ALBERTA ROYALTY REVIEW PANEL

Before Board Panel:

Bill Hunter - Board Chairman
Judith Dwarkin - Board Member
Andre Plourde - Board Member
Evan Chrapko - Board Member
Ken McKenzie - Board Member
Sam Spanglet - Board Member

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APPEARANCES

Gerry Protti	)EnCana
Richard Dunn	)
Roger Soucy,	)Petroleum Services
Frank Dubak (phonetic)	)Association of Canada
David Yager	)
Kevin Myers	)ConocoPhillips
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Kristian Tange	) Penn West Energy

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--- Upon commencing at 10:09 a.m.

THE CHAIRPERSON: Good morning, Ladies and Gentlemen. Welcome everyone on behalf of the Royal Review Panel. Thank you for your interest in Alberta's royality and tax Regime. Your input is a very important part of our work and we appreciate your time and effort.

I'd like to take a couple of minutes to do some housekeeping and introduce the Panel. On my far right is Ken McKenzie; next is Sam Spanglet. I'm Bill Hunter; next is Andre Plourde; Judith Dwarkin; and Evan Chrapko.

Individual presenters will be allotted five (5) minutes, followed by an opportunity for the Panel to ask questions of clarification. Each organization will be allotted ten (10) minutes and, again, the Panel will take the liberties of asking questions.

If you have brought a submission with you, we would gladly accept it. There are secretariat people around the room, as well as the reception desk outside.

If you haven't and you're thinking about making a submission, the closing date is June 22nd. If you go to our website albertaroyalreview.ca you will find a series of mechanisms on how you can get your submission to us.

From a safety point of view, there are exits at the back of the room and to the right of the Panel. Please make yourself aware of which door is closer in case there's an emergency.

While our proceedings are underway, please turn off your cell phones and your Blackberries, we don't want any interruptions while the presentation is being made.

The proceedings are being transcripted; that does two things for us: It allows the Panel to share with all Albertans what we've heard from the presenters, as well as capturing adequately the exchange during the question period.

If there's any media present, I'd be happy to speak with you on behalf of the Panel at one of the breaks. And I'd ask that you respect the space of the Panel and the presenters during the proceedings.

Again, on behalf of the Panel and Albertans, thank you very much for your interest and your time.

Again, I appreciate the audience and the presenters allowing us to get set up this morning.

First we will hear from Mr. Protti from EnCana. Welcome, sir.

MR. GERRY PROTTI: Thank you, Mr. Chairman.

THE CHAIRPERSON: I failed to point out that I have a very strict young man at the far right-hand side that has a series of cue cards to help you with time management. He's fairly aggressive but I'll act as a mediator on your behalf.

Thank you. Any time you're ready.

PRESENTATION BY ENCANA:

MR. GERRY PROTTI: Thank you very much, Mr. Chairman. It's a pleasure to be here in Medicine Hat to present to the Panel.

With me today is Richard Dunn, Vice-President of Business Services and Stakeholder Relations for the Foothills Division in EnCana.

I also wanted to indicate to the Panel that we have a written submission that we'll be supplying by the end of the week.

Now, we are well aware of the time constraint here. We've got seventeen (17) slides, so, we're going to move through them quite quickly and hopefully, there will be time for questions afterwards.

The first slide is one our lawyers require us to have. We won't ask anyone to read it at the moment but it's there. Terms of advisory, given that we're using future oriented information for EnCana.

EnCana has transformed itself since our merger just over five (5) years ago, the merger of Alberta Energy Company and Pan-Canadian. At that time, we had a very diverse set of assets, not only on a geological basis in terms of conventional and unconventional, but also on a geographical basis spread across the globe.

We have very much focussed on our core area of technology expertise and unconventional resource development in both natural gas and oil sands. And in doing this, we've actually disposed of over $13 billion US in assets in the last five (5) years. So we have focussed ourselves primarily on North America. We do have some international assets in exploration. We're moving gradually to unconventional.

But in doing this, one (1) of the key factors for us - beyond our technology focus - was identifying areas where we were comfortable with the fiscal regime, the political and contractual stability. So, that naturally leads us to North America.

Strategic focus, key resource plays, which we'll discuss in more detail in a moment. We have to maintain a sustainable level of growth. We, like other companies, have experienced the boom-bust phenomena, so, having that sustainable growth is important.

Managing costs, executing with excellence, and primarily using technology to help us has been a real focal point. And most recently, energy efficiency of course is a real priority for us in this environment.

This map gives a snapshot of EnCana; where our primary assets are. The circles that you see -- there's nine (9) of them in red -- define nine (9) natural key natural gas resource plays, and two (2) in green are oil. And we will discuss the Alberta ones in more detail.

I think the primary thing here is we define a key resource play as having a substantial resource, at least a trillion cubic feet of natural gas or equivalent and the capability to be developed at 200 million a day.

If you look at our land position, we have 27 million net acres but only seventeen (17) -- or 17 million of that is undeveloped. And that goes to one of the themes that we want to address with you today, is that we are still - even EnCana - at the early stages of unconventional development and the stability of the fiscal regime is very important.

There's the -- the inset map describes

Alberta in more detail. We've got 46,000 operated wells in the province but we have 7 million net undeveloped acres.

And just another statistic that's not on the chart. Last year, we drilled thirty-six hundred and sixty-two (3662) wells in Alberta; the largest operator in the province. And since the formation of EnCana, we have drilled over 25,000 wells in the province.

This next map focuses on our key resource plays' capital. And the reason we focus that is that when we look at our opportunities in North America, we do focus on those nine (9) key gas resource plays and the two (2) oil ones because that's our future.

We still have a significant number of conventional assets.

We have what we call non-key resource plays that don't meet that threshold of a TCF and 200 million a day, but when we look at where our capital is going to be spent over the next ten (10) to twenty (20) years, it's in these areas. So Alberta has about 43 percent of that total and you can see the distribution for the rest.

At this point, our production has grown, in terms of key resource plays, and we're now at about 68 percent of EnCana's production of gas and oil is from those types of resource plays; 85 percent from resource plays in total; and only 15 percent from conventional.

This chart represents analysis that we have developed. I'm hoping you have a colour version. The bubbles that you see in there are blue, and it represents our estimate of impact on the Alberta economy.

The first thing I want to draw to your attention is from the two (2) previous charts, there was 2 billion capital in key resource plays for Alberta for 2007. These numbers represent 2006. And there's three (3) reasons why there's a difference in those numbers.

The first one is that with our transaction with ConocoPhillips, half of the oil sands capital, about half a billion dollars for 2007, is now paid for by ConocoPhillips. So, that expenditure will still be made in '07, but it's in the '06 numbers.

We did reduce our capital expenditures in Alberta by about 400 million, '07 over '06. And finally, what's not on the previous chart is our non-key resource plays and our conventional capital, and that makes up the difference between those two (2) numbers.

All this chart shows is that our expenditure is touching every part of the province. We have now broken down our capital and operating spend by municipal district and we are -- we are -- have investments in spending in sixty-one (61) of the seventy-four (74) municipal districts in the province.

The numbers, in terms of GDP, labour, income and employment are utilizing the finance department's input/output model, both the open and closed model, and that represents the range.

So clearly, beyond the royalties and the direct payments to government, a significant spinoff associated with our activity.

This next chart just describes pictorially the characteristics of what we call resource plays. And we do feel that they are not only Alberta's future but, really, the future of resource development around the world.

The chart on the right describes the types of resource plays in Alberta that we're developing, and so the most shallow ones are shallow gas. And you could put beside there - we should have had it on the chart - the Horseshoe Canyon development, which is in the 350 to 650 metres. SAGD, our bitumen development in northeast Alberta. And the horizontal drilling that we're going to use to develop the Mannville coal, and then finally the deepest of the resource plays are the tight sands of the deep basin play on the foothills in the Canadian Rockies.

The points on the left, just identify some of the characteristics. There has to be huge resources in place, so that we can use the economies of development. Long life cycles, project management planning is absolutely critical to make them economic.

We want to really stress the technology. It's evolved a tremendous amount already in the last ten (10) years, within the Provence, the last twenty (20). We still need further advances to get at areas like Mannville coal, and other resources. These resources have the characteristics of high initial declines, but potential for long term stability.

And I guess the last point I'll make is that we brought some cores to show the panel examples of conventional versus non conventional rock, and we'll just leave that for the break for people to look through.

We won't repeat what others have said to this panel. Clearly, cost increases have the potential to erode future economics, there's commodity price, volatility, and there are a number of issues related planned access.

So what's our view? Resource development is just beginning, and we'll have the next chart we'll get into that in more detail. We do feel that the Crown, the way the ad valorem royalty in the case of gas, and the fixed royalty for oil sands, do provide the opportunity for the Crown to earn up front.

The next set of bullets in terms of producer risks are those that we have to handle, we have to manage, and we're prepared to discuss that in more detail as required.

And then the second last set of bullets, the government has had a tremendous track record in history of providing that competitive and stable fiscal conditions, and that'll be a key to continued development of the resources in the Provence. And, evermore increasing the issues around environmental regulation are important in the Province's great track record.

So, we see the current regime as actually having -- not only providing great cash flow to the Crown and to the people of Alberta but also, from our perspective, has facilitated our transition from a conventional to a non conventional. And more specifically, items like the low productivity well allowance that were designed at an earlier time have served very much the development of low productivity, shallow gas, and coal bed methane as an example.

This next chart, I want to spend a moment on, Mr. Chairman. It's -- it describes notionally where we see our resource placed in terms of maturity. And what I think it re-enforces is that we see -- we see a tremendous amount of future development that's underway.

So shallow gas is one that's the most mature. We've been developing it for over thirty (30) years. We've drilled to date over thirty (30) thousand wells. We still have sixty-five (65) hundred wells to drill, so we're about we consider 80 to 85 percent development.

The next one is the Horseshoe Canyon. And even though we have only been developing it for three (3) or four (4) years, we already have drilled over twenty-five (25) hundred wells. We see five (5) thousand more yet to be developed, so, it's in the early stages primary development and has some distance to go before it matures.

The next one is Bighorn, which is the area in the deep basin, along in the Rockies, near Hinton, Grand Cash area. They are significantly less developed. We've drilled one hundred and twenty-nine (129) wells to date. We see in terms of our resource on our lands an additional thousand to drill.

We move along to the Foster Creek, and we've drilled thirteen hundred strat (phonetic) wells to develop that bitumen project. Seventy-nine (79) well pairs; yet to fully develop Foster Creek to its potential, we'll drill another fifteen hundred well pairs.

And you move along to Mannville, coal bed methane where we've effectively just started thirty-two (32) wells. We don't even know what the ultimate potential is in terms of the number of wells, and Christina Lake (phonetic), we've drilled eight (8) well pairs. We will need about twelve hundred to develop that resource.

So, early days, lots of potential yet to come. This is a typical tight gas production profile. We think applies to a lot of wells and resources that are being developed. So, the Crown is getting some immediate proceeds in terms of the land bonus. And then, as soon as production starts, revenue flows to the Crown, and all this illustrates is the steep decline curve associated with these types of wells. And then, depending upon prices, a number of years before they reach project payout. So, industry return after about seven (7) years.

THE CHAIRPERSON: MR. Protti, your time's expired. I wonder if you would like to go to page 17 of your presentation and close for us.

MR. GERRY PROTTI: Sure. I'll just mention on the way through that we have cashflow diagrams for both Horseshoe Canyon and for SAGD, similar to the diagrams that were in the CAPP document and we'd be happy to answer any questions on those.

So the last slide is our synopsis of EnCana's perspective. And that's that -- that -- we've only just begun to develop the resource. From our perspective, technology and cost control are really important for us to drive the economies of scale that we think are necessary for the development.

Clearly, commodity prices are going to be volatile; that's the history we've had and will continue to have.

And that we'd like to recommend to the Panel that if the -- in your recommendations to the Crown, if the Crown is considering royalty adjustments, that you would recommend consultations with producers so that we could get into the details of specific projects and economics to understand the consequences for investment decisions.

And just -- the last bullet is that we'll have to work together in the public interest and develop these resources.

Thank you, Mr. Chairman.

THE CHAIRPERSON: And thank you for respecting our time constraint. We want to make it fair for all our presenters.

MR. GERRY PROTTI: No, I understand that.

THE CHAIRPERSON: So if you'll allow us a few questions.

MR. GERRY PROTTI: Absolutely.

QUESTIONS BY BOARD:

THE CHAIRPERSON: Ken...?

MR. KEN MCKENZIE: Yeah, thanks for the presentation.

You mentioned the -- in passing, the different approaches we take to imposing royalties on conventional oil and gas versus the oil sands. The key features being that although costs are not explicitly accounted for in the conventional regime, we do so in an ad hoc basis through low production allowances and also through tier -- different rates for different tiers. It's ad hoc so.

However, there is a sliding scale royalty rate which is sensitive to prices.

MR. GERRY PROTTI: Right.

MR. KEN MCKENZIE: Oil sands on the other hand we explicitly allow costs -- recognize costs, certainly in the net regime, the 1 percent upfront we don't but it's a fairly low rate, yet, the rate is flat and is not flexible with respect to price.

Is there any underlying reason or

characteristics of the oil sands which suggest that the royalty rate should not be flexible with respect to price in a similar way that the conventional royalty system is?

MR. GERRY PROTTI: Yeah, I think the characteristics of oil sands development with the high upfront capital required --

MR. KEN MCKENZIE: Which are recognized in the royalty formula.

MR. GERRY PROTTI: That's right. You know, I think the -- the net profits interest after payout does capture in times of high prices, higher profit. So there is -- there is some price sensitivity to the extent that prices are high, profits will be higher and so the Crown does benefit from the higher price.

You would be moving away, I think, from a net profits interest-sharing concept if you were to then say, well, let's put another factor in to change the -- the rate post-payout, you know, say from 25 percent to something higher.

MR. KEN MCKENZIE: No, I would disagree with you. In fact, you're still sharing the net profit interest, all you're doing is changing the relative shares.

The concept of net profit sharing is still there because that's the base that you're applying the rate to. So you're not moving away from that concept, all you're doing is changing the share.

MR. GERRY PROTTI: Yeah, well --

MR. KEN MCKENZIE: Would you not agree with that?

MR. GERRY PROTTI: That's exactly what you're doing.

MR. KEN MCKENZIE: Right.

MR. GERRY PROTTI: But, you know, this -- this particular regime is well understood and, I mean, obviously you can do that. It will impact how producers look at individual projects and, you know, it will affect the economics.

MR. KEN MCKENZIE: But there's no underlying characteristic of the oil sands which suggests -- I mean, that -- we have a sliding scale royalty rate for conventional oil and gas, which you seem to be saying is fine.

And now we have an oil sands regime which has explicitly recognized costs and yet we don't have a sliding scale rate there. So, I'm just -- I see a bit of a disconnect in the logic.

Why is it okay for conventional but it's not okay, for some reason, for oil sands, given that we already recognize the costs upfront?

MR. GERRY PROTTI: I mean, you can absolutely construct that. All -- all I'm saying is that at the end of the day, under different scenarios, you have to understand what the implications are in project economics.

MR. KEN MCKENZIE: Yeah, of course.

MR. GERRY PROTTI: And -- and it -- you know, I think we've seen some evidence recently where oil prices have increased but so have costs, particularly in the oil sands.

And so the question then is: Would -- is there actually more economic rent to capture at that time. It may be that prices are up but you could -- you could argue that perhaps there's less economic rent given costs have risen.

MR. KEN MCKENZIE: Yeah, I understand that, but I don't want to belabour the point. But the system already takes into account those higher costs by allowing them as a deduction. So you're quite right; if costs go up those are recognized in terms of lower royalties. We're talking about the share that goes to the Crown versus the company after those costs have been recovered.

MR. GERRY PROTTI: Well, there's no --

MR. KEN MCKENZIE: So, yes, there may be a reduction in economic rent associated with higher costs that's --

MR. GERRY PROTTI: Well, there's no question --

MR. KEN MCKENZIE: -- completely captured in the system.

Okay. Thank you very much.

THE CHAIRPERSON: Judith...?

MS. JUDITH DWARKIN: Thank you. Good morning.

I have one question of clarification on a couple of the slides that you didn't have a chance to get to. They're the pie charts on page 13 and then on page 16.

Are those returns -- are those cumulative or dis -- what are --

MR. GERRY PROTTI: Those --

MS. JUDITH DWARKIN: -- what are the units?

MR. GERRY PROTTI: Those represent the stream of project revenues. The -- so the after tax cashflow that's flowing to the producer. So that's not a return in an ROI sense, that's -- that's the -- the discounted total of the after tax cashflows to the producers.

So if you look at the previous chart, the Horseshoe Canyon, it is the -- the discounted cumulative industry revenue line. The red line.

And so, you know, that's -- that's the after tax cashflow from the project, you know, required for the corporate capital and GNA --

MS. JUDITH DWARKIN: Okay.

MR. GERRY PROTTI: -- and funding next year's capital program.

MS. JUDITH DWARKIN: Can you translate the producer return in both cases to an IRR-type measure?

MR. GERRY PROTTI: Yeah. The IRR in this Horseshoe Canyon example is about 21 percent. And in the case of the SAGD project, it's about eighteen (18).

MR. RICHARD DUNN: Fifteen (15) actually.

MR. GERRY PROTTI: I'm sorry. Fifteen percent.

MS. JUDITH DWARKIN: Thank you. And does the Horseshoe Canyon example, does it include your freehold land or do you have freehold land in that area?

MR. GERRY PROTTI: Yes.

MS. JUDITH DWARKIN: And the economics include that?

MR. GERRY PROTTI: Yes, it's freehold

mineral tax.

MS. JUDITH DWARKIN: Okay. Now, just something totally different. You --

MR. RICHARD DUNN: To clarify. It -- but we haven't allotted a return to ourselves in terms of some sort of a lesser royalty or anything like that. Not in our return. If that's what you're --

MS. JUDITH DWARKIN: Your return is after the freehold mineral tax?

MR. RICHARD DUNN: Right. But -- right. Exactly.

MR. GERRY PROTTI: Yeah, the direct government payment is a freehold mineral tax payment.

MS. JUDITH DWARKIN: Okay. It's just subsumed into that category.

Aside from the low productivity allowance, you acknowledge is a useful device with respect to encouraging the economics of the shallower coal bed methane wells.

Is there anything else you'd like to recommend with respect to enhancing the economics of those particular kinds of resource plays?

We've had speakers in previous sessions who have actually in some cases recommended more, you know, targeted incentives or special programs. And some others have said, No, the low productivity allowance we think works adequately for this kind of resource.

MR. GERRY PROTTI: Well, the -- the development will occur with the current regime unchanged at the pace suggested by the economics. If the province were to feel that they wanted to accelerate, for example, the next -- the next round of coal bed methane development -- I'm thinking particularly in Mannville Coals where you're dealing with a lot of water handling relative to the Horseshoe Canyon, you know, I think you could look at mechanisms in the gas cost allowance to -- to capture that.

Again, I think it's understanding the economics of the projects to understand if such a support is needed.

MS. JUDITH DWARKIN: Specific --

MR. GERRY PROTTI: We -- I was just going to say, we see Mannville development as -- as the next --

MS. JUDITH DWARKIN: The big --

MR. GERRY PROTTI: -- way of the future. Given the uncertainty around commodity prices, the pace of development, I think, will be slower than what people anticipated two (2) years ago when we had the gas price spikes.

MS. JUDITH DWARKIN: Right. And

specifically on the gas cost allowance, you're suggesting the water handling costs be factored in?

MR. GERRY PROTTI: Yes.

MS. JUDITH DWARKIN: For Mannville. Yeah.

Okay. Thanks.

THE CHAIRPERSON: Sam...?

MR. SAM SPANGLET: Good morning.

MR. GERRY PROTTI: Good morning.

