigger and at some point it gets down to the fact that you've got to have lots of guts or your banker's got to have lots of guts to go ahead because there's so many ways that competitors can keep you out of that market and if they're bigger than you are and they want you out of the market at some point you come to a premise that no one you've ever dealt with before has been able to -- you know, they've all backed away. And they may back away for all sorts of reasons. They can't get the financing, they can't get the contracts, so on and so forth. That's just a really rough game.

MR. PARR:

You said something about this a little while ago and I'm afraid I didn't hear you as well as I'd like to. You were talking about in the lower 48 petrochemical plants based on gas liquids hadn't been able to compete whereas this state's position versus (indisc.--loud noise) because of amortization.

MR. MOORE:

Yes, amortization of the total costs.

MR. PARR:

Yeah, and you said that they could absorb, I guess, fluctuations in price, low prices for (indisc.) I wasn't really quite -- I know so little about economics in business that I'm embarrassed but nevertheless I didn't quite understand what it was you were saying. If I understood you right, let's say this plant that ALPETCO's going to have a 2-1/2 million dollar plant, this one might be say a billion dollars, they're both selling the same product, ethylene. Now how does the fact that there's a bigger investment than the ALPETCO plant, I mean assuming that it's one of (indisc.) lower 48 situation, it wouldn't be quite as true up here. But how does that fact that one of them costs twice as much today, help them?

MR. MOORE:

Well, okay. The (indisc.) has two characteristics, one is that it produces a wider range of products and secondly is that of its total cost, only half of that cost is variable.

MR. PARR:

Their bonded indebtedness or whatever kind it is.

MR. MOORE:

The (indisc. -- simultaneous speech) cost of that plant.

MR. PARR:

That's the same year in and year out (indisc. -- simultaneous speech)

MR. MOORE:

(Indisc. -- simultaneous speech) some costs. But the cash flow that's produced by the plant only has to account for half the total cost which is the feed stocks, utilities and labor support. So if I want to cut the price if I want to compete, you know, cut the price. I can cut my price 50% and still have net dollars coming in every day from the operation of this plant. Now sure, I'm not paying the bank off as fast. Maybe I'm not paying myself back as fast on some investments. But in terms of just the sheer money coming in for the product, less the money going out for the feed stock and the utilities, I can cut prices 50% and still make a positive cash flow.

MR. PARR:

That's if your bank will let you get by with that.

MR. MOORE:

That's right. And then, of course, for that reason, you don't see anybody getting a crude oil plant -- there is no crude oil plant in the word that's not operated by an oil company.

MR. PARR:

So they have (simultaneous speech). The guy that runs the gas liquids plant though doesn't mean they are in the same position, right. There's a higher percentage of his costs are the variables, the cost of the feed stock and so forth.

MR. MOORE:

It could be over-simplifying to say whether it's good or bad. Because I could say well the crude oil plant has more products, therefore it's diversified and therefore that's good. But if you're going into a virgin market, that's bad because you've got to sell so much stuff.

MR. PARR:

So if the price of ethylene is low and the price of something else is high at this time you have a chance to sort of balance it off.

MR. MOORE:

Well if you look at the Gulf Coast where you have all the petrochemical industry there, a crude oil plant that produces all of these byproducts, there's someplace for all of those products to go because there's some plant around there that takes all of these products. Now by contrast, if you look at Saudi Arabia, something you read about in the news, they're looking at several ethylene plants but they're all ethylene plants because there's no plant anywhere around that takes anything. So their marketing problem is very complex and they'd like to just produce one product if they can, based on one product. That's a lot better than selling two products. So in all cases they're looking at the simplest plant that they can come up with so they have the simplest marketing problems; the simplest transportation problems. And this is kind of the analogy that we followed in thinking that the ethylene plant is kind of the obvious one for Alaska because you really have a virgin market. You don't have an infrastructure of other plants around you. And you have to create all that at one time; that means more money, more loose ends you have to pull together.

