ECONOMIC DEVELOPMENT AND INFRASTRUCTURE COMMITTEE

Inquiry into Mandatory Ethanol and Biofuels Targets in Victoria

Melbourne — 27 August 2007

Members

Hon. C. Campbell
Mr P. Crisp
Mr D. Davis

Chair: Hon. C. Campbell
Deputy Chair: Mr D. Davis

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Witnesses

Mr B. Frilay, Consultant, and

Mr F. Russell, Biofuels Project Director, BP Australia Ltd.

Necessary corrections to be notified to executive officer of Committee

The CHAIR — Welcome to the public hearings of the Economic Development and Infrastructure Committee's Inquiry into Mandatory Ethanol and Biofuels Targets in Victoria. All evidence taken at this hearing is protected by parliamentary privilege; comments you make outside the hearing are not afforded such privilege. Could I ask each of you please to state your name, the organisation you are representing, your position within the business and the business address.

Mr RUSSELL — Frank Russell. I am the Biofuels Project Director of BP Australia Ltd. The address is 360 Elizabeth Street, Melbourne.

Mr FRILAY — Bill Frilay. I am a Business Consultant with Glen Doreen which is located at 60 Lipton Court, Doreen.

Mr RUSSELL — What I propose to do is just run through this sheet; if you need any clarification, please ask me. I will try not to use heavy acronyms or any technical terms. I would like to refer to what we currently understand as diesel. Rather than petrodiesel, I just call it diesel and biodiesel. If we are talking about a blend, we talk about a B20 or B5 or something like that. It just helps to make it less confusing.

BP — our role and activities in Victoria. We are primarily a fuel marketer. We do not have any production capability in Victoria. We largely rely on the Victorian refiners to provide us products. We draw fuel from Mobil in Yarraville and we use its storage facilities. That is primarily how we get our fuel. At a retail level BP has a number of branded-operated sites. Those sites are principally in Melbourne, but we have a strong dealer network, and of course we have a rural distributor who covers all the State. That is Advance Petroleum. In effect, outside of the Melbourne metro area BP relies entirely on Advance Petroleum to distribute fuel.

Over the last three years BP has spent quite a bit of time on biofuels. Just to briefly run through some of the activities we have been involved with, BP is the largest marketer of biofuels in Australia. I say that based on the fact that within Australia at the moment, if you are looking at ethanol, there is approximately 130 million litres of ethanol available for fuel and currently BP is contracted to have 55 million litres of that. It is on that basis that we can claim that we are the largest marketer. We buy both from CSR in Queensland and Manildra in New South Wales. Up until early last year we were getting some of our ethanol from CSR, Yarraville. What we are doing in WA is BP has an understanding with a company building, an ethanol plant near Perth to take all of their product that they produce — that is, approximately 160 million litres. We are currently expanding our market for E10 and by the end of August we will have about 85 sites in Queensland. With the recent contract for supply of ethanol in New South Wales we will have close to 250 sites around Australia by the time we get that to the marketplace. That is a considerable change in our product slate. Close to 50 per cent of our sales in New South Wales will be E10.

BP has taken a different marketing route to the other majors. Where we put ethanol into a site we have what we call dedicated sites. We do not offer a 91 octane fuel, which is your normal unleaded petrol; we only have the E10. The reason we did that is that we found that two or three years ago when we had E10 available at some of the sites in Queensland the uptake maximum was around about 20 per cent — 20 per cent of the customers would use E10 and the rest would use normal unleaded. Given that our vision is that all of our unleaded petrol will be E10, we saw that we needed a way of using more of the ethanol. That is where we went to dedicated sites. Our ethanol sites, in the main, are just selling E10. We have sold more than 100 million litres of E10 now and we have not had any problems with that. From the point of view of customer operability issues, there have been none. So that has been very pleasing for us. Clearly it was a marketing risk. We could have lost a lot of customers doing that, but fortunately we did not.