MR. SAM SPANGLET: First of all, I'd like to congratulate you for you and your people to create such a premier company. EnCana is a premier company. And there's good news and bad news in that because you guys are a benchmark; you know, everybody looks at the way you do things, they want to copy you, and that's why I'm coming to the costs thing -- including on the cost side.

And I thought I'm not going to ask questions about costs today anymore but since you brought it up, I'd like a little clarification here.

I have difficulties -- first of all, I'm a free market guy, so what you guys -- oil companies do with costs is their business. But I have difficulties to link it to royalties, which is the Albertans sort of share.

And the cost side is controlled. And one of the comments I heard in the oil patch, because I'm connected to the oil patch myself, is EnCana is leading the way by increase of manpower costs. And everybody is trying -- and you're the benchmark, as I said upfront, so everybody got to copy you. So it keeps going up. So the controllable side of the costs, what do you say to this?

I know some people were whining to me about seven (7) weeks vacation and every Friday off and that, obviously, translates itself to lower productivity and people are moving from one company. Like, the whole thing is pushing up.

The point I'm trying to make, it's the oil company's prerogative to do whatever you want with cost, it's none of my business really only as a shareholder it is, and I am a shareholder by the way, but, I just want to hear your reaction to it.

MR. GERRY PROTTI: Yeah. The -- I mean, clearly for us when we speak to our investors and to analysts, cost control is something we have -- that's number 1 in our agenda.

So they want to understand that -- how are we spending our capital dollars; are we really seeing the best -- maximizing the value from those capital expenditures. Then on the operating costs side, as you know, they have this very rigorous metrix where companies are compared to their peer groups. And -- and so we -- we definitely have a focus on that.

We have increased our, -- things like the Friday off, and more recently, vacation for our employees but that's actually part of our strategy. There is a war for talent out there and we recognize that people want the work life balance. If anything, we think that it increases productivity rather than decreases it. And so, we're balancing all of that on a continual basis.

And then the other area on the cost side is -- is the technology. Is the investment in -- in new technologies, working with our companies in the service industry together, in partnership, to develop the technologies required to develop the resource. And if you look at the type of drilling, the type of completions required to develop an unconventional gas well today versus five (5) to ten (10) years ago, there -- it's night and day.

And -- and without those cost -- without those technology improvements, our costs would be at a point where we couldn't develop these resources. So, we certainly hear that -- those types of comments but we do our best to make sure that cost is -- is one of the best metrix.

And in terms of our operating costs, our operating costs run the lowest in the industry, so we feel we compare well with the peers.

MR. SAM SPANGLET: Now, I do -- I do understand that. It's as I said before, it's not -- it's a free market, it's your business what you do with wages and, you know.

But, what I'm saying is that it's -- I was myself an executive, I just retired, and I'm also sort of guilty -- what I believe the -- the whole cost structure that is located in Alberta is our own fault.

MR. RICHARD DUNN: Just a --

MR. SAM SPANGLET: Our own fault, we've done that. And I would have -- I feel uncomfortable when we connect the cost to the royalties when it's all our fault. Me included but it's -- we're there.

The second question is about the environment side. Greenhouse gases, which is a concern to all of us and yourself too, what -- what's your outlook on this one? How do you feel -- should it be sort of encouraged, discouraged by royalties or should it be a separate type of issue altogether? What's your feeling about it?

MR. GERRY PROTTI: So two (2) questions, and I'd like to just come back to the costs one --

MR. SAM SPANGLET: Okay.

MR. GERRY PROTTI: -- one more time, and I'm going to ask Mr. Dunn to supplement that and then we'll come to the greenhouse gas.

MR. SAM SPANGLET: Okay.

MR. GERRY PROTTI: On the cost side, I think that, -- you know, there's no question we've had that inflationary effect within the economy but I do think that the government and through the Crown, and producers are aligned, we all want to have the most economic, the most profitable.

To the extent we get the most profitable projects and operations, the return to the Crown in terms of the royalty payments where it's a direct deduction, as in the oil sands --

MR. SAM SPANGLET: Yeah.

MR. GERRY PROTTI: -- as we discussed, it's directly aligned.

And also in terms of the income tax system. We -- we increase our profits our income taxes go up. So I think that -- that alignment is there and the royalty system does try to capture economic rent which includes, you know, as after costs. So they are -- you know, otherwise you go to something that's a very fixed, absolute percentage of gross revenue.

MR. SAM SPANGLET: Yeah.

MR. GERRY PROTTI: And we've had those -- we've had those royalty systems in the past in the province.

Richard, on the costs.

MR. RICHARD DUNN: Yes, Sam, just want to add, there's no doubt on the unconventional resources cost management to make them viable is everything. Certainly with the technology driving down cost but some of the things -- and we certainly recognize - and Jerry had mentioned in there - the need for project management and a lot of very good sophisticated project management with a number of wells we're drilling you utilize that to a great extent.

What we have focussed on as well is spreading out our activity throughout the course of the year, load levelling and we find that that's a very very effective way of managing our costs. We can offer, again, year round activity to our suppliers, we focus very much on local suppliers as the bubbles show.

But, with resource plays and the development of the unconventional plays, these are long term plays as some of our cash flow indicated the amount of activity that we have and that we are looking at offering multi-year deals to various suppliers and that gives them the stability, it gives us the stability, the certainty of the -- on the cost side and manage our economics that way. So, a very very important part of it.

MR. SAM SPANGLET: Thanks.

MR. GERRY PROTTI: Just on the greenhouse gas question, could I call up slide 16? Just the --- this is the one on --- this is, this is effectively Foster Creek or SAGD Technology, 60 percent of that operating cost is natural gas. When you burn the natural gas you're producing a lot of emissions, so, we have --- we're focussing on down-hole technologies to improve the productivity from the reservoir, so, special pumps that handle hot abrasive fluids more efficiently of really making sure that we're doing everything we can to reduce our steam/oil ratio.

Our steam/oil ratio at Foster Creek is the best in the business, that reduces our emissions and longer term we're going to have to find solutions to replace natural gas and to find alternative fuels and in doing so, it will reduce our costs, increase the profitability.

So, I actually think the greenhouse gas issue as it relates to oil sands is in many ways already captured through the royalty system.

MR. SAM SPANGLET: Thanks very much.

THE CHAIRPERSON: Evan...?

MR. EVAN CHRAPKO: Thanks for your presentation. I'm trying to reconcile a couple of your answers segue into two (2) different of my questions.

The reconciliation I'm after is to what extent, if any, does the fact that costs are allowed, we've heard a lot of reference to costs and you're in a good position to answer whether or not we all together as tax payers and citizens of the province amount to co-investors in that technology by allowing the costs.

I mean, how much -- besides whatever you might be claiming in the way of R&D or credits in regards to the corporate income system that way. Do you see that -- is it correct for us to think of your investments in technology as something that we're subsidizing? Or is that just a cost of doing business? R&D and perpetual improvement in terms of efficiency and what you just mentioned on slide 16?

MR. GERRY PROTTI: So we're talking oil sands here in terms —

MR. EVAN CHRAPKO: Both. You've touched on technology in several aspects of your presentation.

MR. GERRY PROTTI: Yep. So in terms of the technology development, let's take SAGD as an example.

So, the original concept in terms of steam assisted gravity drainage was developed in -- as partnership between several companies. It involved the Alberta government directly through an organization called AOSTRA Alberta Oil Sands Technology Research Authority. But that was just the conceptual development.

And there was direct government funding as there was industry funding as well. But it really took projects like Foster Creek, the work we did at Senlac to really understand resource, and understand how we can apply the technology more effectively.

So what does the royalty system do to recognize that? There's no question that every one of those dollars goes into your payout calculation, and delays as your testing, piloting new approaches, delays project payout.

Throughout that time period the -- the -- the company is not making any profit. It's in a negative cash flow position. The Crown is receiving, to the extent that it's production, that 1 percent gross royalty.

So, there is a payment to the Crown, the owner of the resource, the people of Alberta reflecting that, you know, a valuable nonrenewable resource is being produced. One payout occurs then and what was selected was a 25 percent rate net of costs as the appropriate share.

Now, if costs were higher and there is more technology being developed, there is a sharing by the Crown of that because the net profit is lower of that expenditure. But that's the type of expenditure required to develop -- maximize development of -- the long-term development of the resource, all elements of it.

So it is a sharing mechanism. Whether that rate is appropriate or not is -- is for you to determine as a panel.

MR. EVAN CHRAPKO: So you're saying as a landlord, we're helping you to help us get the maximum out of the basin?

MR. GERRY PROTTI: Absolutely.

MR. EVAN CHRAPKO: And then the second question I have, which takes a different direction altogether, so unrelated. Technology is the question of the marginal players.

EnCana, as a large and hefty player in this basin, with a deep balance sheet, may or may not be affected as much by price swings or the volatility in terms of the commodity markets.

Should -- in your opinion, should it be the worry of the royalty system and the corporate income tax system to prop up the marginal players, your competitors around the edges, or your smaller neighbours in some of these plays?

MR. GERRY PROTTI: Well, there is -- there has historically been that element in the royalty system -- the Alberta Royalty Tax Credit and there is -- there is a lump sum -- what's it called? For the freehold mineral tax.

MR. RICHARD DUNN: Some sort of deduction, I'm not sure of the name.

MR. GERRY PROTTI: Yeah. There's a deduction which removes the requirement for a freehold mineral tax payment for people who have freehold land, who have very small production. And I think there's -- it takes out over two-thirds (2/3). It was actually -- I didn't realize what the number was, I saw it in your background papers that you produced on freehold mineral tax, but it takes out the majority of individuals who were at that small end of the scale.

So I think the system has had in the past. We don't really have an opinion on it. We're -- we're just using the system as we understand it for a company of our size.

MR. EVAN CHRAPKO: Thank you.

THE CHAIRPERSON: Andre...?

MR. ANDRE PLOURDE: Thank you for your presentation and I look forward to reading the material when it gets to us.

A few things if I may. In terms of you have a number of slides that show full cycle cashflow analysis of various projects. I guess I'm going to ask whether or not these are actual projects or illustrative of what would happen.

MR. GERRY PROTTI: The -- they're based on actual in terms of -- and we'll give you some more details on these two (2) with actual data, but they're obviously pro forma illustrative in terms of go forward, but would be our best estimate at this time.

So in the Strathmore one, for example, we are there with partners; this is not strictly an EnCana development.

MR. ANDRE PLOURDE: Right.

MR. GERRY PROTTI: And I think you received a presentation from Quicksilver. Quicksilver would be our partners in Strathmore. So those who represent our -- the green bars are actual capital and operating costs to 2006, and then with pro forma estimates of how we think the reservoirs will perform, the individual well -- so the overall Horseshoe Canyon play and with our estimates of costs and prices, obviously, and all the assumptions that go into that. And we -- we can certainly provide all of that detail that you require.

MR. ANDRE PLOURDE: Because this is not a single well, this is a --

MR. GERRY PROTTI: No, this --

MR. ANDRE PLOURDE: -- a development of a --

MR. GERRY PROTTI: -- this actually represents --

MR. ANDRE PLOURDE: -- project. Okay.

MR. GERRY PROTTI: This actually represents --

MR. ANDRE PLOURDE: Right.

MR. GERRY PROTTI: -- and, Andre, I'll just give you some of the data on that. So for the Strathmore area, Horseshoe Canyon. So that's slide 12.

MR. ANDRE PLOURDE: Yeah.

MR. GERRY PROTTI: This is twenty-four hundred (2400) wells, fifteen (15) townships of development, about six hundred (600) sections of development and, again, we can -- we can provide further detail on that.

MR. ANDRE PLOURDE: Sure.

MR. GERRY PROTTI: On the SAGD project,

that was modelled off Foster Creek.

MR. ANDRE PLOURDE: Okay.

MR. GERRY PROTTI: And it represents about $11 billion Canadian investment. Sixteen hundred (1600) well pairs and then approximately, I think, 200,000 barrels per day at -- at peak production and held at that level.

MR. ANDRE PLOURDE: Okay. Now I'm assuming that is not freehold? The SAGD project is not a freehold? It's not on your freehold land. The assumptions in this don't look like freehold.

MR. GERRY PROTTI: It's on Cold Lake Air Weapons Range.

MR. ANDRE PLOURDE: Thanks. One of the -- and both of these --

MR. GERRY PROTTI: And -- and I was just going to say --

MR. ANDRE PLOURDE: Sure.

MR. GERRY PROTTI: -- the reason why we call it typical is -- that's probably the wrong word, there's no such thing as a typical, but it's typical in terms of the type of pattern.

MR. ANDRE PLOURDE: Okay.

MR. GERRY PROTTI: Christina Lake, when we develop it, will have a similar pattern but will have different elements.

MR. ANDRE PLOURDE: Right.

MR. GERRY PROTTI: Borealis will have different elements, different operating costs and that, but the same type of pattern in terms of the upfront capital exposed.

MR. ANDRE PLOURDE: Okay. One thing on both of these, in some sense, in the early years you've got capital costs and some small operating costs along the way. You would get from this kind of generate corporate income tax deductions.

How are these factored into the analysis?

MR. GERRY PROTTI: So all of this analysis is after tax cashflow. So, the assumption I believe - and I'll ask Richard to confirm - but I assume it's full flow-through taxation --

MR. RICHARD DUNN: I believe --

MR. GERRY PROTTI: -- for the project.

MR. RICHARD DUNN: No, I believe it would be on a project basis.

MR. GERRY PROTTI: Sorry. Project tax.

MR. ANDRE PLOURDE: So it's a project base -- MR. RICHARD DUNN: And that's why --

MR. ANDRE PLOURDE: -- and that's why you have a red bar at tax, and you deferred the tax until the tax -- until you generate revenues?

MR. RICHARD DUNN: Yes, that's correct.

MR. ANDRE PLOURDE: That's not how it would work?

MR. RICHARD DUNN: No, it's not, but it is --

MR. ANDRE PLOURDE: Right.

MR. RICHARD DUNN: -- how we evaluate the projects.

MR. ANDRE PLOURDE: Sure, that's right.

MR. RICHARD DUNN: And it's consistent without -- throughout the industry. This is how projects are decided upon funding so.

MR. ANDRE PLOURDE: Sure, I don't disagree, but that's not how it would work in your --

MR. RICHARD DUNN: Yes.

MR. ANDRE PLOURDE: -- in managing your portfolio projects, you would kind of manage your tax deductions.

MR. RICHARD DUNN: Absolutely.

MR. ANDRE PLOURDE: Okay, thanks.

Two (2) more questions if I may. First in terms of Mannville. You talked about this in terms of new technology.

How transferrable is the technology from one project to another? In terms -- what do you think at this stage?

MR. GERRY PROTTI: Well, the -- what we found with -- what we found with both Horseshoe Canyon, with Mannville, is there are -- there are so many analogs that you come to the conclusion that every one of these coal seams is unique in terms of its characteristics.

So when we first began to develop the Horseshoe Canyon, we were using drilling and completions techniques that were not optimized to the coal seam. So -- and we ended up with nitrogen fracs, for example --

MR. ANDRE PLOURDE: Right.

MR. GERRY PROTTI: -- that we hadn't utilized to any large extent.

With Mannville, I think the -- so the basic principles are there but you're going to have to tailor your approach, your strategy, with respect to the reservoirs once you've done some experimental wells and then the pilot wells.

Do you want to talk about some of the specifics with the Mannville --

MR. ANDRE PLOURDE: No, I think it's okay. Just to understand -- I don't really need to get into the details of the technology because I wouldn't get there.

MR. GERRY PROTTI: Yeah.

MR. ANDRE PLOURDE: But I think it's the notion of how transferrable the material is; that would be useful, just a general.

MR. RICHARD DUNN: Just to talk to that, Andre.

Mannville will be drilling with horizontal wells. And absolutely this horizontal well drilling technology is going to make the play and it's been transferred from other plays that we -- that we have worked. SAGD would be a great example. We are taking the same drillers that had their SAGD horizontal well experience, where they're placing a well within a metre on the vertical, and transferring that over to these relatively thin Mannville coal seams.

MR. GERRY PROTTI: Which hasn't been done before.

MR. RICHARD DUNN: Absolutely. So it is a great example of one technology developed for an unconventional play transferred over. It was a good question.

MR. ANDRE PLOURDE: Okay. Good. Thanks.

Last thing is on your last slide. Your last line of your last slide. You talk about maximizing the Alberta public interest.

Could you kind of -- what does that mean to you?

MR. GERRY PROTTI: The -- that's a great question. The -- and it is difficult to define. I guess when we look at that, the Alberta public interest is obviously having return to the development of the resource that allows for hospitals and schools and all the funding that the general revenue fund provides.

It's having an environment that is protected and allows all options, as many as possible, to continue in the future in terms of the use of the surface of the land. It also allows a healthy level of economic activity that provides the jobs that people need to -- to maintain -- be gainfully employed.

So all of those factors enter into it and it's a continuous balancing act in terms of trying to maximize those elements.

MR. ANDRE PLOURDE: Great. Thank you.

THE CHAIRPERSON: Q1 '07 was a good quarter for EnCana?

MR. GERRY PROTTI: Yes.

THE CHAIRPERSON: Really good or one of the best?

MR. GERRY PROTTI: I don't have the numbers right in front of me. I think we can certainly get those but a very healthy quarter. And last year was our highest profits for '06.

THE CHAIRPERSON: Just recently we've heard that the US Feds are going to initiate a royalty review for the United States.

Can you speculate what might have driven them to make that decision?

MR. GERRY PROTTI: Well, it's -- we can certainly speculate and I'd be happy to comment on that. It's an excellent question because we have never seen as many pieces of energy legislation in the Houses of -- the House Representatives and the Senate than we see right at the moment.

Many of these are driven by environmental issues; many are being driven by a sense that there's -- gasoline prices are too high. There are a lot of political factors.

What we're not seeing that had been kind of the hallmark of the administration's policy to this point was domestic supply development.

The current Democratic Houses, Mr. Chairman, are focussed very much on those other issues, so, it's a -- it's a very political environment; it's one where both Houses of Congress are in -- in conference. And what we'll see out of it, we're not sure.

THE CHAIRPERSON: Just one quick question, because I am running behind as the Chair and I need to kick my own butt.

This political environment that you're speaking to, does that have an impact on investment in the United States for your company? Does it --

MR. GERRY PROTTI: You know, I think that our -- our assumption would be as EnCana that in North America these debates will always have a balance in them. And when we look at the declines rates in onshore and offshore conventional resources in the US, in particular, under any scenario, under any political environment, the US is going to require as much energy as it can develop.

So, that gives us a high degree of confidence that these debates will occur, it will all be balanced. And whatever legislation and changes come forward won't lose sight of it; won't make projects uneconomic under the current price regime. So we have a high degree of confidence we'll be able to continue investing.

THE CHAIRPERSON: Thank you both for your presentation this morning.

MR. GERRY PROTTI: Thank you.

THE CHAIRPERSON: We appreciate it.

Next we have an opportunity to hear from

Mr. Soucy, Petroleum Services Association of Canada. I'll allow you to get set, sir.

Welcome, sir.

PRESENTATION BY PETROLEUM SERVICES ASSOCIATION OF CANADA:

MR. ROGER SOUCY: Thank you. Good morning.

And on behalf of our organization, I'd like to thank the Panel for the opportunity to present here in Medicine Hat as our choice location for -- really, because of the nature of the organization we are and the members that we represent.

My name is Roger Soucy, I'm the President of the Petroleum Services Association of Canada. With me today on my right is Frank Tirpak, the President of Lonkar Services and the first vice Chair of PSAC. Our Chairman is not here today because we lost him early in June; he was transferred to Moscow. I don't know what he did to deserve that, but...

Directly behind me is David Yager, the Chairman and CEO of HSE Integrated Limited and a director of the Association as well as Elizabeth Aquin, senior vice- president with the staff of PSAC.

PSAC is a national organization representing the service supply and manufacturing sectors within the upstream petroleum industry.

And, again, I'd like to thank the Alberta Royalty Review Panel for the opportunity to present this paper on behalf of the entire service and supply sector.