MR. CHATTERTON:

Well following up on that Joe, suppose we okay the contract with ALPETCO and they go ahead, and they're starting a business -- they're trying to break into the market to produce the products (indisc.) And then if somebody did decide to go into the gas liquids plant, it's going to make ALPETCO's job perhaps even harder because they've got one more competitor who can produce perhaps more cheaply than they can.

MR. MOORE:

Well I think that's true. When you're thinking in terms of ALPETCO trying to build a major petrochemical plant but under the terms of their contract, they don't have to do that.

MR. CHATTERTON:

I understand that. This is just a hypothetical case. Under their contract they have to produce 35,000 barrels of crude (indisc.)

MR. MOORE:

(Indisc.) 100,000.

MR. CHATTERTON:

Billion and a half dollars in a certain period of time or else they lose their contract.

MR. MOORE:

Yes, and that's tough. That's pretty well -- if you really stuck it with that it would tie it to --

MR. CHATTERTON:

A billion and a half is more than you can justify on just producing an amount of fuel oil and gas so they'd have to do something with it or else ...

MR. MOORE:

And personally I think ALPETCO was dumb to have agreed to that. And I think that it is not in the state's interest to hold them to that even. If ALPETCO could come up and show that they had put together a deal for 700 million dollars, 600 million dollars at the end of 18 months, they ~~up~~ the contract terms and it seems to me inequity that that is a significant affair -- discharge of their obligation. And I look at it, if I were in a position of having to decide whether -- what ALPETCO had done was in conjunction with what the intent of the state was when they started out this royalty oil thing, I'd be hard pressed to say that they could spend 600 million dollars or 700 million dollars on an oil processing facility, that there was anything wrong with that.

MR. CHATTERTON:

(Indisc.)

MR. MOORE:

Well, it is, 600 million dollars is a lot of money.

MR. CHATTERTON:

Not Alaskan terms.

MR. MOORE:

In the refinery and petrochemical industry, it is. I don't

think and I'm not positive of this, but I don't believe that it has yet been grass roots project built for a billion dollars. And you talk about it so much that you almost think it's actually been done. I don't think it's ever been done.

CHAIRMAN MILES:

What's a grass roots project?

MR. MOORE:

Oh when you start off with nothing, just build it. I go out with the grass roots and I create a plant. That's what we call a grass roots plant.

CHAIRMAN MILES:

How do they get them built?

MR. MOORE:

Well they do but there hasn't been one built that big yet.

CHAIRMAN MILES:

They're built in stages.

MR. MOORE:

Well yeah, they're built in stages and also most chemical complexes start off much smaller and so forth. You're talking about something that we've written -- seen so much of the literature about, numbers of this size. And we've almost gotten to assume that these things have really been done, but they haven't been done. Now we talked about billion dollar plants in Saudi Arabia and we talked about even -- well I look at a billion dollar and a half plant in the U. S. They've never gotten built. So we're talking -- you just get kind of hypnotised at the fact that the pipeline cost 8 billion dollars. Yeah, but look who's behind the pipeline.

CHAIRMAN MILES:

What are these 200,000 barrel a day OPEC petrochemical facilities cost?

MR. MOORE:

They haven't been built yet.

CHAIRMAN MILES:

I know, but -- I know they haven't been built yet but --

MR. MOORE:

Billion and a half, 2 billion dollars.

MR. CHATTERTON:

(Indisc.)

CHAIRMAN MILES:

Chat.

MR. CHATTERTON:

Thank you, Mr. Chairman. What's your definition of a petrochemical?

MR. MOORE:

Of a petrochemical from oil, from a hydrocarbic source?

MR. CHATTERTON:

Well if I were to build a petrochemical complex, buy a petrochemical complex and I made this a middle of the barrel fuel product slate, (indisc.) propane, a little butane, wouldn't that be a petrochemical complex?

MR. MOORE:

Well there isn't a legal definition of it.

MR. CHATTERTON:

There is no legal definition, is there?

MR. MOORE:

It's a term of art.

MR. CHATTERTON:

It's a great, broad, wide open (indisc.)

MR. MOORE:

We could probably decide in the sense of it being a term of art. But, you know, a normal person (indisc.) petrochemical complex.