BP has got a project that should start later this year where we are using tallow and putting it through our Queensland refinery. Eventually all the diesel coming out of that refinery will be 5 per cent renewable source, so we are calling that a renewable 5 per cent diesel, which equates to about 2.2 billion litres of diesel a year and which will be 5 per cent renewable product. We are also working closely with other mainly ethanol producers' proposed plants — Primary Energy, CSR and some of the others. We have got memorandums of understanding with them. We of course are talking to the people in Victoria. We have discussions with Agri Energy — we have been talking to them for the last 12 months, waiting to see what they are going to do with their plant. We have been told that they expect to have their plant up and running by the end of next year sometime. We have had discussions with the biodiesel people in Barnawartha, who said, last time we spoke to them, that they should be commissioning their plant soon. Also we have been talking with the Smorgon people around their biodiesel operations. We are keeping in touch with what is going on in Victoria.

Internationally BP has established the Energy Bioscience Institute, where they are dedicating US$50 million a year for the next 10 years to develop some new technologies, new conversion technologies, more economic feedstocks, better processes, and things like that. That Energy Bioscience Institute is centred at the Berkeley University in California. BP is also doing some work with DuPont and some other people around developing different routes to a biofuel. One of the more promising ones is biobutanol, which does not have the operational issues that ethanol has. That is a brief summary of what BP is doing in Australia. We will continue to work to try and get more biofuel into the marketplace.

The CHAIR — Thank you. Now to the terms of reference.

Mr RUSSELL — The first question is on the merits or otherwise of a mandated target for alternative fuels. BP is interested in the use of ethanol in Victoria, and we have developed our marketing of the product in other states, so we believe the marketing risk has been diminished a lot now. We still run into some resistance. Some of the motor organisations are not fully committed to it yet, but we believe the history of the performance of the product puts us in good stead to move this forward. Given our limited resources and that this has required a lot of our attention, we have been concentrating on Queensland and New South Wales. We have had discussions with the people in New South Wales, and we are opposed to a mandate. There are some reasons that we think a mandate is not the way to go in Victoria or anywhere in Australia.

Firstly, BP and others have been demonstrating that commercial negotiations are taking place and are being concluded. Regarding our supply of ethanol in New South Wales, that has been going on for more than 12 months and was finally concluded about a month ago. These things take time, and the fact that New South Wales brought in a mandate probably did not have any impact on that negotiation. It was just working through the process to do it. The best way for biofuels to come on stream is to let the market work. This has the great advantage of securing the most competitive price for the consumer. Currently our ability to purchase ethanol allows us to offer a discount to the consumer through our biorewards, and that is 3 cents a litre.

Secondly, a mandate would have a tendency to drive up ethanol prices vis-a-vis the current circumstances where ethanol has to directly compete with gasoline prices. As ethanol prices are driven up there is no alternative other than to pass this on to the consumer. If you look at the situation, for instance, in New South Wales, there is one producer. All that producer's ethanol will go into the market, so about 2 per cent of the petrol market will come from that supplier.

Mr DAVIS — The only alternative is imports?

Mr RUSSELL — Not at this stage, because there is a 38 cents a litre tariff on imports. That comes off in 2011, which then raises the situation of who is going to build the ethanol plant. It will take probably two to three years to build an ethanol plant, so the period you have to recover your capital cost shrinks. The Federal Government has not given any indication to us whether it is going to extend that import tariff period or not. Of course the other incentive, the excise, also starts in 2011, so for ethanol it is 12.5 cents, and for biodiesel it 19 cents a litre — so they all impact on the economics of any future projects. In economic terms a mandate would result in potentially increased prices being paid to the ethanol producer. Unfortunately, this will be at the consumer's cost. The outcome from BP's point of view would almost certainly be the loss of advantages for customers, such as the biorewards. We are able to offer the 3 cents-a-litre reduction, because, firstly, the ethanol is excise free and, secondly, our buyer price allows it.

Thirdly, there is no guarantee that supply would be sourced in Victoria. As mentioned there, BP has been talking with Agri Energy, but their plant would appear to be some way away. Also we are taking potentially 160 million litres of ethanol in Perth, so we need to get that into the marketplace. One of the options would be to bring it around to Victoria and get it into Victoria. For the point of the mandate, we possibly could import it to meet that demand.

The CHAIR — Just before you get off that, could I check whether it is more economic for you to bring it to Victoria than anywhere else?

Mr RUSSELL — There are certainly shipping costs.

The CHAIR — Rather than to another country?