I would like to point out that PSAC has submitted a more detailed paper to this Panel. That paper provides the references for the data in this presentation and elaborates on the points I'm going to make today.

In my presentation this morning, I'm going to start by providing a brief overview of the petroleum services, supply and manufacturing sector, then I'm going to summarize the benefits realized from the petroleum industry in this province. And, finally, I'm going to highlight some of the impacts increased royalty rates could have on the livelihoods of people working in the industry.

Petroleum service, supply and manufacturing companies contract almost exclusively to oil and gas explorers and producing companies providing them with valuable services that keep the petroleum industry operating.

Many Albertans do not realize there are more than three (3) dozen different services needed to drill, complete and maintain oil and gas wells.

These services include contract drilling rigs, drilling fluids, wire line, fracturing, perforating, cementing, well testing, snubbing, transportation, construction, safety environment services, as well as equipment supply and manufacturing, just to name a few.

Companies offering these services operate in and between virtually every community in the province, from Rainbow Lake to Medicine Hat, Lloydminster to Grande Prairie. Wherever there is oil and gas activity in Alberta, there are petroleum service companies, owners and employees. In fact, PSAC estimates that more than 80 percent of the service sector's employees live and work outside of a major centre like Calgary.

Currently two hundred and fifty-eight (258) - that's more than 95 percent - of PSAC's member companies are Alberta-based. Together, PSAC members employ 68,000 people, and that's only about half the total number of people involved in the sector.

These people live and work in small towns and cities in every corner of Alberta. They pay taxes, they vote, and they spend their disposable income here.

These people and their families are living proof that the Western Canadian oil and gas industry isn't just about big oil corporation, it's about people, ordinary people.

As a result, any decisions made that affect Alberta's petroleum industry, like changes to the royalty structure, must be made with people - not just corporations in mind.

We know that Alberta counts on non-renewable resource revenue to fund its many programs and services. This revenue comes directly from royalties, land leases, fees, corporate taxes paid by companies in the petroleum industry.

Further, the industry is responsible for creating and sustaining thousands of well-paying jobs in this province and country. According to a recent study by Stats Canada employment in the upstream petroleum industry increased 64 percent over the past ten (10) years; more than three (3) times the average employment growth in a country.

Of the 177,000 people directly employed in the upstream petroleum industry, 75 percent live in Alberta. The people working in the -- in this industry in Alberta can earn about thirty-eight dollars ($38) an hour, almost double what workers in other industries make across Canada.

An additional ninety-eight thousand (98,000) people work in jobs that support the industry;

an increase of 88 percent from ten (10) years earlier.

Because of the petroleum industry, people are operating and working in hotels, restaurants, car and truck dealerships, coffee shops, retail stores, technology, construction, communication companies, banks and finance companies, even law and accounting firms, safety and environmental safety firms, and many more services. And all these people are paying their fair share of provincial income taxes, boosting the government's total share from the oil and gas industry.

Even Albertans who have nothing to do with the industry benefit in the Alberta advantage which has been made possible by the efforts and commitment of the petroleum industry. The statistics on this slide are proof of that.

Viewed from any angle, the industry and the system that it works within are clearly working.

The oil and gas industry is operating fully in the province, employing hundreds of thousands of people and paying billions to the government.

In turn, the government is using its substantial annual non-renewable resource revenues and other tax revenues to fund programs and infrastructure that benefit all Albertans.

Even so, some still say it's not enough.

Some say the government shares, specifically from royalties, should be higher.

But I stress to you today that increasing royalty rates is not a simple process that only affects big oil and gas corporations. The fact is, seemingly small changes like royalty increases can have large unintended consequences. Its trickle-down effect that happens quicker than one might imagine. Increased costs or even cost uncertainty can cause the industry to rein in activity. Less activity means reduce provincial revenue from the industry. And any retraction in activity levels has a direct and immediate impact on the thousands of people working in the service sector and their families.

When producers curtail activity, service companies close outlets, lay off staff, and send their equipment elsewhere. That results in increased unemployment in the province which then leads to reduced royalty revenue -- provincial revenue from income taxes and decreased personal disposable income to be spent in Alberta, and an overall erosion of the Alberta advantage.

I mentioned earlier that PSAC members represent two hundred and fifty-eight (258) companies in Alberta; that is an estimate but there is -- it is an estimate that there upwards of three thousand (3,000) service companies operating all over the province, including hundreds of small mom and pop operations. To survive, these entrepreneurial operations rely on a vibrant local petroleum industry and a stable fiscal framework.

Increased royalties and their resulting impacts on the industry's activity levels would have a negative and potentially dangerous, disastrous effect on the people working in the service sector in this province.

Your goal in this review is to determine what's fair to Albertans. As you contemplate increased royalty rates, I urge you to consider the hundreds of thousands of Albertans and their families who rely on them who work for or in support of the petroleum industry.

Because of this year's slow down in activity, some companies are already laying off staff and others are sure to follow.

A change in royalty structure would exacerbate the already precarious situation these people find themselves in.

Thank you for your attention and I refer you to our paper we submitted to support our presentation.

Thank you.

QUESTIONS BY BOARD:

THE CHAIRPERSON: Thank you, sir. If you'll allow us a few questions.

Andre...?

MR. ANDRE PLOURDE: Thanks. Thank you for your presentation. I've read the materials, so, I'm going to try and ask some questions about both the material that you submitted and the presentation.

So if you go to -- let me start with cost issues, on page 7 of your -- of the material that you submitted. You have a discussion about how costs are high here in Alberta.

What's your feeling -- how does this compare to costs in onshore or US, for example? Is there reason to think that costs are higher in Alberta, lower in Alberta --

MR. ROGER SOUCY: Well, I'll defer --

MR. ANDRE PLOURDE: -- or both --

MR. ROGER SOUCY: Yeah, okay. That's a good question, Andre, and I'll defer that to Frank because he's got operations in both -- in both areas and he can speak specifically to that.

US costs versus Canadian costs.

MR. FRANK TIRPAK: Yeah. I note that definitely the US, the labour costs are a lot less than they are in Canada here. The cost of doing business in the US is a lot less than it is in Canada is what we're finding. Our -- and even though our margins are about the same but a little -- maybe a little bit greater than the US, we simply do much better in the US.

Here, I think you've got to keep in mind that the drilling is -- is not happening in the areas where most of our population is. In Canada we have -- now we have to go out further into the mountains or further away from the communities where people live, so, there's a -- there's a huge increased cost there of -- of housing the people there in camps and so forth like that, so there's a huge increase of costs.

The costs of labour. The biggest problem we have is trying to find people in a new generation that want to live away from home. If they -- they want to be home at night, they want to take their girlfriends to movies, things like that. It's very difficult to find people that want to work away from home. That's -- you've got to pay them a little bit more, so, our labour costs are going to be up, there's a lot of competition out there.

Anything else you can think of Roger I've missed?

MR. ANDRE PLOURDE: Okay. Good. Thanks.

On page 10 of your presentation, you have this apples to apples, apples to oranges analogy and you kind of inform us about how making apples-to-oranges comparisons would be inappropriate, but what you don't do is give us ideas of what apples-to-apples comparisons would be.

So what would be apples to apples comparisons?

MR. ROGER SOUCY: Now, you're relating to royalty?

MR. ANDRE PLOURDE: Royalties. One size does not fit all. It's not comparing apples to apples, right? The Norway-Alaska routine. And I'm not going to disagree, I'm -- just tell you right now, okay.

But, what would be apples-to-apples comparisons?

MR. ROGER SOUCY: Well, I -- the difficulty we have, and I tread into things like the specifics of royalties because it's not really our area of expertise -- you know, we're contractors, that's something that -- and I'm sure you've asked the question to -- to the producing industry in one fashion or another that are much better situated to do that.

But, you know, we've -- I think the reason we put that in there is, you know, we've heard the arguments that people have used in comparing the Alberta royalty system versus other jurisdictions. And our point there is is that there's lot of example, if you look into it, to show that you're not necessarily comparing apples to apples.

I mean, in Norway, for instance, it's a federal state tax system where here you're dealing with provincial and then federal taxes and so on and so forth, so the layering of taxes is different.

So, you know, that's what we meant by it is that picking a number and saying, you know, 25 percent is right or wrong versus somebody who is getting 30 percent, there's a lot of other things that are going --

MR. ANDRE PLOURDE: Okay.

MR. ROGER SOUCY: -- into it to make that up and --

MR. ANDRE PLOURDE: Okay. Okay.

MR. ROGER SOUCY: -- when you're looking at that you have to -- you have to --

MR. ANDRE PLOURDE: So in terms of comparisons, you have advice for us on what not to do, but you don't have any advice for us on what to do?

MR. ROGER SOUCY: That's right.

MR. ANDRE PLOURDE: Okay.

MR. ROGER SOUCY: Particularly in royalties because just don't feel that --

MR. ANDRE PLOURDE: All right.

MR. ROGER SOUCY: -- that we have the expertise to --

MR. ANDRE PLOURDE: So you have the expertise to tell us what not to do, but you don't have the expertise to tell us what to do?

MR. ROGER SOUCY: Well, only from the standpoint that if we can -- we can tell you the effect it has on our sector of the industry in the reduced cashflow it does it -- it will have on the producers who reinvest that cashflow.

MR. ANDRE PLOURDE: No, I'm -- I guess at the stage I'm --

MR. ROGER SOUCY: That's our only --

MR. ANDRE PLOURDE: -- only talking about comparisons, I'm not even talking about --

MR. ROGER SOUCY: All right.

MR. ANDRE PLOURDE: You know, what should we be comparing?

MR. ROGER SOUCY: All right.

MR. ANDRE PLOURDE: Okay. Last thing is on one (1) of your slides that's one (1), two (2), three

(3), four (4), fifth slide, impacts of increasing royalty rates.

So it's kind of increase royalty rates, a whole bunch of things happen. So, I'm going to try to turn the question around on you and say, should I conclude from that that the optimal royalty rate is zero?

MR. ROGER SOUCY: Well, --

MR. ANDRE PLOURDE: 'Cause all of this --

MR. ROGER SOUCY: Yes.

MR. ANDRE PLOURDE: Any increase --

MR. ROGER SOUCY: Sure.

MR. ANDRE PLOURDE: -- has negatives effects, as you've pointed out there, so should I conclude from that that the optimal royalty rate's zero?

MR. ROGER SOUCY: Well, if -- from -- from the standpoint of the amount of activity that would be produced, the answer to that question would be yes.

Now, obviously there's more in play here than -- than just a level of activity and --

MR. ANDRE PLOURDE: Right.

MR. ROGER SOUCY: -- and, you know, the province feels and it -- I mean, there obviously there's some justification for that, that as the owner of the resource it has -- it wants another piece of it as well.

MR. ANDRE PLOURDE: Right.

MR. ROGER SOUCY: So that's what we're debating and discussing today.

MR. ANDRE PLOURDE: Right. And that's not on the slide?

MR. ROGER SOUCY: That's correct.

MR. ANDRE PLOURDE: Okay, great, thank you.

MR. ROGER SOUCY: All right.

THE CHAIRPERSON: Judith...?

MS. JUDITH DWARKIN: Thank you. Good morning. Back on the slide that you were just speaking to from Andre, would it be fair to say that you're actually missing a piece of the flow diagram in that?

What we've seen over the last five (5) months in Alberta is that the -- the sector is adjusting to a price cost squeeze so, in fact, you don't have to start with increased royalty rates at the top and show this cascade of -- of bad effects, but rather a price cost squeeze has -- has caused producers to reign in their drilling activities to some extent and then an offshoot of that is that we're seeing costs coming down in the service sector.

So in -- in some ways the cure for high costs is low activity and then the cure for low activity is lower costs. And related to that in your -- in your written presentation you note that it's basically it's bad policy to develop, you know, make long-term changes to royalty policy based on short-term circumstances and that's completely true.

However, we're talking about short-term circumstances, cyclical downturn in the service sector as somehow being a reason why we shouldn't be examining the royalty system today. So it doesn't seem to work in reverse.

Do you have a comment on that?

MR. ROGER SOUCY: Well, yeah, well, I think that the very fact that there are cycles in the industry is something that has to be factored into -- into the process --

MS. JUDITH DWARKIN: Mm-hm.

MR. ROGER SOUCY: -- and, I mean, the pressure to, in fact, have this panel convened in the first place has come from, you know, high prices, high profitability of -- of companies and a -- a sector of our society that wants a bigger piece of that -- of that pie.

And so, you know, fair enough let's -- let's open the books and have a look at it, but in -- in looking at it one has to keep in mind that prices, as we've seen, aren't always at high levels, certainly on the gas side, we -- we've proved that. And, yes, costs have come down, but those are, to some degree, costs that perhaps are controllable --

MS. JUDITH DWARKIN: Mm-hm.

MR. ROGER SOUCY: -- for instance, labour costs has not come down and they really can't come down to any -- any significant point because, you know, if we don't pay them they'll just go somewheres else and we've seen since January probably a loss of some ten thousand (10,000) jobs in our sector of the industry because of the downturn in activity.

And I don't think any of those people are standing around with their hands in their pockets on street corners looking for work, they're gone, they're working in other areas of the economy. And so we, you know, we can't start reducing our labour costs and expect to keep the people when they can very easily go to other sectors.

So, yes, costs have come down, but I think they're -- they're -- it's not a homogeneous -- the service industry isn't homogeneous, there's many factors involved in it. The drilling industry is very -- as far as the drilling rigs industry is very different than the other aspects of the service industry.

Manufacturing portion of the service industry is very different than the -- than the field service industry. So, we haul -- they all have their peculiarities in this -- in this grand scheme.

MS. JUDITH DWARKIN: Thank you.

THE CHAIRPERSON: Evan...?

MR. EVAN CHRAPKO: My questions have been covered, thank you.

THE CHAIRPERSON: Ken...?

MR. KEN McKENZIE: Yeah, this gets back to Andre's point. I'm just having a little trouble connecting some of the statements you're making. This has to do with this optimal royalty rate somehow being zero (0). I mean, you raised the spector of the National Energy Program in your in your presentation, in your written presentation. And, if you'll allow me a bit of editorializing, I think that's just a trifle disingenuous.

I mean, how on earth can you compare the impact of a royalty review on something like the drastic impact of the -- change like the National Eenergy Program when you have absolutely no idea what the outcome of the royalty review will be? And there seems to be this idea that even a small change in the royalty system will have a big impact on economic activity.

I'm just afraid that I do not see that connection. There has to be a continuum of impacts.

Right, and not this sort of discontinuity which -- which seems to come up in your presentation that, you know, a small change here will have drastic impact somewhere else.

I mean, I understand what you're saying. There will be an impact in either direction depending upon what direction that the things change. There's no denying that. But I'm just wondering where this idea of this apocalyptic scenario comes from? So if you could just address that.

MR. DAVID YAGER: If I could chip in here. The greatest flaw in the National Energy Program was --- and this, of course, being to some degree addressed by this panel today, is it was written in a policy vacuum in the sense that there were the high cycle items, there was high profits for the producers and a perceived profiteering much like we'll see today.

And there was no understanding of how the industry actually worked in the trickle down effect. For those of you who are old enough, one of the questions in the House of Commons was: Are those oil rigs going to the United States or are those gas rigs going to the United States? Because we didn't need the gas rigs. We had an oil shortage, so, those ones didn't matter.

On behalf of the service sector I just

think that the -- the point is, is that the trickle down effect is a massive multiplier and it's like you guys have all got a financial background. It's like a royalty. You know, 5 percent off the top line is more like 25 or 30 percent on the bottom line.

So, I would say apocalyptic is a bit strong in your question, Mr. McKenzie, but I assure you one point off the top has a massive multiplier down the income statement and we're the little guys at the bottom.

MR. KEN MCKENZIE: Sure, I understand. I mean, I'll retract the apocalyptic and I'll throw your words back at you, precarious and disastrous, so, you can substitute them. I have no problem with that.

MR. DAVID YAGER: Well it will be, it will be. It'll have the --- it'll have a multiplier effect as we've tried to demonstrate, that I just hope that you'll consider, that's all.

MR. KEN MCKENZIE: Mm-hm. Absolutely. I truly -- I mean, it's not the issue of the connections. I mean, I'm well aware of the linkages and I very much appreciate the fact in your presentation that you've drawn those out.

I'm just having a little trouble with this sort of --- what I view as a discontinuity.

MR. ROGER SOUCY: Well --

MR. KEN MCKENZIE: And invoking, quite frankly, you know, a policy was invoked twenty five (25) years ago that really has nothing to do with what we're up to today so.

MR. ROGER SOUCY: Well except that, again, we're representing a sector of the industry that was absolutely devastated by policies that were done in a vacuum.

MR. KEN MCKENZIE: Mm-hm.

MR. ROGER SOUCY: You know --- and we're not suggesting that you're going to do that but we don't know where you're going with this either.

Now, it's interesting that you say that --- in your comment you mentioned that there'll be small changes.

MR. KEN MCKENZIE: No, I didn't.

MR. ROGER SOUCY: Well --

MR. KEN MCKENZIE: I said I'm just --

MR. ROGER SOUCY: Well --

MR. KEN MCKENZIE: I'm saying that --

MR. ROGER SOUCY: -- I'm not going to ask for the transcript back, but --

MR. KEN MCKENZIE: Well --

MR. ROGER SOUCY: But -- you know, so we don't know where you're going on this thing, what you're going to recommend, so, to us, the whole scale is there.

MR. KEN MCKENZIE: Mm-hm.

MR. ROGER SOUCY: And you know, something like the National Energy Program went after big oil and didn't get big oil. They got us cause we can't move like the oil companies can.

MR. KEN MCKENZIE: Mm-hm. I appreciate that.

MR. ROGER SOUCY: And twenty five (25) years ago the game wasn't good here, they went someplace else and all those mom and pops in Podunk, Saskatchewan, Podunk, Alberta went out of business.

MR. KEN MCKENZIE: Sure. I understand that. Thank you.

THE CHAIRPERSON: Sam...?

MR. SAM SPANGLET: Good morning. A little bit of help because I don't think that I --- that we got a real answer. United States vs Canada. I'm getting an inferiority complex very close concerning it. I don't understand why the Americans beat us in everything.

Here you have the same price of gas. The same price of oil. And the guys in the US also like girlfriends take them to the movie anyway, I'm sure, and all that stuff. And there all the rigs are busy like hell. And here we only 50 percent busy. What is it?

I think I have an answer by the way, but I want to hear your answer.

MR. ROGER SOUCY: Well there's a number of points. I think the dollar is one ---

MR. SAM SPANGLET: What do you mean dollar?

MR. ROGER SOUCY: Canadian dollar, the value of the dollar has gone up dramatically in the last couple, three (3) years.

MR. SAM SPANGLET: Yeah.

MR. ROGER SOUCY: We have an economy here that is hyper inflated. And ---

MR. SAM SPANGLET: And who created it?

MR. ROGER SOUCY: Well, I mean, it's the nature of the industry here plus all of the other ---

MR. SAM SPANGLET: No.

MR. ROGER SOUCY: -- I think spin-off industries --

MR. SAM SPANGLET: No. It's leadership and productivity; that's what it boils down to. And to connect all of this to royalties is -- I'll tell you -- look, I'm a former executive, I'm coming from there.

And I suggest to you that I've majored -- my message to the industry and to you guys is start looking at how to take costs out of the system and how to increase productivity starting from the top, not from the little guy on the bottom there and do it.

Because across the border, their rigs are busy, services are busy, same oil price, same gas price. And it doesn't have anything to do with royalties.

MR. DAVID YAGER: I think you'll find the upfront access costs are higher in Canada. Most of the Crown mineral rights are freehold mineral rights. In very many cases you don't have to pay an upfront land bonus.

Secondly, very often the surface rights' holders their interests are congruent with those of the mineral rights holders. Often they're the same person. So what we have in Canada is we have the Crown owning the subsurface mineral rights and we have to make a separate agreement with the surface rights holder.