UNIDENTIFIED SPEAKER:

That would make (indisc. -- laughter).

MR. CHATTERTON:

Joe, thank you, you've made a point, I hope. I don't want to admit it.

MR. MOORE:

Any other questions?

MR. PARR:

Tell me one thing and this, again, is an off the top of the head answer. I've got to tell you that this one company came in and discussed with a number of us on this committee, I guess, the possibility of building a strato-plant (ph) over the gas line in Fairbanks and they buy the gas and they put it through a process (indisc.) liquids and (indisc.). It's their responsibility to market the stuff. Is it your off-hand guess that such a thing might be economically viable?

MR. MOORE:

Yeah.

MR. PARR:

Do you have much information (Indisc.).

MR. MOORE:

I think the thing that -- I think that if you just do that by itself, the thing that you probably clearly could do, you could probably recover propane, butane, (indisc.) and sell those. Now that probably wouldn't really contribute anything significant to development in the state if that were your objective.

MR. PARR:

(Indisc.) planned use.

MR. MOORE:

That people would use?

MR. PARR:

Something like the (indisc.--interrupted)

MR. MOORE:

(Indisc.) people.

MR. PARR:

It would be a real big plant.

MR. MOORE:

Oh a hundred people probably.

MR. PARR:

So in terms of an increment of employment or development it's not a real big increment.

CHAIRMAN MILES:

No, it's a term of art, (indisc.) It's a downstream manufacturer is what you'd call it -- the guy who would buy this propylene or whatever it is to make something out of it.

MR. MOORE:

Make something else out of it.

MR. PARR:

And then he came along and located (indisc. -- interrupted)

MR. MOORE:

(Indisc.)

CHAIRMAN MILES:

(Indisc.)

MR. CHATTERTON:

Joe, what's a commercial name for aromatic, one of the aromatics?

MR. MOORE:

Benzine, you mean?

MR. CHATTERTON:

✓ Okay. Let's say the bottoms from the fuel oil refinery would contain those, would it not?

MR. MOORE:

The bottoms from the fuel oil refinery?

MR. CHATTERTON:

Well the tops -- in other words, what you didn't -- if you had products like jet fuel, diesel, stove oil and the rest shifts out why that would have -- what shifts out would have aromatics in those, wouldn't it?

MR. MOORE:

Aromatics are into gasoline (indisc.) If you make these in a plain old refinery, that made gasoline --

MR. CHATTERTON:

I'm not making gasoline.

MR. MOORE:

The aromatics of commerce appear in the gasoline business.

MR. CHATTERTON:

And if I don't take any out why they're still in there, aren't they?

MR. MOORE:

Yeah.

MR. CHATTERTON:

I've separated them from something.

MR. MOORE:

There's lots of aromatics, you know, if you try to be literal but the aromatics of commerce are primarily benzene and secondarily xylene (ph) and third (indisc. -- noise) and anything else is not really an aromatic of commerce.

MR. CHATTERTON:

And where would our olefins fit into commerce?

MR. MOORE:

If you're not thinking gasoline?

MR. CHATTERTON:

No.

MR. MOORE:

Well if you had atomic refinery, you don't have any olefins. Olefins are primarily produced in a refinery by a cracking process (indisc.)

MR. CHATTERTON:

Okay.

MR. MOORE:

Gas, oil.

MR. CHATTERTON:

Alright.

MR. MOORE:

(Indisc.) cracking bottoms or they're produced by thoroughly cracking naptha. In the petrochemical business they're primarily produced in cracking steam, so called steam cracking or steam parolosis (ph) a derivative material producing ethylene and propylene. So that if you had a simple refinery, you normally wouldn't have any olefins (indisc.) If you start producing olefins in a normal refinery you do it because you're making --increasing the octane of gasoline. If you're not making gasoline and you're producing olefins, you're probably producing chemicals like ethylene and propylene.

MR. CHATTERTON:

Okay. Thank you. Thank you, Mr. Chairman.

CHAIRMAN MILES:

Anything else? Joe, thank you very much. You were very, very helpful.