Mr RUSSELL — Yes, it would be. Ideally we would like to consume all that ethanol in Western Australia, but BP's volume is not that large, so we would rely on selling it to the other competitors in WA — the other major oil suppliers. Potentially we could bring it around and put it into Adelaide and other places as well. I mention the import restrictions; they will play a key part in any planning decisions made by potential ethanol plants throughout in Australia. As to whether a mandate should be 5 per cent or 10 per cent, as we mentioned above, we do not believe a mandate is desirable. We also should make the point that a mandate target of the level suggested by 2010 is probably unachievable, given the difficulty in getting any project on stream today. BP, through its refineries, is continually upgrading the refineries. We now have found that to get materials and skilled labour is very difficult. I also mentioned before that we are working closely with a company that is going to build an ethanol plant in WA. We know the difficulty it is working through, trying to get costs for projects; the cost appears to be going up all the time. It is really quite a difficult time over the next three years to build plants.

The CHAIR — Before you get off that point, do you want to outline anything more on skilled labour in short supply? What skills in particular are in short supply?

Mr RUSSELL — Certainly engineers of any description — electrical, civil, mechanical. I know BP itself has been trying to recruit engineers, and it cannot compete with some of the offers being given by mining. That is difficult. For instance, a project the size of the one we are talking about in the west is worth several hundred million dollars. As to the additional engineering resources around drafting or engineering houses to help you along with your design, you just cannot get them. It is proving very difficult. The other thing is just materials; there is a shortage of stainless steel, for instance. If you are building an ethanol plant you need stainless steel. It is quite expensive. We have been working closely with the Federal Government in trying to get biofuels into the market and there are many measures already in existence by the Federal Government, and these appear to be working well. I should highlight that the service station changeover assistance has really helped us to convert our sites in New South Wales and in Queensland to E10. We were very appreciative of that; and also the Federal Government for LPG on major excise breaks and automotive-engine-refit subsidy.

A major barrier to biofuels at present is the stretched economy, as we mentioned before. Therefore any further incentive is only likely to result in little advance, but at significant cost to the public purse. We are just wondering how we balance what we are trying to do in this current resourcing and building boom that is going on in Australia. How to maximise the original economic development? Again, as outlined above, the initial issue is whether the development occurs in Victoria or is privately shipped in. Perhaps the best approach here would be to provide incentives for producers to enable them to compete with other biofuel producers, rather than applying mandatory targets. I think I have covered everything.

Mr FRILAY — I have a comment on the service station assistance which, as Frank said, was great; that phases out in March next year, but it has been great. It is one thing to buy it, but we have to sell it, and to get the service stations to come online to do it, it has been a great thing for getting the service stations, dealers, to be prepared to switch over.

Mr RUSSELL — I should say that that is not only for BP; in Sydney, over the next couple of months, 50 retail sites will be converted, and only 20 of those are BP.

Mr DAVIS — The others are franchises?

Mr RUSSELL — Or dealers.

Mr CRISP — That really just gets the tanks checked, to scrub them?

Mr RUSSELL — Correct.

Mr CRISP — To scrub them for anything that could contaminate, but it is effective because you are retiring ULP91, and only the bigger sites could add another tank or browser, which would be hugely capital intensive.

Mr RUSSELL — Yes.

The CHAIR — Given that last comment, did you make a net profit or a net loss?

Mr RUSSELL — No, you only recover your costs. On the changeover?

The CHAIR — On the changeover.

Mr RUSSELL — No, you only recover the cost that it took you to convert your site.

Mr CRISP — Up to a ceiling?

Mr RUSSELL — Yes, up to $10 000.

Mr FRILAY — You mean in terms of the subsidy?

Mr FRILAY — Yes, it is only a maximum $10 000, whereas it costs about $60 000 to $100 000.

The CHAIR — Per tank?

Mr FRILAY — To change over, if you were offering choice.

Mr RUSSELL — That would be to replace a tank, yes.

The CHAIR — But if you do not have too replace a tank?

Mr RUSSELL — No.

The CHAIR — Is it a net benefit or still a net cost to you?

Mr RUSSELL — It varies. If the tank was old and you had to flush it out several times, or there was some issue with it, then it may cost you right up to the $10 000, but we are finding that most of them come in under the $10 000 — newer tanks and things like that.