So there's a cost often --- an access cost, a service rights' cost. Frank talked about the physical access costs. There's also the seasonality cost. The fact that there's three (3) months a year when we can't do anything so you can't keep your programs going.

I didn't know to what degree - because there was only two (2) seats up here - I should get involved but Andre asked a question, you know, what's Canada like? Well we're not like anything in the world, really, in terms of the meteorological challenges, the geological challenges.

In talking to producers we, at PSAC, have been active in trying to get the industry to cooperate on a cost study to tear the thing apart.

Royalties outside, what is the actual cost of well bore construction due to the total cost. Unfortunately, the Canadian Association of Petroleum Producers are so terrified by this panel and several other events such as the Clean Air Act, the change in dollar, that we can't seem to get their attention.

MR. SAM SPANGLET: The share prices keep going down by the way.

MR. DAVID YAGER: No, I think that's unfair. I think to -- you know, it's interesting to watch you guys kick EnCana. I wish I owned some, but -- but some companies are doing very well in terms of some of the larger producers but many many are not doing well at all right now. There's a lot of companies in the service sector and smaller A and P companies that are doing very very poorly.

But to continue, to look at the two (2) regimes, one of our larger clients is Devon Canada.

Their cost in the States is about --- in Canada is about nine (9) bucks per thousand. And the cost in the States is about seven (7). And we have, as an association, have been all winter have been trying to get the industry to fund a study.

MR. SAM SPANGLET: Mm-hm.

MR. DAVID YAGER: So what component of this is well bore construction, what point is the -- the perennial conflict between the Crown and the subsurface mineral rights holder and the surface rights holder and I'm told by some of the producers at CAPP, who are sympathetic to our case, that the other -- the soft costs between the purchase of the mineral rights and the actual well bore construction costs involved with surface access and so on.

We would love to be able to be here today as an association and plunk these numbers in front of you and actually just strip out the F&D costs and be able to lay down, you know, well bore construction costs and labour cost on a basis to basis case.

THE CHAIRPERSON: Maybe I could finish our exchange with gas as I've --- I understand it 2004, '05, '06 and '07 is averaging about six (6) bucks.

Q4 of '05 we saw it go up to eleven (11) and then Q3 of '06 we saw it drop down to three fifty

(3.50), more than balance out each other. So, the balance has been about at six fifty (6.50).

Yesterday we had a drilling rig company tell us that they doubled their rig count for their fleet since 2002 to 2007. We've heard that there's been record drilling opportunities over the last three (3) years. We've heard from EnCana that talks about six (6) quarters plus of outstanding performance and then we hear, because somebody parked the rigs that that has a huge influence on the royalty examination, so.

MR. ROGER SOUCY: Well, you know, we're just -- the point being is that there's -- there's a cycle involved and if you're -- you know, in your review of the royalty system you have to look at it from the longer term perspective that it was originally put in place, and not just because -- there's pressure now because in 2005 it was a record year, right.

So that's the only thing we're -- we -- that -- that the question -- or the only point, I guess, when you boil it all down, is when you're reviewing that, look at the longer cyclical nature of the industry and -- and the effects that that has.

You know, I mean from the service industry we recognize, you know -- we're, in a lot of ways, our own worst enemies. When you double the rig count and, I mean, I -- I can get on that soapbox, too, but time won't per -- won't permit it here.

You know, it's the nature of the capitalistic system that we're in. When the opportunities are there, people -- and when money's available, and certainly money has been available in this province, we'll -- we'll flood in to -- to fill that market and then as soon as there's a pullback, yeah -- you know, we've expanded too far and so you have that curtailment and you start the cycle all over again.

You know, it's no different than commodity prices and the cycles that they go through. We live by those.

MR. FRANK DUBAK: Can I -- can I add something that, also, probably a lot of the companies you're talking about have a big interest in the US that probably balances out their balance sheet. I think if you forget about that -- we -- we have sent a lot of equipment south in the -- in the last year because we got over capacity here, so it's going south. And they're doing very well down south.

THE CHAIRPERSON: On a positive note, we enjoy being a province with energy development and the service people that make them successful, so thank you for your presentation this morning.

MR. ROGER SOUCY: Thank you for the opportunity. Thank you.

(BRIEF PAUSE)

THE CHAIRPERSON: Next, ladies and gentlemen, we have an opportunity to hear from Mr. Myers of ConocoPhilips, if you're here, sir.

PRESENTATION BY CONOCOPHILIPS:

MR. KEVIN MYERS: Good morning, sir.

THE CHAIRPERSON: Good morning.

MR. KEVIN MYERS: I must admit, I don't envy your task. You're what now, fifth session of testimony, second day. You're probably beginning to get to the point where you say, I think we've heard just about it all. Unfortunately, not everybody's had a chance to say it yet, so you're going to probably have to hear a little bit more.

Hopefully mine won't be too painful and I do very much appreciate the opportunity to speak with you all today to give you ConocoPhilips' input on the royalty review process and I -- and I realize this has been a long journey for you all.

And I'm sure over the last few weeks

you've heard many times about the challenges the industry is facing here in Alberta. You've heard about rising costs due to the -- commodity prices, labour shortages, greenhouse gas regulations. You've heard about squeezed margins due to the strong Canadian dollar. You've heard about the impact of uncertainties in the regulatory and fiscal regime. And I share these concerns and I don't want to diminish them.

And we've submitted a document, which I'll be happy to answer questions that deals with many of them. But what I want to do is take my time today, my brief time, and just talk a bit about Alberta's global competitiveness. And I'll bring this from the perspective of someone who's relatively new here. I've been here about six (6) months, so perhaps you will take that worth a grain of salt.

But what I have done in my twenty-seven (27) years in the career -- were in -- career -- has worked all over the globe. I've also worked for a global company. ConocoPhilips is one (1) of the largest integrated oil and gas companies in the world. We operate in forty (40) countries and this year we'll invest in new investments over $13 billion. So you might say we live with competitive -- global competitiveness every day. We make these decisions on a daily basis where to invest.

Personally, during my career, I've had the opportunity to work in the Lower 48, Alaska -- you can tell I lived in Alaska because I called those other states the "Lower 48" -- now Canada, Russia. I heard some chuckles. I just came from Russia and I'll make a few comments about that and I've also in a host of international projects.

And I -- I guess I have -- and you can take it for a grain of salt but I think I've had a bit of experience, first-hand experience, on what it means to try to compete for capital investments against other great projects around the globe and there are a lot of them out there.

And I've learned a number of things. I guess the -- one (1) of the main things I've learned is that the oil and gas industry truly is a global industry and investment capital will move where the most profitable return can be made; that's -- that's just a fact of life.

And it's actually pretty highly mobile; that's what's amazed me, how quickly money -- what -- what is today's hot area can turn into tomorrow's cold area. You don't want to go there. And I guess if I -- you only need to take one (1) thing away from my comments today, I guess it would be something to the effect of, I would encourage you to do all you can to help protect Alberta's global competitiveness in the face of these challenges I enumerated before.

And I -- I don't envy your task because evaluating competitiveness is not easy. I mean, look at the things that go into to. It's not just royalty; it's the overall government fiscal take. It's the overall government stability. It's political risk. It's the resource size you're dealing with, the -- the quality of the resource, the certainty of the resource, how far are you from the market? Are you at the end of the pipeline? Are you right next to the consumer? You know, you've got to factor all these things and, oh, I didn't mention development and operating costs, just a small task we have -- a challenge.

All those things factor into the determination and it's -- it's a challenge to come up with the right balance amongst these factors that you'll attract investment at the same time you're getting your fair share. And fair I think I've learned is often like beauty; it's very much in the eye of the beholder. We all have a different opinion of what fair is but one (1) of the ways I tend to measure it is just as the saying goes, follow the money. Where's the investment going?

What are the trends? What's happening? How does -- how does Alberta look in that regime?

And I guess prior to coming to Alberta, as I mentioned, I worked in Russia and I was responsible for ConocoPhillips' assets in Russia and Caspian.

And I've got to tell you, some people chuckled about Moscow. I lived in Moscow and I loved living in Moscow. It was a great place to live, an interesting experience but I also have to tell you I was very glad to come to Calgary and come to our Canadian operations because Russia is, indeed, a country that's blessed with incredible resources. And I will say ConocoPhillips has significant investments there but of late the political and fiscal environment in Russia, I'll just say it's very challenging. We'll leave it at that. And it's -- it was good to come to Alberta.

And I came to Alberta with a number of expectations. I guess my biggest expectation is I'm coming to a province, a basin that has some substantial low-risk geological resources. I mean just -- they're there. You know the gas is in place. You know the oil is in place but the challenge is how do you get them out of the ground and make money doing it?

And I think one (1) thing is constant whether it be oil, gas, or bitumen Alberta tends to be the high cost of supply. When you stack up the road and look how much it costs to get the oil and gas or bitumen out of the ground and delivered to the marketplace, we definitely have a competitive disadvantage.

We are one (1) of the highest cost basins in all of those categories in the global race for capital. Now, that's the bad news. I would say the good news, coming in with my bias, is these cost challenges are mitigated by the stability of Alberta's and Canada's fiscal and regulatory regimes and it results in why we're -- we've seen, until very recently, record drilling rates and record rig rate utilizations. It's been a very active place.

Unfortunately -- and I -- and I don't know if it's just my arrival or not, the last six (6) months have seemed to see a change in environment. I don't know if it's my arrival or the changing of governments or the subsequent policy adjustments that have come with those governments but uncertainty has definitely increased; there's no doubt about that.

We're -- we're seeing cumulative impacts, if you will, or cumulative cost impact or uncertainty impact associated with things with the ACCA going away for the oil sands, the lack of clarity or cost around what it's going to cost us in greenhouse gas and fighting climate change and also seeing changes in some of the conventional royalty levels from 2006 as those adjustments take place.

And you asked some questions about -- the previous speakers, about precipitous change and tipping points and that and step change and I'm not going to come up here and tell you if you make a change in royalty suddenly the world is going to end because you're economists, you're wise people, you know better than that. This is all sort of cumulative impact. And I barely believe that you can kill a project by making a little change here or there.

But I have learned if you -- to make too many of these change and hit the cumulative impact, you definitely may not kill the patient, but you -- you can put him into a long-term coma and that's generally not a good thing for the industry or the province because the net effect of delaying projects and -- or indefinite deferrals is basically revenues are going to go down, both for the industry as well as for Alberta.

It is interesting that all this change is going on at a time when Western Canada gas has proven to be one (1) of the most expensive basins in the world to find developed hydrocarbons. You've seen some prior data, I put some in the report we've submitted, but if you look over the last four (4) to five (5) years, we've been seeing double digit cost increases in Canada and that has been eroding our competitiveness.

We've also seen that our -- compared to our major competitor for the North American gas market, those guys in the lower 48, that our cost had that increasing differential and part of that is foreign exchange 'cause the Canadian dollar has moved 50 percent.

And 80 to 90 percent of my costs that I look for in terms of developing and finding oil and gas are in Canadian dollars and so when the Canadian dollar moves, compared to those guys in the US, we just got more expensive. And it really came home to me in April when we -- we jumped about 10 percent in one (1) month compared to -- didn't do anything different, we just -- our cost just went up by about 10 percent in -- in one (1) month.

Now, bear in mind, our revenues come in in US dollars, you guys all know that, so this is -- translates into a profit squeeze. Right now we're about 40 percent higher than the lower 48 and I said, that's partially due to FX and part of it's due to the seasonality of our work.

A lot of my compatriots in the -- in the lower 48, and we are a big driller down there, have the luxury of drilling year round where we shut down. I swing from forty (40) to fifty (50) rigs running in the winter months down to almost none running during the spring break and then we'll ramp back up as we go into the fall and into the winter season again.

And that's just driven by the location of where we drill, that's a fact of life. About 70 percent of our targets are -- only can be accessed in the winter months. Anyhow, you put this all together and returns of late have not been as profitable in this basin and I think the industry has responded.

The numbers I've seen indicate that drilling for western Canada dropped about $5 billion this past year. I see you're nodding your heads, you've seen the numbers before. We cut our drilling in half (1/2) when that -- I would've liked to see it be higher, but I got into the global race for com -- for competition for capital.

Actually the first thing I did when I showed up on the job was going through our annual budget cycle and maybe I'll do a better job this year, but the rates of return weren't competing with what we'd see in the lower 48, so we cut back our capital in hopes that the market would adjust up here and the place would become more competitive.

As I said, you know, previously your job's not an easy one, evaluating competitiveness is not easy, but I think one (1) metric you can use is capital investment, where's the money going, is it increasing or is it decreasing and, frankly, I think -- although it's a lacking indicator, it in -- the indicator indicates that the cost are -- are -- the capital is -- is heading out.

And if you look at the same time, and I'm sure you've seen these numbers from CAPP, we've seen investment while it's dropping in Alberta, it is increasing in the lower 48 and elsewhere around the world. So, I would encourage you as you go forward to -- to take a look and -- and not do anything that would further, if you will, debilitate -- I think debilitate's too strong of a word, decrease Alberta's competitiveness.

I know my time's just about up, let me make one (1) last comment before I do and that is in support of the current oil sands royalty. I could go into long detail, we have it in our writeup, but on my short answer would be on the oil sands royalty, it is working.

It encourages investment in a very, very high cost resource and it does provide ultimately a -- a very hefty return in terms of royalty to the -- to the province. And if you want to look at one (1) note of that, take a look at Syncrude, one (1) of the oldest projects around.

It was paying 1 percent and it's recently jumped up to the 25 percent rate and we saw the royalties go from 55 million in 2005 to over 654 million in 2006 and so it is, indeed, working, it is encouraging development, but that was after a decade of investment.

THE CHAIRPERSON: Have you got one (1) paragraph to close, sir?

MR. KEVIN MYERS: One (1) -- you've -- you've cut to the chase and that simply is, my concluding statement is, Alberta's had a very long and often rocky but bright history in the development of oil and gas and oil sands.

And I think -- and I'm confident with under your guidance that we will continue to have a very bright future and I encourage you to weigh in all of the factors that impact the economics and the global competitiveness of Alberta as you ponder what should be done on royalty and with that, thank you.

QUESTIONS BY BOARD:

THE CHAIRPERSON: Thank you very much and again, if we could have a few questions? Judith...?

MS. JUDITH DWARKIN: Good morning. Your

advice is to follow the money and your observation is the capital's heading out. Well, clearly these companies aren't abandoning their assets, someone else is coming in and buying them, so I'm not sure your advice is an unambiguous as you might think.

MR. KEVIN MYERS: Well, I would sugges --

MS. JUDITH DWARKIN: And I'm seeing notable acquisitions in the oil sands sectors especially even since the royalty review was announced.

MR. KEVIN MYERS: Yeah, what I -- what I would say, you know, acquisition in many ways is a transfer of an asset. When I say, follow the money, look at new capital investment, are people making new capital investments?

The oil sands has remained strong, but I will tell you and I know Gerry showed you some numbers before, we're a partnership with them in Foster Creek and Christina Lake. When we look at these new investments, these projects are very challenged to meet our hurdle and compete for global capital.

I mean, they're -- they're struggling to get into double digit types of return.

MS. JUDITH DWARKIN: Thank you. I have a question on your written presentation and thank you very much for that, it was very detailed. You have a chart that shows -- compares the costs -- I guess its full cycle supply costs for Alberta gas versus other -- some regions in the US --

MR. KEVIN MYERS: Mm-hm.

MS. JUDITH DWARKIN: -- and you note that the -- the Canadian cost is the highest, it's around seven dollars ($7) US per Mcf. We've received other information and most recently a Cambridge Energy study uses 2005 data as well, which is the same date as in your chart, I think it's on page 7.

And they looked at seventy-six (76) North American basins and all in long run supply costs again and similar metric to the one that you've shown, and that study shows us that all areas of Alberta that includes unconventional gas have less than average costs.

So I'm -- I'm just -- I'm in a bit of quandary of how to digest all this various information we're getting from various corners of the globe with respect to the cost structure of the Alberta resource?

MR. KEVIN MYERS: Well, you know, as to the specifics, I assume you're referring to the chart prepared by Zip Energy?

MS. JUDITH DWARKIN: Yes, yes.

MR. KEVIN MYERS: I would, you know, refer you to -- to Paul to get the details, but what I can offer is the following observation. What Paul was showing there in terms of relative cost of service is very consistent with what we see internally when we stack up our opportunities in -- within --

MS. JUDITH DWARKIN: Mm-hm.

MR. KEVIN MYERS: -- North America and -- inside ConocoPhillips and we st -- we right now are the third largest producer in western Canada at gas and oil, that comes as a surprise some people, but we've done it through a number of mergers and acquisitions in Canada and I think we're probably like second or third largest in the lower 48.

So we have a pretty big database we work from and I find that as much as I love my brother to the south, this time of year as we go into the budget cycle, I hate them and they tend to be, as a whole, coming in with several percent better returns than I'm being able to generate in -- in the basins we're dealing with up here.

MS. JUDITH DWARKIN: Well, maybe you should get that Cambridge Study and use that for ammo.

MR. KEVIN MYERS: Unfortunately what we do is, we're using our actual Rothwell prognosis --

MS. JUDITH DWARKIN: Yeah.

MR. KEVIN MYERS: -- and data and cost

and it's, you know, as it -- it's hard -- sort of hard to argue with those.

MS. JUDITH DWARKIN: Thank you.

THE CHAIRPERSON: Ken...?

MR. KEN MCKENZIE: Yeah, thanks a lot for the -- for the presentation. Let's talk -- let's talk about fairness. I mean, you're -- you -- you nailed it, you know, when you said that it's -- it's -- fairness is a difficult concept. Let me just quote something to you from your study and this is actually a CAPP quote:

> "When federal and provincial corporate income taxes are added to the provincial royalty, the total government share of marginal net revenues from an oil sands project is 49 percent and the industry share is 51 percent."

I mean, we've seen this, I know where that number comes from, I'm sure you're -- you understand it--

MR. KEVIN MYERS: Mm-hm.

MR. KEN MCKENZIE: -- as well. So that seems to be presenting the view that, you know, fifty/fifty (50/50) seems about right and so let's sort of continue down that road. A problem with that forty-nine/fifty-one (49/51) number, of course, is it's just focussing on a year-by-year basis on the net -- on -- on the share of net revenues, revenues net of -- of cost, okay.

And I'm sure you will agree and, in fact, you indicate in the study, that we should really be looking at government take on a full cycle, full project basis, over the life cycle of the entire project?

MR. KEVIN MYERS: Mm-hm.

MR. KEN MCKENZIE: Right, I mean. And indeed, we should be discounting our revenues and costs to take into account of the fact and particular in oil sands that the expenditures tend to be very upfront and the revenues tend to come at the end.

So are we in agreement on that?

MR. KEVIN MYERS: I would say so far, yes. But somehow I feel like I'm -- there's a path I'm heading to and there's going to be a cliff --

MR. KEN MCKENZIE: No, no, no. No, no.

MR. KEVIN MYERS: -- I'm about to run off and --

MR. KEN MCKENZIE: I'm not a lawyer, I'm an economist, okay, so.

THE CHAIRPERSON: Have you ever been to a congressional hearing?

MR. KEVIN MYERS: Yeah, actually I have

on one (1) or two (2) occasions in my past life in Alaska, so, I get his feeling, but so far I'm with you, let's put it this way.

MR. KEN MCKENZIE: Okay. So -- so let's just continue down this road then and see where it takes us. Let me just throw some hypothetical numbers out at you and -- and these are hypothetical for discussion purposes, okay.

So let's say that the government or the -- the crown/company's split over the life cycle was forty/sixty (40/60), say, you know, and, again, these are -- I'm just pulling these numbers out, so it's not fifty/fifty (50/50), it's forty/sixty (40/60).

Is that now unfair, right? And indeed let's say that there's several competing jurisdictions in the world where the government take on a life cycle present valued adjusted basis is sixty (60), right and -- and here it's forty (40). I mean, are things out of whack there?

MR. KEVIN MYERS: Well, it -- it's hard to answer that question in absolute --

MR. KEN MCKENZIE: Right.

MR. KEVIN MYERS: -- because to me the judge of it is, when you -- if you've made that change --

MR. KEN MCKENZIE: Right.

MR. KEVIN MYERS: -- how do you make it, when do you take -- make the -- when do you take the -- the fiscal take for the government, the timing --

MR. KEN MCKENZIE: Right.

MR. KEVIN MYERS: -- 'cause that has a big impact on rates of return. I mean, what is it going to do in my -- in terms of my economics? I'm out there trying to, you know, attract capital for our oil sands projects --

MR. KEN MCKENZIE: Mm-hm.

MR. KEVIN MYERS: -- since you used oil sands, will this still make them competitive.

MR. KEN MCKENZIE: Mm-hm.

MR. KEVIN MYERS: My gut answer is it's going to be -- the answer going to -- my gut answer's no and the reason I say that is, I look at new projects that are coming up for sanction and we operate Surmont, we are a 50 percent owner in Foster Creek, we also are 50 percent owner in Christina Lake, --

MR. KEN MCKENZIE: Mm-hm.

MR. KEVIN MYERS: -- which EnCana operates. So we're seeing a whole host of oil sands projects coming forward for sanction literally one thirty (130) or forty thousand barrel a day projects almost a year for the next five (5) to ten (10) years is sitting up in the cue.

And you look at that and I say, with the current royalty regime, we're struggling to sanction those.

MR. KEN MCKENZIE: Mm-hm.

MR. KEVIN MYERS: We're struggling to find them, compete for capital in our portfolio. Now, we fight that on a number of regimes, it's not just royalty, I'm not get out --

MR. KEN MCKENZIE: Mm-hm.

MR. KEVIN MYERS: -- there and say royalty is it. You -- if you play royalty, the royalty comes to an end --

MR. KEN MCKENZIE: Yeah.

MR. KEVIN MYERS: -- oil prices comes into this, --

MR. KEN MCKENZIE: Mm-hm.

MR. KEVIN MYERS: -- cost comes into this, the list goes on and on --

MR. KEN MCKENZIE: Mm-hm.

MR. KEVIN MYERS: -- and we try, we -- we fight them on many fronts, but I would say these are not projects that are tremendously robust and I don't know what would happen.

I'm not going to say that would -- a

change in royalty is going to kill the project, but I'm also at the same time balancing the regulatory challenges, the greenhouse gas challenges, which have a whole range of potential cost impacts that, frankly not all of the projects around the globe have these same type of regulations they're facing, so that's why you have to view them more as a cost than as a -- as a price as of doing business --

MR. KEN MCKENZIE: But many of them do.

MR. KEVIN MYERS: Many do.

MR. KEN MCKENZIE: I mean, greenhouse gas issues are not Alberta or Canadian centric, obviously, and in fact, we're probably lagging much of the rest of the world in this regard.

MR. KEVIN MYERS: I would say when you come to the oil and gas development, no, you're leading.

MR. KEN MCKENZIE: Okay. All right.

MR. KEVIN MYERS: You're leading on oil and gas development.

MR. KEN MCKENZIE: Okay.

MR. KEVIN MYERS: Now, if you're talking about consumption, I'm not going to sit here and debate the merits of Europe versus, you know, Can -- Europe is probably ahead of us, --

MR. KEN MCKENZIE: Yeah, I would agree

with that.

MR. KEVIN MYERS: -- but you talk about production --

MR. KEN MCKENZIE: Okay.

MR. KEVIN MYERS: -- we're -- I think we're leading on the production side.

MR. KEN MCKENZIE: Okay. So -- so you're basically saying is that even though this sort of government take concept that I'm talking about here is a present value concept, it does take into account the, you know, the time profile of -- of costs and revenues.

That -- that you're just really reluctant to come in and say that fifty/fifty's (50/50's) okay or -- or forty/sixty's (40/60's) okay or whatever?

MR. KEVIN MYERS: To me, the right answer is the one that will attract global com -- global capital to your projects. And my observation I'm providing you right now is that, I -- and I say, again, it's a lagging indicator, you hate to use lagging indicators, but follow the money.

And what we don't see is a lot of people announcing acceleration of projects, we're seeing deferrals and tha -- and things are moving slower, which migh -- many may argue is a good thing to relieve some of the cost pressures, I'm not -- I'm not going to debate that, but I think the indicators are that the oil sands right now under the current regime are barely competitive for capital.

But they are attracting it. To say they aren't would be BS, you're BS metre should all go on.

MR. KEN MCKENZIE: Mm-hm.

MR. KEVIN MYERS: They are attracting it, but I'm -- what I'm saying, is we're barely making that -- making that hurdle right now.

And so I'm trying to discourage anything that's going to make my life more difficult in terms of attracting capital, whether it be royalty increase, cost, oil prices, yada, yada, yada, the list goes on.

MR. KEN MCKENZIE: Okay.

MR. KEVIN MYERS: This is one (1) just part of the stew, if you will.

MR. KEN MCKENZIE: Okay, thanks a lot.

THE CHAIRPERSON: Evan...?

MR. EVAN CHRAPKO: Just to be clear, billions of dollars are going into non-robust projects, do your shareholders know that?

MR. KEVIN MYERS: As I said, they're barely making the hurdle. I'm not saying we're not making our hurdle, but they're not -- it's not like something that they're going -- they're well above our hurdle or we're --

MR. EVAN CHRAPKO: What's your hurdle?

MR. KEVIN MYERS: You know, we don't necessarily per se put numbers out there, but let me -- that's sounds like I'm being evasive, but the bottom line is, you look out there, most people talk about making returns on capital employed in the 15 percent range, that's sort of like they -- the number you'll hear or the industry throw out there.

And that's a little bit different than investor rate of return, you guys are a bunch of economists, so I'm not going to -- but it gives you the ball park --

MR. SAM SPANGLET: Hey, hey, hey, I'm not an economist --

MR. KEVIN MYERS: Well, some -- some of you are economists. You can -- the old guys can talk to the economists and that, but I mean, ballpark when you're talking about IRR you're in the same neighbourhood, is what you're -- what you prefer to see, that's the type of the thing that the industry, as a whole, tends to try to attract to consider it itself competitive.

MR. EVAN CHRAPKO: So you're -- you -- do you use others tools, IRR, net present value?

MR. KEVIN MYERS: When you evaluated

projects?

MR. EVAN CHRAPKO: Yeah, yourselves specifically?

MR. KEVIN MYERS: Yeah, I mean, we use a number of metrics --

MR. EVAN CHRAPKO: Oh.

MR. KEVIN MYERS: -- when we evaluate a project. There's a whole host of them and can I tell you there's one (1) definitive metric we use above all else?

MR. EVAN CHRAPKO: Yeah.

MR. KEVIN MYERS: Probably IRR is the one that gets the highest weighting, but it's not the sole one. I don't, you know, -- Sam can tell you, I mean, he --- he's sat -- he knows -- a lot of things go into the overall equation.

MR. EVAN CHRAPKO: That --

MR. KEVIN MYERS: But it's not just IRR, it really has to be -- you have to consider it in terms of your risk adjusted IRR, you know, you've got to factor that into the equation.

MR. EVAN CHRAPKO: We appreciate all the sympathy you expressed when you started your presentation and the fact that you acknowledged we'd heard it all, I think, we're feeling like that and also for focussing your presentation on competitiveness too, that was useful.

But then you -- you said accumulative change won't ne -- won't kill the patient necessarily, but can put them into a coma.

Can you go a little bit further because one (1) of the things we haven't heard much of is how much energy prices affect the patient and things like after the -- the National Energy Program as mentioned earlier?

If you compared the activity in the US and Canada after the NEP was introduced, actually had activity in the US galore, it was coinciding with the -- the dog which is energy prices as opposed to everyone's attempt to make it sound like its tail, the fiscal regime wags this dog.

MR. KEVIN MYERS: You know, you're absolutely right, I mean, it -- it's royalty in and of its -- you're not -- I'm not going to come over and tell you royalty --

MR. EVAN CHRAPKO: Yeah.

MR. KEVIN MYERS: -- in and of itself is going to be the sole determinate of what happens here. It is accumulation of a lot of other factors including revenues and cost and, yes, clearly our revenues have gone up dramatically.

I should be sitting here with a large smile on my face saying this is a great time, we're doing wonders, but unfortunately if you look through the paper there's numerous examples we've given and CAPP is given out on the industry, it's -- it's our costs are outpacing revenues unfortunately.

MR. EVAN CHRAPKO: And it -- is your capital flight argument more strongly correlated to large, major world operators and integrated companies?

MR. KEVIN MYERS: I think it's -- my comment -- my comment is really driven on what is -- what is available around the globe in terms of competitive projects for companies to invest in and how do they fair -- there's certain things that are in common here.

I mean, we're all facing higher commodity prices, steel is up, copper's up, tubulures are up, that's a commonality around the world, but then there are things that are differential to Alberta and I would say two (2) of the biggest things that are -- are differential to Alberta and one (1) of them is mitigating a bit, but the one (1) big differential has been the FX effect.

I know people can be -- foreign exchange, I'm sorry. Foreign exchange effect, you can wave it off, but a -- 89 percent of the costs are in Canadian dollars and the Canadian dollar's depreciated 50 percent in the last four (4) or five (5) years. And that's one effect here that has a big significant effect to us that's differential.

I think the other thing is, we -- until very recently, we've been in a pretty heated market here in terms of overall labour and services. Differential to what I think you see around the world. The whole world's hot, but Alberta's been really hot until we -- we've started to see some signs that that's mitigating a bit especially on the drilling services area which some of the previous speakers were talking about rig rate utilizations, they are down.

They are down and we're starting to see some movement on rig services costs. We haven't, unfortunately, seen movement in some of the other areas, they still remain pretty hot.

MR. EVAN CHRAPKO: Thank you.

THE CHAIRPERSON: Sam...?

MR. SAM SPANGLET: Welcome to Calgary.

MR. KEVIN MYERS: Oh, thank you.

MR. SAM SPANGLET: And I don't have any questions, so I'll -- I'll) keep mine clear.

THE CHAIRPERSON: Andre...?

MR. ANDRE PLOURDE: Thanks. We've heard

a lot about being -- about the effects of the Canadian dollar, but I think it's also important to reali -- I think to take into consideration the fact that a lot of the financing is from outside Canada and a strong Canadian dollar makes financing easier to get and cheaper to get.

We don't have -- we haven't heard that story, but I'm sure it's part of the story as well. A few questions. Thank you for your presentation and for the written material. If I can take you to page 10, if you have your written material here?

MR. KEVIN MYERS: Yes, I do.

MR. ANDRE PLOURDE: Thanks. And so I -- you have a picture there from -- I guess it's from Ziff Energy --

MR. KEVIN MYERS: That's from Paul Ziffigan (phonetic), yes.

MR. ANDRE PLOURDE: -- that essentially says, if I read this correctly, that throughout 199 -- the 2006 the price of natural gas was significantly below the cost of operating natural gas.

MR. KEVIN MYERS: 2006 was a good year for the industry.

MR. ANDRE PLOURDE: And how do I conclude that from this?

MR. KEVIN MYERS: Well, if you look at this, what Paul has stacked up here, if you will, the cost of service, plus what is believed to be an acceptable rate of return. That's the bars being stacked up there and if I remember correctly, what Paul was showing each year's drilling program, so this isn't the performance of the company as a whole, this is what the drilling program looked like for '04, the '05 and the '06 for the industry.

And the red line basically shows the gas pricing and the theory being, whenever the red line is above the yellow wedge or near the yellow wedge, the industry's making a competitive rate of return, it's going to play -- it's going to tend to have an a -- an environment that will tend to be attracting, if you will, to the basin.

And indeed, if you followed rig rates and saw what happened in the industry in '06, '05/'06, there was -- there was a boom up here. We were basically starting to approach, well, one (1) might argue, over 100 percent utilization of available drilling equipment and, of course, what happens in any market when you start to approach 95 to 100 percent utilization of anything, I don't care if it's widgets, bicycles or drilling rigs, the price of poker goes up. It gets very expensive.

MR. ANDRE PLOURDE: So I shouldn't conclude anything from the fact that the red line is for almost all of the year below the sum of overhead royalty operating costs, operating capital --

MR. KEVIN MYERS: You're -- you're talking about when you get into the '06, later '06 time frame and that?

MR. ANDRE PLOURDE: No, no. It's throughout. If you look at '06, it's within all --

MR. KEVIN MYERS: Oh, I see what you're saying. Yeah, I apologize.

MR. ANDRE PLOURDE: -- January. The red line is below overhead and royalty opera -- I shouldn't conclude anything from that?

MR. KEVIN MYERS: Well, what I would conclude from this is the following, I mean, the industry was showing very, very competitive rates of return in the '05 and this -- this played into the early '06 first quarter or so and so it picked up its activity, it was investing significantly.

During '06 gas prices weakened, as you see in the red line, substantially and haven't recovered anywhere near to the levels they were in late -- late '05, early '06. And what the industry did in response is, to the combination of cost and decreased revenues, is it cut back on its investment and the numbers I've seen, like I -- I've said earlier was about $5 billion reduction in investment in -- in western Canada gas, in particular.

MR. ANDRE PLOURDE: But this isn't here, I know and we've had some gas producers tell us, fox example, they've had excellent returns in '06, excellent returns at the beginning of '07. I guess I'm not too sure what to conclude from this.

We're probably not going to get there, so that's okay. In terms of you mentioned the cost relat -- the cost -- costs are higher in Canada than the US, could you give me some idea how that has evolved over time? You threw out and you told us roughly 40 percent.

MR. KEVIN MYERS: About 40 percent.

MR. ANDRE PLOURDE: Is this more now than it was five (5) years ago, that kind of thing?

MR. KEVIN MYERS: Yeah, if you go back -- I can -- I have the numbers --

MR. ANDRE PLOURDE: That would be useful.

MR. KEVIN MYERS: -- I think they're actually in the report there it's mentioned back to about '02/'03 and at that time it was running about 15 to 20 percent, if I recall correctly, were more expensive.

I think what's driving to that when you

get to the pre-f -- the pre-foreign exchange period, which I think foreign exchange explains the increase from like 15 to 20 percent higher cost in '03ish to 40 percent today.

I think it accounts for a big chunk of that, but beyond the foreign exchange impact, I think what you see different between here and the lower 48, when I talk to my -- my counterparts down there is, it's our seasonal drilling, it results in a, boy, I wish I could run a rig all year round.

MR. ANDRE PLOURDE: But that's not a new thing?

MR. KEVIN MYERS: That's a new thing.

MR. ANDRE PLOURDE: And it can't really explain how the pattern of --

MR. KEVIN MYERS: Well, it -- it explains why when you go back five (5) or six (6) years, why we are --

MR. ANDRE PLOURDE: Sure.

MR. KEVIN MYERS: -- more expensive and why it's been -- why it's been exacerbated as our dollar has strengthened.

MR. ANDRE PLOURDE: Okay. One (1) thing which I didn't see in your report, and you haven't talked about, is essentially some discussion about comparisons between the situation in Venezuela and in -- in the Canadian oil sands.

I mean, ConocoPhillips is in a privileged position to be able to bring to our attention evidence from operating in both areas. I don't want to lead -- lead you any more than that. If maybe you can give us some idea of how it compares, what's it -- what's it like operating in Venezuela compared to operating in Alberta.

MR. KEVIN MYERS: Well, I would say and, again, it's -- it's always a sensitive subject 'cause I -- I'm sure you're probably aware that we continue to have ongoing negotiations with the government of Venezuela as to how we will be reimbursed for our -- our interest there, but I would say until the most recent political regime, I think we were very happy with our -- our relationship in Venezuela. As a matter of fact, the fiscal regime they had there had some similarities in the sense that it encouraged development. It provided some low -- lower royalty regimes to help substantiate these multibillion dollar investments that were necessary to develop the -- the Orinoco Belt.

Unfortunately, with the change in the political regime, our -- our experience has been less than satisfactory. It is interesting whether it occurs through the national guard showing up at midnight or it occurs through fiscal regime, reduction, expropriation, reduction intake, has the same net effect.

Clearly, we hope that things will change in Venezuela and some day we would plan on returning if they do, but for now, it's really dampened our enthusiasm and I think as the whole western industry of additional investments in Venezuela.

MR. ANDRE PLOURDE: One (1) last thing, I don't think you had to fear the national guard showing up in Fort McMurray.

MR. KEVIN MYERS: No, I hope not. I doubt that. As a matter of fact that is one (1) of the things, remember as I mentioned, I meant political risk, that's one (1) of the things that even though we -- at times -- not the oil sands, but the gas targets, the -- the targets we go for -- it's amazing.

In Russia I was looking for fields that had billions of barrels or multiple TCF. Now, I can tell you right now, put the oil sands aside, in the western Canada, conventional oil or tight gas, we're not looking for billions of barrels or multiple TCF, but the nice thing is, as you said, there's -- there's an undercurrent of stability that offsets this -- this lower -- these smaller targets.

MR. ANDRE PLOURDE: And in the oil sands

you don't have to look for the billions of barrels, you actually know where they are.

MR. KEVIN MYERS: It's a low risk and I made that comment, that's one (1) wonderful thing about Alberta, it is a low geological risk. I just wish that our projects weren't quite as marginal as they are. It seems like everything we deal with whether it be -- it's not Alberta, but it's Canada. Arctic gas, oil sands or -- or the western Canada sedimentary basin, they all have that same theme that we're on the high end of the cost curve.

MR. ANDRE PLOURDE: Okay, thank you.

THE CHAIRPERSON: In the -- in our analysis of some of the information that's been presented over the various communities that we visited, we had one (1) president of a small to medium energy company make a presentation, not unsimilar to a lot of the other energy companies and he talked about costs and parking rigs and a few other things.

And then for some reason I picked up the annual report for that same company and it talked about something totally different. In fact, it talked about making 2008 a banner year for drilling and a whole bunch -- so there -- it was inconsistent with -- with the information.

Is this document that you gave us for the submission to the review panel something that you share with your shareholders?

MR. KEVIN MYERS: Since it's considered to be a public document, de facto, yes. Now, we've mailed this out to our shareholders, no. But would I say is there anything inconsistent in that with what we tell our shareholders, no.

THE CHAIRPERSON: Okay.

MR. KEVIN MYERS: You know, we cut back, I mean, we cut back our capital investment in western Canada. We increased our oil sands investment, but we've cut back our -- what -- capital investment in western Canada by 50 percent and we've got -- you know, we -- that is something we put in our -- all of our analyst presentations and that.

We also say at the same time, we're hoping that the conditions change so that we can ramp back up our investment in -- in western Canada. And one (1) -- one (1) of the things we're looking for is will the cost relief be coming here and, hopefully, no offsetting increases in royalty or greenhouse gases, yada, yada, yada,

THE CHAIRPERSON: Thank you, sir. Appreciate your presentation this morning.

MR. KEVIN MYERS: Thank you.

THE CHAIRPERSON: Ladies and gentlemen, we have one (1) more presenter. It is Mr. Krickhahn, an Alberta citizen. If you are here, sir.

MR. UWE KRICKHAHN: Okay.

THE CHAIRPERSON: I hope I pronounced your name right. Could you give me the proper pronunciation.

MR. UWE KRICKHAHN: It would be Krickhahn.

THE CHAIRPERSON: Krickhahn, thank you. Welcome, sir.

PRESENTATION BY PRIVATE CITIZEN:

MR. UWE KRICKHAHN: Ms. Dwarkin, gentlemen. I'm a citizen of Canada now for forty-eight (48) years. We live in Medicine Hat for the better part of some forty (40) years and I'm a shareholder of 3.2 million shareholder of our natural resources in Alberta.

Listening to the presentation made by the oil patch people, as we refer them to, I have the feeling they're all infected by the Liberal Conier disease with a subsiver -- subvirus of G99 complaining left, right and centre. We're not making any mone -- any money, but the last six (6) quarters we made record profits on one (1) side and on the other side, so I -- I have a rather mixed message, I get from those people.

You probably have sorted it out a lot better than I have anyhow. On the spur of the moment, I downloaded some information from the internet in regards to royalties and so on and what's happening to our Heritage Fund and Alaska Permanent Fund and so on and so on.

And I have the feeling that we are not getting enough or not getting our fair share of royalties for the taxpayers of Alberta. Our infrastructure is completely deteriorating and I think somewhere along the line the money has to come or we have to refer to having a sales tax in Alberta which probably is not going to go over too well at all.

We're talking -- in my thirty-five (35) years -- thirty (30) -- thirty-six (36) years of business, I sold Mercedes and Volkswagens in Medicine Hat. I ran a tight ship and our net profits on turnover was between 1 1/2 and 1.75 percent and that is considered in our industry, even today, as a tight well run company.

I have outlived fifty-six (56) dealers in Medicine Hat and part of it had to do, when things got tight then you tighten down, you batten down the hatches and you go through systems and you watch, you switch the lights off, you're the last one to get out of the door and the first one to open the door.

And I have the feeling with the rates they're paying and the overhead, the oil -- the oil patch itself, they got themselves into and they've painted themselves into a corner where they hardly can escape. Cost control, I think co -- I -- I have the feeling there is no cost control. Anyhow, back -- to get back to the rate of return, who says and -- and you, Mr. Plourde, really commented on it. You know, where is -- where is the bar where you make more money or less money.

This is the average return of like 15 percent they're aiming to or aiming at, who tells me that 15 percent is a fair return or I tell you that it's way too high. I think you should have a return of 8 percent or maybe it's 7 percent and that's the way -- that's the way it is and you should lower your bar maybe a little bit, not going for the maximum or the maximum return, but going for fair return.

You know, if you're running at double inflation rate or triple or quadruple the inflation rate, I personally believe it is excessive. We are -- Premier Stelmach put a little warning shot into the air this morning, I guess today, we're going have some taxes and if I have to pay more taxes than I think everybody else should pay more taxes too.

We are affected all by it, but I think the oil company pay the -- should pay the fair share of taxes as well.

My recommendation is that we have a flex rate of return or charge royalty charges on a per barrel basis and according to the Oil Weekly, which I downloaded yesterday, Alberta in 2004, Alberta only got $4.30 a barrel, Alaska should -- got $11.60 a barrel and Norway charged fifteen (15) or got $14.10 a barrel.

There's some structure -- structural differences between the two (2) -- or between the three (3), between the State of Alaska and the Nation of Norway, I don't understand that, but that is basically for you to sort out.

I would recommend a flat percentage charge which then is automatically adjusted or maybe only -- almost daily basis and it can be done very, very easily on fifteen (15) or eighteen (18) or 20 percent of the barrel.

Whatever the cost, the world prices a barrel of -- of oil that -- that will be charged against the producer, so he knows exactly before he's going to drill a hole that he knows that my overhead is going to be so high, well, that's my actual cost to retrieve the oil, retrieve the natural gas that's -- that's what I have to pay. I have a fixed cost and it flexes with an amount based on a world -- world price.

Another -- I'm a little bit of an environmental freak in a sense, a tree hugger or whatever they call them, the tar ponds, a hundred and sixty-eight (168) acres, $400 million to clean out.

Estimate -- estimate that oil sands by the time they're done, there are going to be seventy-seven thousand (77,000) square kilometres and I don't think we have any money or resources ever to clean that up. And that's what I like, that's my presentation.

THE CHAIRPERSON: Thank you, sir. Would you allow us a few questions?

MR. UWE KRICKHAHN: Any questions?

THE CHAIRPERSON: We do. We do. Andre...?

QUESTIONS BY THE BOARD:

MR. ANDRE PLOURDE: Thanks.

You've talked mostly about oil. How do you think of natural gas? Similar type of approach, different kind of approach?

MR. UWE KRICKHAHN: I think we could have the flat rate. I don't have an argument with natural gas charged the same way, but it should be -- EnCana apparently is the only one who's doing it. They are paying 12.9 percent right now and I'm not complaining. So can we squeeze them a little bit more for twenty (20)? Maybe we could.

MR. ANDRE PLOURDE: Okay. Thank you.

THE CHAIRPERSON: Judith...?

MS. JUDITH DWARKIN: Thank you. Good morning.

You talk about a flat rate but it's a flexible rate at the same time so I'm not quite sure what you're advocating. In fact, in the conventional royalty system now the rate does flex with price -- oil or gas -- up to a maximum amount and then it's flat.

Are you suggesting something different from that?

MR. UWE KRICKHAHN: I'm not aware that we are doing it right now, to be quite honest about it.

But let's say for -- just for argument's sake, the oil price goes up to a hundred dollars a barrel which could be quite possible if they ever straighten out the mess in Iran and Iraq, and we have a flat rate of 20 percent on a barrel of oil of the world price, we collect twenty dollars ($20).

If the oil price goes down to sixty (60), we collect twenty (20) -- we would collect twelve (12). Sorry. But if the oil price goes down to thirty (30), we still collect six dollars ($6) and the oil companies have to deal with that particular item.

So, it's fluctuating based on the world price; that's what we charge to produce it.

You know, we're talking "we"; we are Alberta.

MS. JUDITH DWARKIN: Okay. Thank you.

THE CHAIRPERSON: Evan...?

MR. EVAN CHRAPKO: Something that you mentioned which is not necessarily part of our mandate, but you touched on sales tax in Alberta.

Are you suggesting that that would be unacceptable or acceptable in terms of making up a revenue shortfall?

MR. UWE KRICKHAHN: If you want to have a complete change of government, you might as well introduce a sales tax. Is it acceptable? No, I don't think it is. I think we have enough natural resources to have no sales tax well for maybe the next fifteen (15) or twenty (20) or thirty (30) years, whatever.

We have to extract natural gas. It's going to be harder to find, I realize that. Methane coming out of the coal beds, you know, even not too far away from here. Water is going to be the biggest problem in the production. But if the methods are too expensive at this time, then it is time that they develop methods which are less expensive.

Technology, you cannot stand still. And over my years I had to learn so many things, and I'm still learning. And I'm not -- at seventy-two (72) years of age I still continue to learn, it is not that you stop today and say, Hey, this is it.

What is the technology? Do we have to look at something entirely different, and that's the way we can do it and that's the way we can make money. It will cost us to develop that, yes, but that's what we have to do.

Sales tax, no, it will be not acceptable. We will have -- I think -- even the very mention of a sales tax I think would defeat the government. That's -- you never seen anything like it. Maybe there's a change anyway because Albertans have a habit of every thirty (30) years to throw out the government anyway, maybe it's going to come anyway, but we don't know that.

MR. EVAN CHRAPKO: So as a taxpayer and owner of the energy resource, what I thought I heard you just say now you'd be okay with funding or in some way putting incentives in place to develop better technology at resource extraction and get at more of this stuff cheaper or faster.

MR. UWE KRICKHAHN: No, I don't think we should put incentives in place.

MR. EVAN CHRAPKO: No?

MR. UWE KRICKHAHN: I don't think that is our mandate as citizens of Alberta to do that.

If you want to build something and you want to do something or you want to get a certain -- certain natural resources, then it's your responsibility to do it as cheap as possible at your own cost. We are not facilitators to do that. There is some natural gas in the ground and if you'd like to have it then you find the technology to do it.

I don't think we should pay --

MR. EVAN CHRAPKO: What if --

MR. UWE KRICKHAHN: -- any incentives.

MR. EVAN CHRAPKO: What if my technology only lets me get at 20 or 30 percent and the rest is stranded and I move on and you, as a taxpayer, sitting on 70 percent that can't be accessed, are you still happy with not incenting a technology improvement?

MR. UWE KRICKHAHN: Oh yes.

MR. EVAN CHRAPKO: As the owner of the resource. You still wouldn't -- you wouldn't see that as your -- something --

MR. UWE KRICKHAHN: My --

MR. EVAN CHRAPKO: -- a burden you should share?

MR. UWE KRICKHAHN: I always had a problem with it because being in -- in an enterprise myself, I really -- the only time I ever accepted money from the government it was in 1981 when the interest rates went right through the roof then, the government had lots of money at that time to enter -- pay some interest on my floor planning for my cars and it was well appreciated, to be quite honest.

And it was the first time in I think in twenty (20) -- twenty-two (22) or nin -- eighteen (18), nineteen (19) years we lost money on the -- on a year-to-year basis. If it is not economical to take the natural gas out of the ground today, it probably will be economical to take it out of the ground in ten (10) or fifteen (15) years or twenty (20) years. It is not something which is lost.

MR. EVAN CHRAPKO: Thank you.

THE CHAIRPERSON: Ken...?

MR. KEN MCKENZIE: You just addressed the questions I was going to ask you and -- and you gave very -- very clear and eloquent answers, so thank you very much for that.

MR. UWE KRICKHAHN: Thank you.

MR. KEN MCKENZIE: Thank you.

THE CHAIRPERSON: Sam...?

MR. SAM SPANGLET: Thanks for the presentation.

MR. UWE KRICKHAHN: Thank you.

MR. SAM SPANGLET: Environment, you touched on a very sensitive point and I agree with you that the tailing ponds from the tar sands, you call them the tar ponds. This could become a major environmental issue down the road, it already is really.

MR. UWE KRICKHAHN: Mm-hm.

MR. SAM SPANGLET: Unless -- unless something change in the last year and a half which I've not been part of the business anymore, I think the permit requires companies to reclaim those ponds every ten (10) years.

Do you know about any just -- unless you know something that I don't -- I'm not aware in the last year and a half, is that -- is that changed?

MR. UWE KRICKHAHN: As you well know, reclaiming -- you know, reclaiming contaminated soil is -- it's extremely expensive and I'm familiar with some of the cases, you know, where people had gas tanks in the ground and they had to --

MR. SAM SPANGLET: Right.

MR. UWE KRICKHAHN: -- buy property -- had to buy the property back because they're -- the -- the sale of the co -- of the property was far higher than -- than cleaning up the property.

MR. SAM SPANGLET: Yeah.

MR. UWE KRICKHAHN: They -- they bought the property back and -- and, you know, it's inactive now sitting there. We don't have a reserve fund in Alberta, not -- not to my knowledge that the Alberta Government has set billions and billions of dollars aside and say, well, all right this is what the kind of money we need to clean up.

You know, if -- if the oil company -- if Husky Oil today is owned by a Chinese investor, I believe, and if he decides to move out after all the oil sands are gone and he declares Husky in bankrupt because the cleanup bill is, let's say for argument sake, $10 billion and his total assets in Canada are only two (2) then we, as a taxpayer, of this province are holding the bag.

MR. SAM SPANGLET: Thank you.

THE CHAIRPERSON: Thank you very much for your presentation and --

MR. UWE KRICKHAHN: Thank you.

THE CHAIRPERSON: -- I applaud you coming forward on behalf of yourself and Albertans. Appreciate that. Ladies and gentlemen --

MR. UWE KRICKHAHN: Have a good lunch.

THE CHAIRPERSON: Yes. Have a great day.

Ladies and gentlemen, that concludes this morning's presentations. We will be coming back this afternoon at two o'clock to hear from ARC Resources and Penn West Energy Trust. Thank you very much.

--- Upon recessing at 12:15 p.m.
--- Upon resuming at 1:55 p.m.

THE CHAIRPERSON: Good afternoon, Ladies and Gentlemen. Welcome everyone. And on behalf of the Royalty Review Panel thank you for your interest in Alberta's royalty and tax regimes.

Your input is a very important part of our work and we appreciate your time and your effort.

I'd like to introduce the Panel to you before we start. On my far right here is Ken McKenzie; followed by Sam Spanglet. I'm Bill Hunter; Andre Plourde; Judith Dwarkin; and Evan Chrapko.

On our far right is a capable young man

who is responsible for time management. He has some placards to help you with your time management.

Each individual presenter will have five minutes followed by an opportunity for the panel to ask questions. Each organization will have ten (10) minutes and, again, the Panel would like to have the opportunity to ask questions.

If you have a submission -- a written submission with you today and you don't want to present but submit it, we have various secretariat people and our reception desk where you can hand that in.

If you haven't and you're thinking about it, our public submissions are closing on June 22nd.

From a safety perspective, if you'll notice there's an exit door at the rear of the room and one to the immediate right of the Panel. Should there be any emergencies, please familiarize yourself with the closest exit.

If you would, please shut off your cell phones and your Blackberries, we don't want any interruptions during the presentations.

These proceedings are being transcripted; that allows two opportunities: One is for us to share with all Albertans via our Website albertaroyalreview.ca the transactions that happened today, as well as capturing adequately the exchange during the question period.

If there's any media here today, I'd be glad to speak to them at the next break. I ask that you please respect the space of the Panel and the presenters during the proceedings.

And again, on behalf of the Panel and Albertans, thank you very much for your time and your interest.

The Panel has the opportunity to hear this afternoon from Mr. Tange from Penn West Energy Trust.

Welcome, sir.

MR. KRISTIAN TANGE: Thank you.

(BRIEF PAUSE)

PRESENTATION BY PENN WEST ENERGY TRUST:

MR. KRISTIAN TANGE: Hello, my name is Kristian Tange and I'm Vice-President of Business Development at Penn West Energy Trust. Thank you for giving us the opportunity to present here today in Medicine Hat.

The first slide -- or sorry, the second slide here is the corporate profile for Penn West.

Since 1995, which is when I joined Penn

West, Penn West was producing about 15,000 to 20,000 barrels of oil a day; had an enterprise value of 250 to $300 million. Today, Penn West is the largest energy trust in North America, producing approximately 130,000 barrels of oil equivalent per day with an enterprise value in excess of about $10 million.

Penn West's main ingredient to success has been its ability to grind and create value out of the conventional oil reserves -- oil pools in the Western Canadian basin, and our core focus has been mainly Alberta.

On slide number 3, it highlights the core areas that Penn West operates in. It also highlights the projects, the C02 projects that Penn West has a working interest in, and I'll start with the C02 projects going from southeast to northwest.

Midale. Penn West has a 9 percent working interest in there. And there was a C02 flood that was initiated in late 2005 and we expect that's going to extend the life of that pool by an additional twenty-five (25) years.

If you go west to Weyburn, Penn West has a 21 percent working interest in that pool, and a C02 flood was initiated a few years back. Prior to that C02 flood, that pool was producing approximately five (5,000) to six thousand (6,000) barrels of oil per day. Today, it's producing in excess of 30,000 barrels of oil per day. Another example of C02 flooding extending the life of these large conventional oilfields.

If you go further west to Joffre, Penn West is the main working interest owner and operator of that pool. This was a pool that was abandoned by the early 1980s. Mid-'80s a C02 flood had -- was initiated and that flood has been going on for more than twenty (20) years and will for some time into the future.

Again, another example of C02 flooding extending the life of these conventional oil pools.

Penn West also has an interest in South Swan Hills. Ninety (90) percent, we're operator there. We're solvent miscible flooding that pool as well, that's ongoing. We have an interest in the Devon C02 pilot in Swan Hills and we also have the Pembina pilot which is currently in progress.

My fourth slide, I really want to just quickly review the status of C02 flooding in North America.

The United States is by far the leader in C02 flooding with seventy-four (74) projects, active projects, producing approximately 237,000 barrels of oil per day.

Saskatchewan, we just talked about but there's more projects in Saskatchewan under review because they have the infrastructure in place via Midale -- via Weyburn and Midale.

Alberta, in contrast, is still at square one, it's still very much in its infancy, and this provides a tremendous opportunity for Alberta to become a C02 flood player.

Currently, there's a flood at Glencoe, Joffre, and I think there's also one at Enchant, which I didn't get on the slide here. The key point here is its order of magnitude difference compared to other jurisdictions.

At the bottom of the table there you can see Penn West C02 pilots, we have the Pembina/Alee's (phonetic) pilot which is on stream, we have two (2) more planned for the end of the year. The key point I want to make here is Penn West is spending significant capital trying to push C02 flooding on a larger commercial scale here in Alberta. And it's good to see there's other operators who are starting to get in to that mode of thinking; that's encouraging.

The next slide on page 5 is a table of the top fifteen (15) light medium oil pools in Alberta. The yellow highlights are pools where Penn West has a significant working interest. What I really want to focus on are two (2) points.

At the bottom of the table there you can see the original oil in place of about 50 billion barrels of oil. Thirty-one (31) percent has been produced to date; that means 70 percent of the oil is still in the ground.

With C02 UR you can get an incremental 10 to 20 percent of the oil out, typically; that translates into about five (5) to ten (10) billion barrels of incremental oil on a simplistic basis. If you high grade the pools to the more amenable reservoirs, you still have a very large number. That's point number 1.

Point number 2 is these light medium oil pools are a high value, low greenhouse gas intensity resource. In an era where greenhouse gas emissions are becoming a bigger and bigger issue and we have the opportunity to sequester C02 while extracting more of that oil that's still in the ground, that's a win-win for Alberta and -- and other stakeholders as well.

Going on to slide 6. I list some of the other benefits here to Alberta. Obviously, with C02 flooding there is -- there is incremental revenue stream here that you would not otherwise realize. You get increase in -- with C02 flooding, there's a lot of capital that's required; that's increased investment; that's increased economic activity in rural Alberta; increased employment in -- not just one local area of Alberta but throughout Alberta because these pools are dispersed throughout Alberta.

You get increased taxes at all levels of government.

You get better utilization of existing infrastructure, again throughout Alberta not just in one localized area.

And I've already touched on the greenhouse gas emissions in my previous points.

Over time, fresh water consumption would decrease as C02 displaces water.

And the last point, it's really just a reiteration of another point that I made before and that is we have 70 percent of the oil, it's still in the ground. It seems to make a lot of sense to take a waste product and try and extract more of that high value resource out.

Next slide is -- really answers the question: Why hasn't C02 flooding taken on in a large sense here in Alberta? And there's some realities with C02 flooding here in Alberta.

The first point is really a -- from a C02 flood proponent perspective. As a C02 flood operator, there's very significant capital outlays that are required upfront for infill drilling, for infield facility development, pipeline development, recycling, that kind of stuff. One commercial phase in Pembina or Swan Hills could easily cost 200 to $300 million. That's upfront, that's before any C02 gets injected.

Then you also have the C02 injecting costs; that can range from 50 to $100 million, depending on the project size. So you have this large upfront capital cost.

Then you have also with that, once you inject C02, it takes time for that reservoir to respond to the C02 injection before you actually get an incremental barrel out.

As a -- you know, that translates into long payout economics. And as I highlight in red there, a C02 operator needs a robust price, a supportive royalty regime to help make C02 flooding competitive with alternative investments.

And the other two points I list on the slide there are really bigger, wider industry-related issues that are being worked on to resolve over time, and that's lack of reliable low cost C02. And obviously you need successful C02 pilots that are repeatable on a larger -- on a large commercial scale.

So, really, in summary here, UR royalty program, we think it's a critical component -- not the only component but a critical component to encouraging C02 flooding on a commercial scale.

Our opinion is that the current royalty regime needs to go beyond the status quo in terms of encouraging C02 flooding in Alberta.

The second point there is -- is list one option that can help balance out that front-end loadedness that the C02 operators have. And we're suggesting an upfront corporate royalty relief on UR capital spent, reduced UR royalty before payout, and a higher UR royalty after payout.

And one point I really want to emphasize here is with that type of concept, there's a potential for win-win with both industry and Alberta. Both parties -- both parties can -- both parties can end up with incremental revenue streams they would not otherwise have. Both parties can end up with incremental rate of return that they would not otherwise have without C02 flooding.

And my wrap-up point here, really, is there's an opportunity here to set the stage to extend the conventional oil reserves here in Alberta. One critical component is a royalty program that recognizes and deals -- helps deal with some of the challenges of C02 flooding.

Thank you for your time and consideration.

THE CHAIRPERSON: Thank you, sir. If you will allow us a few questions.

MR. KRISTIAN TANGE: Absolutely.

QUESTIONS BY THE BOARD:

THE CHAIRPERSON: Judith...?

MS. JUDITH DWARKIN: Thank you. Good afternoon. Thanks for your presentation.

A couple of questions. You note on your slide 7 that the commercial scale C02 flooding has two (2) essential requirements: One is, the robust commodity prices and the second is, supportive royalty regime.

How are you defining "robust commodity price" considering where expectations for average future prices have shifted in the last few years?

MR. KRISTIAN TANGE: I say "robust", I'm talking probably a price in excess of fifty dollars ($50), just given the higher capital costs that we're seeing. I mean, if capital costs start coming down then -- then that commodity price can probably come down as well, so.

MS. JUDITH DWARKIN: Okay. And can you tell us about any -- are there incentives in the US fuelling the UR C02 floods there?

MR. KRISTIAN TANGE: I can't speak to the US particularly; I could speak to Saskatchewan a little bit. I know Weyburn there was -- there were some incentives provided for the Weyburn to kick off but -- but the US, I'm not -- I think they have a different cost structure than we do, and it varies from state to state but it's tough for me to comment --

MS. JUDITH DWARKIN: Okay.

MR. KRISTIAN TANGE: -- much further than that.

MS. JUDITH DWARKIN: And lastly, your point about

> "the producer needs a sufficiently competitive rate of return relative to alternative investments to be inspired to undertake a C02 flood."

What is that competitive rate of return that you have in mind?

MR. KRISTIAN TANGE: Well, it's going to depend from company to company. I think -- you know, I think you need a -- a rate of return probably greater than 15 percent risked for operators to enter into it. Because there's -- one thing I didn't talk much about in the presentation -- I talked a lot about the upfront capital costs, but there's also a lot of technical risk here.

You do pilots that covers twenty (20), forty (40) acres and then when you actually go to commercial scale, you're doing probably five thousand (5,000) acres. You don't know how that five thousand (5,000) acres is going to react. You don't know how twenty (20) acres is going to react, so there's technical risk here too.

And there's also long-term liability risk with -- with C02 supply contract which you would likely have to enter into if you go. So -- so I think the rate has to be fairly sufficient to cover that type of risk.

MS. JUDITH DWARKIN: Thank you.

MR. KRISTIAN TANGE: Yeah.

THE CHAIRPERSON: Sam...?

MR. SAM SPANGLET: Hi.

MR. KRISTIAN TANGE: Hello.

MR. SAM SPANGLET: Couple of questions for clarification.

MR. KRISTIAN TANGE: Sure.

MR. SAM SPANGLET: How many barrels a day are produced today in Alberta using the flooding? You guys -- the total, if you have an idea.

MR. KRISTIAN TANGE: Yeah, I can certainly speak to Joffre. Glencoe is a private company so I'm not up to speed on how much they produce. But we're producing about six (6), seven hundred (700) barrels a day from Joffre.

MR. SAM SPANGLET: Okay.

MR. KRISTIAN TANGE: And that was an abandoned field, literally.

MR. SAM SPANGLET: Yeah.

MR. KRISTIAN TANGE: Yeah.

MR. SAM SPANGLET: But totally? You know --

MR. KRISTIAN TANGE: It's -- I'm going to guess it's probably a thousand (1,000) to two thousand (2,000) --

MR. SAM SPANGLET: Thousand.

MR. KRISTIAN TANGE: -- barrels a day, Sam.

MR. SAM SPANGLET: Okay.

MR. KRISTIAN TANGE: That's a guess.

MR. SAM SPANGLET: Thank you.

Now the other question is: Where do you get the C02 from? In Joffre I guess you get it from

Nova, is --

MR. KRISTIAN TANGE: We get --

MR. SAM SPANGLET: -- is that right?

MR. KRISTIAN TANGE: -- it from Nova. Yeah, it's two (2) miles a way. I mean, there's a very natural fit there. We're two (2) miles away. They were stripping out C02 from one of their streams, it was very pure. You hook up a compressor and two (2) miles of pipeline and away you go.

MR. SAM SPANGLET: When do you --

MR. KRISTIAN TANGE: Very opportunistic.

MR. SAM SPANGLET: When do you get Scotford going? You guys --

MR. KRISTIAN TANGE: What's that?

MR. SAM SPANGLET: You've done a deal with Scotford, with Shell, is that --

MR. KRISTIAN TANGE: We were working on a letter of intent with them but that's been slow.

MR. SAM SPANGLET: Okay.

MR. KRISTIAN TANGE: Yeah.

MR. SAM SPANGLET: You think there is enough C02 that can be captured -- no, the investment -- just backtracking here a little bit --

MR. KRISTIAN TANGE: Sure.

MR. SAM SPANGLET: -- because I meant to

ask and it is so environmentally friendly that I'm interested in it. Do you know how much C02 is in the area that can be used? Not in quantities, but is there enough C02 to be captured to be used to -- there is?

MR. KRISTIAN TANGE: We've been looking at C02 capture supply from different sources for quite some time. And you have the refiners. There's coal, which is very expensive --

MR. SAM SPANGLET: Yeah.

MR. KRISTIAN TANGE: -- to capture and then you have refiners. Again, that's quite expensive to capture. Some of the upgraders, it's fairly expensive to capture. Really the gas supplying -- the gasification options seem to provide the lowest cost CO2 and that's really what I think a UR proponent would look at.

MR. SAM SPANGLET: So from the refinery standpoint, it's going to be important to develop technology I guess to --

MR. KRISTIAN TANGE: Absolutely.

MR. SAM SPANGLET: -- to be able to capture and provide it -- provide to people like yourself that C02?

MR. KRISTIAN TANGE: Yes.

MR. SAM SPANGLET: Well, thanks very much.

MR. KRISTIAN TANGE: Yeah, you bet.

THE CHAIRPERSON: Evan...?

MR. EVAN CHRAPKO: Do you consider this an infant technology or it's good enough to pour hundreds of millions of dollars into?

MR. KRISTIAN TANGE: The C02 flooding is not an infant technology in itself, the capture side of it is something that has -- the cost of C02 has to come down because the UR just can't carry the cost of the C02 capture and the transportation costs. So, I would say the capture side is probably fairly new technology.

The UR itself, it's been going on for longer than I've been alive.

MR. EVAN CHRAPKO: And what would you -- what are you asking us for, specifically, in terms of a royalty and corporate income tax review?

MR. KRISTIAN TANGE: I guess one idea I'm throwing out here is, you know, there is a UR royalty relief right now for tertiary recovery and that's worked for hydrocarbon in the past, but -- and it's ring fenced around the scheme. And what I'm suggesting in here, and it's just one suggestion it's not the only one, but make that ring fence a little wider so that the payout -- the up-front capital costs aren't all loaded up on the UR operator.

MR. EVAN CHRAPKO: And just for C02, not all technologies?

MR. KRISTIAN TANGE: I'm speaking on behalf of C02 but it could -- it could certainly apply to other technologies as well. We just see an tremendous opportunity with the conventional oil pools; that's where you -- the C02 UR -- the C02 flooding works very well.

MR. EVAN CHRAPKO: How would you define it or how would you help us think about this if you, as you likely will, inevitably move on to other technologies in years to come? Is it specifically a C02 ingredient as the touchstone or is it flooding as the concept, or what's --

MR. KRISTIAN TANGE: Well, C02 is a good miscible agent for flooding and since there's so much of it around, that seems to be a logical choice. And it's been going on in Weyburn and we do have a lot in the Edmonton area, we have a lot in the Fort McMurray area, so.

You know, in the past it's been the hydrocarbons, it's been solvents, it's been the C3-C4s. But, again, those are very expensive to -- to utilize. We're using one. We have one such project up in Swan Hills but it makes a lot more sense to use C02, from our perspective. There are certainly challenges, no doubt.

MR. EVAN CHRAPKO: So you'll likely be on C02 all else being equal for the next hundred years?

MR. KRISTIAN TANGE: These are long-term projects that we have -- you know, Pembina and Swan Hills, they can take a lot of C02. And when you start a flood, it lasts for a generation or more, so.

MR. EVAN CHRAPKO: Thank you.

THE CHAIRPERSON: Ken...?

MR. KEN MCKENZIE: Yeah, thanks.

Aside from the proximity to a CO2 source, what makes a pool amenable to CO2 flooding? I mean, my understanding is that it's not something that's --- that can be universally applied, some pools it just doesn't work for.

MR. KRISTIAN TANGE: You need a fairly homogeneous pool, homogeneous rock, you need good pressure high --- you need minimum stability pressure. Usually if it's been a good water flood candidate that's a --- that's usually a good sign that it's a good candidate for CO2 flood.

Good well density helps because you have to infill drill to sweep more of the rocks so. Good depth, good gravity oil, good homogeneous rock. Those are the ---

MR. KEN MCKENZIE: The same sorts of

things you'd be looking at with a water flood as you say. You're just looking at a different agent.

MR. KRISTIAN TANGE: Absolutely right.

MR. KEN MCKENZIE: Great. Just another question here just for clarification. At one point on one of your slides, you indicated that there is potential to permanently sequester 400 million tons ---

MR. KRISTIAN TANGE: Yes.

MR. KEN MCKENZIE: Of CO2 by EOR, where's that number come from?

MR. KRISTIAN TANGE: That was from a --- I don't have it right here in front of me but Stephan Batchu (phonetic) and Jerry Shaw publication. There's lots of publications out there but they did a fairly detailed study and they did a high grade on that number. There's some bigger numbers and there's some smaller numbers, and their number looked fairly reasonable ---

MR. KEN MCKENZIE: Okay.

MR. KRISTIAN TANGE: -- because they did a fair bit of detail in their study.

MR. KEN MCKENZIE: Okay. So this is -- I'm assuming -- this is based upon assumptions about how easy it is to capture -- I mean, this is sort of pretty optimistic I would think.

I mean, we're not there right now ---

MR. KRISTIAN TANGE: That number's probably middle of the road.

MR. KEN MCKENZIE: Okay.

MR. KRISTIAN TANGE: Relative to what I've read. I've seen a thousand, two thousand --

MR. KEN MCKENZIE: Okay.

MR. KRISTIAN TANGE: -- like, that's probably a little too high --

MR. KEN MCKENZIE: Okay.

MR. KRISTIAN TANGE: You know, just looking at it.

MR. KEN MCKENZIE: So this is relatively conservative. You know ---

MR. KRISTIAN TANGE: It's middle of the road.

MR. KEN MCKENZIE: Middle of the road.

MR. KRISTIAN TANGE: Yep.

MR. KEN MCKENZIE: Great. Good, thanks a lot.

MR. KRISTIAN TANGE: You're welcome.

THE CHAIRPERSON: Andre...?

MR. ANDRE PLOURDE: Thanks for your presentation. I got your material just a little while ago so I've looked through it and I'll go through it again and I'm sorry if I haven't --- don't do it justice right now.

MR. KRISTIAN TANGE: Okay.

MR. ANDRE PLOURDE: On slide 5 you talk about recovery rates and on --- earlier you --- just on slide 6 you talk about 400 million tons of CO_2 sequestered.

Can you kind of make the link between the two (2) tables and tell me, roughly, if you sequester 400 million tons, how many more barrels of oil are we going to be producing?

MR. KRISTIAN TANGE: If you --- rule of thumb that you can use and it's just a rule of thumb, it usually takes five (5) to --- on a good flood it'll take five (5) to ten (10) MCF of CO_2 to produce one (1) barrel of oil.

So you can work it backwards if you have a calculator and I don't have one on me. But, --

MR. ANDRE PLOURDE: I don't have one here but I --

MR. KRISTIAN TANGE: -- that's a good rule of thumb and that can give you an idea.

MR. ANDRE PLOURDE: Ok, thanks. That's useful. You talk about this at some point in time about CO_2 purchase costs which is on your slide number 7.

MR. KRISTIAN TANGE: Yep.

MR. ANDRE PLOURDE: Now, if we're in a world where there's greenhouse gas emissions type of project where the price of CO2 -- CO2 itself has a price.

How does that effect the economics of flooding?

MR. KRISTIAN TANGE: So this is a perspective from the CO2 flood operator.

MR. ANDRE PLOURDE: Right.

MR. KRISTIAN TANGE: And from our perspective we, obviously, want to pay as little price as possible because we have to inject a lot of CO2 to get our oil out.

MR. ANDRE PLOURDE: But if companies now -- if a firm producing CO2 now gets a -- there's a cost to putting CO2 --

MR. KRISTIAN TANGE: Yep.

MR. ANDRE PLOURDE: -- somewhere other than in the ground. How does that affect the economics of flooding?

MR. KRISTIAN TANGE: It -- how -- I'd say indirectly. If you're a CO2 emitter you're going to look at the cost, the penalty cost, that you have to pay to emit CO2 versus --

MR. ANDRE PLOURDE: Right.

MR. KRISTIAN TANGE: -- what it's going

to cost to capture. And UR, it can bear some of that capture cost, not all of the capture cost, depending on the process that you're dealing with. So, it depends what the penalty is or what the cost.

MR. ANDRE PLOURDE: So what's the standard capture cost in a standard? Pick something that's okay.

MR. KRISTIAN TANGE: Well for coal ---

MR. ANDRE PLOURDE: That's high.

MR. KRISTIAN TANGE: That's going to be very high. If you ---

MR. ANDRE PLOURDE: Yeah.

MR. KRISTIAN TANGE: -- look at the refiners, they're probably -- this is a range $50 to $80 a ton. And then if you're looking at gasification, it's less than $40 to $30 dollars, it depends.

MR. ANDRE PLOURDE: Great. One last thing. As you know was --- and you mentioned here the Alberta government, but also the federal government, have been running some incentive programs, right, to support CO2, the kinds of operations that you have now.

What have we learned as a result of these incentive programs?

MR. ANDRE PLOURDE: I think you're referring to the energy --- Innovation Energy Technology

Program and I think that's been an excellent program that's been put forth by the Alberta government.

It's not just CO2 UR, it's technology in general. And it's to help industry spend a little bit of money learning the technologies, understanding the technologies, getting over the technical and the economic hurdles and challenges. And they participated in the Pembina/Alee's (phonetic) pilot and that's still ongoing. It's pretty early to draw any definitive conclusions but we're certainly learning some things from that.

We are doing that Pembina horizontal pilot to learn more about spacing and well configuration. We've learned that, you know, on our pilot that there's very good injectivity, very good CO2 containment, very good sweep efficiency which are all very encouraging to us. But it's --- we're two (2) years in and you're talking about a reservoir where it's taken seventeen (17) --- fifty-three (53) years to produce 17 percent of the oil out.

It's very tight. It takes time to learn this stuff. A lot of people aren't patient enough to -- they always ask when when when, but it just takes time and ---

MR. ANDRE PLOURDE: So it's a bit early to kind of ---

MR. KRISTIAN TANGE: It's a little bit early.

MR. ANDRE PLOURDE: -- and major learning --

MR. KRISTIAN TANGE: And we share those learnings with the -- one of the committee's with the government on that.

MR. ANDRE PLOURDE: Okay.

MR. KRISTIAN TANGE: And it gets disbursed over time as well, that information. That's the whole idea.

MR. ANDRE PLOURDE: Okay. Great. Thank you.

MR. KRISTIAN TANGE: You're welcome.

THE CHAIRPERSON: On the same point, I think it was in the last two (2) to three (3) years that the people of Alberta supported your industry with $200 million through that fund.

MR. KRISTIAN TANGE: Right.

THE CHAIRPERSON: Through that minister. And now you're asking for a royalty -- EOR royalty program on top of that. Sort of like having your cake and eating it too, but those are my words.

Is that actually what you want, or would you prefer that the people of Alberta continue to invest money in the technology? Or would you like the royalty relief?

MR. KRISTIAN TANGE: I think the ITP's been a great program to help industry learn about CO2 UR technology. What I'm suggesting here today is that we take it up a notch and try and go for a large commercial scale CO2 flood to kick-start it like they did in Weyburn.

And I guess what I'm saying here, is if the royalty regime doesn't change, what could happen is you have potential projects that could --- that may not materialize that should materialize because it's incrementally beneficial to both Alberta and industry because we're chasing the tougher barrel now. The easy barrels have been produced and now we're chasing the -- I call it the EOR barrels, the enhanced oil recovery barrels. And then there's more costs -- as I say, there's more upfront cost and more risk with that.

We're saying that instead of loading all the costs and the risks on one (1) stakeholder, can we somehow work with the royalty program so that everybody benefits.

THE CHAIRPERSON: Thank you very much for your presentation this afternoon. We appreciate that.

MR. KRISTIAN TANGE: You're welcome.

Thank you.

THE CHAIRPERSON: Have a great day.

MR. KRISTIAN TANGE: Thanks.

(BRIEF PAUSE)

THE CHAIRPERSON: Next the panel has an opportunity to hear from Mr. Stadnyk ARC Resources. Welcome, sir.

PRESENTATION BY ARC RESOURCES:

MR. MYRON STADNYK: Yeah, thank you. So I'll -- thank you for the opportunity to present. And what I'd like to speak about is the mature assets. I know there's been a lot of talk on the oil sands and, you know, where the industry's going. I have a little bit of that on CO2 but I'd like to spend one (1) moment on the mature assets that still are important in Alberta's industry so.

The --- I guess you could look at us as a voice for the conventional assets for this specific presentation.

To just give a quick overview on page 3. Similar to Penn West, we started in the mid '90's and we've grown our company from $200 million initial value to over $5 billion, and we currently employ four hundred fifty (450) people and about five hundred (500) contractors.

We've repatriated about $2 billion of assets to Canada, to Calgary head office that were previously owned by multi-national companies, in essence. So that's been our mantra, our focus has been on conventional oil and gas assets.

Of these $2.6 billion of assets that we've acquired, we've reinvested $1.3 billion in developing them. And we've spent a billion dollars operating those assets over that time period.

During that time we've paid $1.2 billion of royalties, about $800 million of that to Alberta. So on the next page -- I guess I should flick this along here. I just have a quick slide to context ARC in the industry, so, this is the companies that are listed on the TSX. We are number 14 on there and we produce about 64 thousand BOE per day.

You can see, clearly, the trend that the industry has undergone the last ten (10) years. You see the integrateds, the mega companies with the refining oil sands large production bases. Kind of a smaller E&P group, the green bars now that are true sort of A&P's but you see as they look for growth they're going overseas.

Then kind of the trust business that's really producing the historical or legacy assets of conventional production.

Now, you know, there's this -- I think one important number just yesterday in the Daily Oil Bulletin it talked about Penn West and ourselves, Penn West having the largest conventional light oil, light and medium oil reserves and us being the second largest.

So I just thought it was interesting to put it into perspective for you. Ours are one hundred and one (101) million barrels of light and medium crude. If you look at that on a world scale, the world will consume that much in about twenty-eight (28) hours. And we'll work about twenty-five (25) years with a thousand (1,000) people to produce it.

So, it really gives you a context of what these -- the remaining light oil and medium reserves are left in our Province. The world's now consuming about eighty-five (85) million barrels a day of oil.

So on page 5, I think this just gives you a sense of the type of portfolios that companies are operating that have mature assets. So, in our case, we have the Pembina discovery well. Fifty (50) years old well, we smashed the bottle of non-alcoholic champagne in the new oil patch on it a couple of years ago. And the

Redwater field we had since the late '40s. We operate in Swan Hills. We also have, in this area, lots of wells, some of them being -- some -- a couple in Brooks are getting to be eighty (80) years old so -- but I call them legacy assets.

So, to have our production of sixty-four (64) thousand barrels a day, we own a small ownership in some wells and a hundred (100) percent in other, but a total of seventeen thousand (17,000) wells. So, that gives you the complexity of the business operating mature assets.

So my key point that I'd like to drive home in this presentation is that it's really important to us as a conventional producer with a lot of these old assets to establish a solid base that we have predictable royalty rates and that the royalty rates acknowledge that the cost of operating these old wells is expensive.

And that we maximize the long-term recovery of this resource for our shareholders and for the people of our Province. So it'd like to just run through a couple examples to make those points. But before I'll -- I do that I've tried to condense the CAPP summary into two (2) pages, which is not easy, but here I go.

So, what -- what I wanted to show is with the graph on page 8. The key points of the royalty system currently in Alberta. Now, this -- this summarizes a lot of complex calculations of how royalties are done, but the key points are that royalty rates automatically adjust for price, they automatically adjust for the productivity. But they do -- they don't consider the increasing costs of our basin.

As you can see in our mature fields, those royalty rates -- I've looked at a whole bunch of them and they're about between 5 and 10 percent. And that's the kind of numbers that are rolling out for these mature assets. So just to give you the context.

Now, what I'd like to show is a ten-year history. So I've been at ARC since the start and this is what I've seen since we have grown this company. This is shown graphically on this page, but our operating costs started at around four dollars ($4), they're about nine dollars ($9) a barrel.

The royalties started in a similar range, and they're up to about ten dollars ($10) a barrel. So if you take that concept of the price increasing, you can see on wells that actually have declined in production over a ten (10) year period, that the royalty payment has gone up 230 percent per well, which is figured in because the price has increased.

So the actual cost of adding new reserves to replace what we've produced has been the most dramatic increase, and I've shown that on the dark brown part of that graph. So in our case, where we started reserves, you could buy for five (5) to six (6) dollars a barrel. With the cost increases, with the pressure on the acquisition market, that industry average has climbed near twenty (20) dollars a barrel.

So on page 10 on the returns, you can see the actual -- what's left over per BOE hasn't changed a whole bunch. So there's a -- it's very interesting to look at the actual history of one company that's been in conventional production for -- for eleven (11) years.

So just to reiterate the key point, the royalties have, in a way, looked after themselves because those royalty curves have been very well thought out.

The key points then on page 11, I think everyone's acknowledged the cost of our industry has gone up dramatically. I think, you know, in the CAPP presentation you've seen the size of the oil and gas discoveries that are being made. It is getting tougher to find -- to find discoveries to sustain the companies and it's very challenging in western Canada.

And that's evidenced by seeing our intergradeds going overseas and the movement to the oil sands.

Now, I'll just repeat the point that there is this economic reality of our basin and a fair sharing of royalties and profits is essential for us to fully mature these assets.

Now, I wanted to just give a couple property specific examples. I think on page 13 and 14 what you can see there is that in 2006 Alberta drilled 3,000 oil wells and just about 13,000 gas wells. The -- that's, you know, 15-16,000 wells and you can see the average production per rate -- per well.

I think you've seen that in the CAPP presentation. At a macro level, the oil production on conventional is declining despite that drilling of all those wells. The macro level of gas, the gas is staying about flat with all the drilling of the wells. So, that gives you a macro level of the conventional basins.

So people are using their cash flow from conventional assets to look for new developments. Now, you might ask why are the costs going up so dramatically on fields? Well, here's an example of Redwater.

We acquired this asset from Imperial Oil. You can see during the peak of this it was producing 150,000 barrels a day with very little water in the early '70's.

This property actually went up to about a million barrels a day of water that's produced in conjunction with the oil. Now, the oil --- the little orange part at the end is the oil that we are producing. It's about 4,000 barrels a day. It's tough to see and we produce about 600,000 barrels of water with that. So, to reinject water in these aging oil fields, in this example, it's $12 a barrel just to put the water back in the ground.

So, the costs of these types of older fields are very common to be over $20 a barrel. So the net back, in order to have a return, the royalties in this particular field are about 7 percent; that's what's allowing us to break even and to continue running this asset.

And on this particular asset - I'll get to it later - that's building a foundation for us to potentially CO2 flood this asset so that's the daisy chain of development there.

Similarly on the next page, on page 16, on the Pembina property, I didn't put the water in on this one but it's actually over 100,000 barrels a day of water being reinjected to produce about 5,000 barrels of oil.

So again, Pembina in general is about $20 a barrel to operate the production.

So I've just switched gears just a couple pages on CO2.

THE CHAIRPERSON: Actually, maybe I can get you to go right to 20 and 21.

MR. MYRON STADNYK: Sure.

THE CHAIRPERSON: As a way of ---

MR. MYRON STADNYK: Finish up that part?

THE CHAIRPERSON: Yeah.

MR. MYRON STADNYK: Sure. Okay.

THE CHAIRPERSON: And then maybe through our questions we can go back to the things you missed.

MR. MYRON STADNYK: Fantastic.

THE CHAIRPERSON: All right.

MR. MYRON STADNYK: Okay. So the ask I guess to use your words, Evan -- or for the conventional mature assets. What we're asking is that we really clearly understand the importance of high -- of fair royalty rates on high operating cost fields so that these assets can continue to produce and provide a platform for future development.

So, you know, I call it our royalty system. It's for the companies, it's for us citizens of the Province. We need to maximize the recoveries of our pools.

And so, you know, as Kristian said,

Pembina, the costs are over $20 but there's still 60 percent of the oil left. That Redwater example, there's still 40 percent of the oil left.

So the lower royalty rates for the older low rate wells are important to sustain the production. And I -- the concept of the sliding scale of the production and the price I personally feel is well thought out.

So that does the mature asset part. Bill, do you want me to --

THE CHAIRPERSON: Actually --

MR. MYRON STADNYK: -- wait for questions or do a couple pages ---

THE CHAIRPERSON: Did you want to do 21?

MR. MYRON STADNYK: Sure.

THE CHAIRPERSON: And then we're -- and then we're going to have to go to questions I'm afraid.

MR. MYRON STADNYK: Sounds good. So for CO2 what I've done is I've spoke to Kristian a couple days to -- a couple days ago to the concepts on CO2. And the upfront corporate royalty relief, the way I would paraphrase that, if you look at Redwater specifically, that pool would -- would pay $5 or $6 million royalties.

If you look at the investment required to CO2 flood that, that's going to be half a billion dollar plus factoring in the cost of CO_2. So what that point means is that it's going to be important to have fair risk sharing to get these projects off the ground. That's -- that's what -- to paraphrase that.

So I -- I agree with -- with that statement. And the concept of reverting to higher percentages, sharing in the risk and then gleaning the take after, I agree with that as well, so.

THE CHAIRPERSON: Okay, if you'd allow us some questions?

MR. MYRON STADNYK: Sure, yeah.

QUESTIONS BY THE BOARD:

THE CHAIRPERSON: Andre...?

MR. ANDRE PLOURDE: Thank you. Thank's for your presentation.

MR. MYRON STADNYK: Oh, you're welcome.

MR. ANDRE PLOURDE: And thanks for the material that you circulated ahead of time.

If I can take you to one of your slides and that is, I think it's 10, when you talk about a ten (10) year increase in terms of returns, finding and development costs, is that an average increase or are you comparing 2006 to -- to 1996, so it should --

MR. MYRON STADNYK: Yeah, I just did the

one year to the other year.

MR. ANDRE PLOURDE: Okay.

MR. MYRON STADNYK: I think an easier way, the last three (3) year average is about sixteen dollars ($16).

MR. ANDRE PLOURDE: Right.

MR. MYRON STADNYK: So that would still be at double if you average those three (3) years.

MR. ANDRE PLOURDE: Yeah. No, I'm just trying to -- the rate of return is kind of quite low in the last year.

MR. MYRON STADNYK: Yeah. Yeah.

MR. ANDRE PLOURDE: That's all I was -- couldn't quite understand.

MR. MYRON STADNYK: This is why all the budgets are being cut back on drilling, everybody.

MR. ANDRE PLOURDE: Okay. You also talk a bit about natural gas well productivity having declined.

MR. MYRON STADNYK: Mm-hm.

MR. ANDRE PLOURDE: However, we also know -- I think a lot of people have been telling us about how coal bed methane has grown dramatically --

MR. MYRON STADNYK: Yeah. Yeah.

MR. ANDRE PLOURDE: -- in the last five

(5) years. How much of the decline that we've observed of the 9.2 percent that you -- that you have shown is really linked to this change in the structure of -- of the play itself.

MR. MYRON STADNYK: Mm-hm. Yeah.

MR. ANDRE PLOURDE: That essentially if we -- do you know if you were just to take out all of the CBM wells and focus on the -- the -- the normal, conventional gas wells --

MR. MYRON STADNYK: Yeah.

MR. ANDRE PLOURDE: -- what that number would look like.

MR. MYRON STADNYK: I think it would be higher. In my experience, our CBM wells come on and they stay flat longer. So, if I were to take my CBM wells out of this graph, the decline would be higher.

And I think you see that. I know Apache and EnCana, when they put their wells on, the wells start off at a rate and they actually incline for a while as the coal is produced so.

MR. ANDRE PLOURDE: Yeah. We've been getting --

MR. MYRON STADNYK: So I --

MR. ANDRE PLOURDE: -- lots of different kind of things on this, so it's confusing --

MR. MYRON STADNYK: Yeah. My wells are flat.

MR. ANDRE PLOURDE: -- that kind of stuff.

MR. MYRON STADNYK: Yeah.

MR. ANDRE PLOURDE: One last thing, in the terms of the cost issue, you mentioned that the Alberta royalty system kind of adjusted for prices, productivity, also vintage, right, when the oil was found; right?

MR. MYRON STADNYK: Yeah, and that --

MR. ANDRE PLOURDE: Okay.

MR. MYRON STADNYK: Yes.

MR. ANDRE PLOURDE: The other thing is, implicitly, there's kind of a link between cost and productivity. Do you think it's sufficient?

MR. MYRON STADNYK: So the first part is interesting because on a Redwater and a Pembina field, we're actually paying the old royalty, the highest one.

MR. ANDRE PLOURDE: Right.

MR. MYRON STADNYK: Even though we're doing the development --

MR. ANDRE PLOURDE: Yeah.

MR. MYRON STADNYK: -- so, just to be clear on that.

MR. ANDRE PLOURDE: Yeah. Yeah.

MR. MYRON STADNYK: Then the second one the -- is there sufficient returns on the -- on the new -- just to clarify, do you mean on the new royalty or --

MR. ANDRE PLOURDE: Whatever you want.

MR. MYRON STADNYK: Whatever you want. Well, the -- the royalties have been in place so long that they're in our economic runs to calculate the return, so each well would be unique.

MR. ANDRE PLOURDE: Okay.

MR. MYRON STADNYK: You know, they all have different crown, freehold, split, you know, I --

MR. ANDRE PLOURDE: Okay, so maybe let me ask the question a bit differently.

MR. MYRON STADNYK: Yeah. Yeah. Yeah.

MR. ANDRE PLOURDE: I mean, with all this flexibility, in your -- pick a -- you've got gas properties as well as oil properties.

MR. MYRON STADNYK: Yeah.

MR. ANDRE PLOURDE: When was the last time that your royalty rates on a gas property changed because of a price induced -- because of changes in prices?

MR. MYRON STADNYK: The last time the royalty -- the royalty -- the curve is similar --

MR. ANDRE PLOURDE: Yeah, yeah. Right.

MR. MYRON STADNYK: -- to this one; 20, 25 percent, so the royalties have been -- gas royalties are a lot more complicated. They're moving around monthly and then on an annual basis, because you have to credit back for processing and --

MR. ANDRE PLOURDE: Right.

MR. MYRON STADNYK: -- all that stuff, so, to answer your question, they change all the time.

MR. ANDRE PLOURDE: No, but the maximum rate, right, is hit at something like three dollars ($3) an MCF or give or take --

MR. MYRON STADNYK: Yeah.

MR. ANDRE PLOURDE: -- somewhere between three (3) and four dollars ($4) an MCF. I guess my point it's been a long time, I think, since we've been below three (3) or four dollars ($4) an MCF for natural gas.

MR. MYRON STADNYK: Yeah, that -- that would be three (3) or four (4) years.

MR. ANDRE PLOURDE: So that, essentially, all the upside -- would that be a fair characterization of -- of your operations? That you've essentially been at the maximum royalty rate for quite some time now?

MR. MYRON STADNYK: Yeah, and our gas royalties are very significant.

MR. ANDRE PLOURDE: Okay. Great. Thank you.

MR. MYRON STADNYK: Yeah.

THE CHAIRPERSON: Ken...?

MR. KEN MCKENZIE: Yeah, thanks. I'm a little bit -- I just want to help you -- maybe you can help me clarify some of this stuff. As you've just discussed with Andre, we have price sensitivity, we have production sensitivity or productivity sensitivity and the vintage thing. But not cost-sensitive, explicitly.

So, are you basically happy with the regime as is or are you advocating for a more cost-sensitive regime, in a sense? You talked about water handling, et cetera. You know, right now we don't account for any of that, you just bear that cost; it's an operating cost. It's not a deduction from royalties, you know, so I'm sure -- not quite clear where -- where your feet are on this issue.

MR. MYRON STADNYK: Yeah, my feet are planted that I feel it's well thought out.

MR. KEN MCKENZIE: The way it is right now?

MR. MYRON STADNYK: Yeah, it -- it -- in my experience, of, you know, a wide variety of fields and well-bores, factoring the productivity and the price increases has been a fair -- been fair.

MR. KEN MCKENZIE: All right, with the -- with the exception of some of the EOR stuff --

MR. MYRON STADNYK: Yeah, exactly. There's always niches that need a little bit of different look at but yeah.

MR. KEN MCKENZIE: Okay, so could we just talk a little bit about those -- the sorts of things you have in mind on the EOR stuff. The idea was for corporate tax relief, corporate income tax relief on EOR capital.

So is it -- again, there's lots of ways that this can be done. Are there sorts of things that you have in mind things like investment tax credits, fast write-off rates, maybe an ACCA for EOR capital, I mean, what sort of things are you thinking about here?

MR. MYRON STADNYK: You know, I came here more to present a concept.

MR. KEN MCKENZIE: Okay.

MR. MYRON STADNYK: I -- I would say that we're a couple years behind Penn West on specific projects, economics.

MR. KEN MCKENZIE: Okay, okay.

MR. MYRON STADNYK: But we've done enough economics that we know that the cost of CO_2 is going to be very important, whether these get off the ground, and whether there's some kind of sharing in that. And the capital costs -- the payouts are going to be very long because the CO2 is injected; it takes years for potentially to -- to get your response.

MR. KEN MCKENZIE: To build the pressure up.

MR. MYRON STADNYK: So what I'm looking -- my point is a shared risk up front, so that everyone can benefit later.

MR. KEN MCKENZIE: Yeah, in some -- in some way without -- because it's more of a conceptual framework right now. Okay, that's great, thank you.

MR. MYRON STADNYK: You know, and to maybe the work we've done to answer your last question of CO2, we have a ton of CO2 going in our calculations so you get two to three barrels come out. So if you have to pay a hundred dollars ($100) for that going in, and you're only getting two barrels out, your F&D costs are fifty dollars ($50). It's not going to work.

MR. KEN MCKENZIE: Doesn't add up for me.

MR. MYRON STADNYK: Doesn't add up. And then add your capital and all that, so that -- maybe those numbers help you understand my answer better.

MR. KEN MCKENZIE: Yeah -- yeah, they do

indeed. Thank you.

THE CHAIRPERSON: Judith...?

MS. JUDITH DWORKIN: Good afternoon. I want to follow up on a question that Andre was pursuing with you and it's with respect to your observation or your comment that the sliding scale -- conventional royalty, it slides with price and productivity is well thought out and works well. It does slide on price to a point, as Andre was sort of pursuing with you in that. The marginal rate maxes out at about three dollars fifty cents ($3.50) per MCF and around fifty dollars ($50) for oil.

So in principle, do you think being it's completely well thought out considering where price expectations currently are for the foreseeable future? As in principle.

MR. MYRON STADNYK: Yeah, you see, I've been -- in preparation for this I've been studying the other end of the spectrum, the low productivity and the -- I've been studying the, you know, low productivity gas wells and the low productivity recoveries, and those are how those fields are staying economic.

So, I feel like I haven't studied enough to answer a seventy dollar ($70) price environment. You know, I know the future curve's now seventy-two (72), seventy-three (73) dollars.

MS. JUDITH DWORKIN: Well, let's even, you know, say it's not even going to be that exuberant, but certainly -- especially more so in the case of natural gas even than crude oil. It would be fair to say that expectations for average prices have definitely shifted upwards over the long -- for the long-term?

MR. MYRON STADNYK: Of course, of course. And that was our strategy to buy all these things, right, so. MS. JUDITH DWARKIN: Okay, thanks.

THE CHAIRPERSON: Sam...?

MR. SAM SPANGLET: Well, I understand your position, thanks, I don't have any questions.

MR. MYRON STADNYK: Oh, you're welcome.

MR. SAM SPANGLET: Evan...?

MR. EVAN CHRAPKO: Just a little clarification for me on the cost.

It looked like the Redwater versus Pembina had ten (10) times more water with one than the other. But you still said it was twenty dollars ($20) to put it back in for each -- why -- what's going in -- are there no economies of scale to putting back in more?

MR. MYRON STADNYK: Yeah, what the interesting difference there is that the Redwater reservoir is actually a very high permeability reservoir.

And the water basically falls in the hole. You don't need a whole bunch of pumps. Where at Pembina, you have to pump it up to two thousand pounds (2,000) pressure, which is very expensive on electricity.

So, even though there's ten (10) times more water, more by fluke than anything else, they come out to the same operating costs.

MR. EVAN CHRAPKO: Okay. I was wondering if that was --

MR. MYRON STADNYK: Yeah. Yeah.

MR. EVAN CHRAPKO: Yeah, you're welcome.

THE CHAIRPERSON: Page 8. I'm a retired logger. I like simplistic things. And in our industry we had -- in the lumber industry, specifically, we have Spruce, we have Pine and we have Fir. And they all have different characteristics and it costs more to harvest one over the other.

But at the end of the day, to simplify it, we created an SPF stumpage rate; Spruce, Pine, Fir, rather than have these three (3) separated because they were so close in proximity.

Does it make any sense to simplify this? It's quite old, as I understand it, the history of this rate and these numbers. Does it make any sense to make this more simplified? Like why -- why wouldn't it all be

35 percent?

MR. MYRON STADNYK: Well, you'd be a hero if you could do that. But, yes, you know, the -- one of these is pre-'74, one of these is 1992, I think; the third tier. So there's a combination of history.

And why I would agree with what you're saying is I think if you looked five (5) or six (6) years ago, you could say we're producing -- I think if you study the States, everyone says these old field are supporting the industry.

Well, that's not true anymore. Only 40 percent of the production in the States is coming from what you'd call old field or these, what we call old here. I don't -- I haven't studied the Alberta numbers, but I know it's less and less every year coming from old.

And we're replacing it with -- with third tier, so, a simplification of the royalty system, I -- when I was preparing for this, my accountants were asking me to make that comment for this and for gas. 'Cause the gas -- the submissions that go back and forth on unit of production credits, low prod, it's just a lot of paper and a lot of time turned.

So, I would agree with that.

THE CHAIRPERSON: Thank you very much for your contribution today. We really appreciate it.

MR. MYRON STADNYK: Yeah, you're welcome.

THE CHAIRPERSON: Have a great day.

MR. MYRON STADNYK: Yeah, I will.

THE CHAIRPERSON: In sunny Medicine Hat.

MR. MYRON STADNYK: It's nice here.

THE CHAIRPERSON: Ladies and gentlemen, that concludes our registered presenters for this afternoon. We do have a evening session slated for 7:30 but, at present, there are no registered presentations. So the panel will make itself available in case we have other Albertans who want to sign up and share their contribution with us.

So, thank you very much and please be safe.

--- Upon recessing at 2:48 p.m.

(NO EVENING PRESENTATIONS)

--- Upon adjourning at 7:40 p.m.

Certified Correct,

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Wendy Warnock, Ms.