The CHAIR — Good.

Mr RUSSELL — One of the things you have got to do, particularly with ethanols, is have no water in the system, and that is what it needs.

The CHAIR — We will move to questions. You have outlined a number of very helpful pieces of information in relation to excise and the retail-site subsidies for the changeover. Are there any other government mechanisms that you believe the state or commonwealth governments could adopt to support the biofuels industry in Australia?

Mr RUSSELL — I think there is one area that certainly the previous person mentioned a number of times — that is, infrastructure. Ethanol is a different product. The current fuel systems are set up on the basis that petrol and diesel will separate from water. If you get water in your tank, you let it settle, you pump water out from the bottom and everything is okay. When you have ethanol in the system, ethanol would rather be in the water, so it drops into the water; and so you have an issue around how to dispose of that water and any other contamination issues. So we have to be absolutely certain that our infrastructure is set up to handle the fact that you have ethanol in it.

The second point is that you have to blend the product. A blending facility at a large terminal like at Altona or Yarraville may cost between $500 000 and $1 million. Then you need a tank to store it in. If you are doing that on a large scale, then you also do it for biodiesel. So it is a lot of money. When you are doing it on a small scale in a local region and it may not be as critical to get the blend ratios right, you can get away with mixing tanks, but the maximum ethanol you can have in your fuel now is 10 per cent, so if you are doing any blends you have to make sure that it is only 10 per cent. That is why you need the infrastructure, the blending facilities and the storage facilities, to get the product into the market. If Victoria is going to have a robust and significant biofuels industry, it is about getting it into the mainstream distribution networks.

Mr CRISP — Can I go down a different line: it was with some interest that I read about your hydrogen process for biodiesel and the difficulties you are having in getting the commonwealth to accept it as biodiesel. How is that progressing? You need innovative technology to come through. How is that? Has there been no change since you have written this?

Mr RUSSELL — Bill Frilay can answer that better than I can because he has been dealing with that.

Mr FRILAY — I would say the commonwealth has been pretty good. It is going to be included under the energy grants clean fuels thing — I cannot think of the exact title. I think that legislation is progressing, Mr Crisp, but the commonwealth accepted that it met all the criteria of being a renewable fuel and a locally sourced thing, and it was accepted to come within that ambit of grant, so that is going okay.

Mr CRISP — Can I extend that for just a moment to then look at the feedstock required, which is the tallow. Feedstock supply seems to be very important, and you talked a lot about working your ethanol into security of supply. As to security of supply of tallow, in your submission it was not quite as clear there, and I start to worry about tallow supply.

Mr RUSSELL — In Brisbane we are reasonably fortunate, where they export about 250 000 tonnes of tallow a year. BP’s requirement was for about 100 000 tonnes. So we have been looking to the market and securing, say, 50 per cent of our needs, and then possibly going out to spot for the rest. The aggregators work in a different way from a lot of industries; they just do the abattoirs and accumulate the tallow and then they sell it. It is not as if there has been an ongoing market that you can hedge or do some sort of risk prevention on that. That is what we are looking for. We are reasonably confident that that will work, but I should say that I think the cost of tallow has gone up by 50 per cent in the last 12 months. That is another issue. It might go up even more, because I think people are keeping their cattle on their properties now; because they have some grass they can eat, so there will be less slaughtering done.

Mr DAVIS — On the issue of price, you say in your submission that a mandate will have the tendency to drive up ethanol prices vis-a-vis the current circumstances, where ethanol has to compete directly with gasoline prices. Do you have any estimates about what a mandate might actually do to price, some parameters around that sort of increase?

Mr RUSSELL — I do not, but from discussions that we have had with some of the people who would like to build an ethanol plant — and this is mainly the New South Wales experience — once the mandate level is reached, whatever million litres worth of production that requires, there is no incentive for another plant to come on. So we see that feedstock prices could increase because there is an alternate demand for that. What we would like to see is that any plant that is built is built on the basis that it can compete with imports. That is what we are trying to do with the plant in Western Australia, that has to compete with the potential post-2011, when there are no import tariffs. I do not have a feel for it.

Mr FRILAY — It is simply on the basis of, ‘Okay, at present there is an ordinary, straight negotiation, but if I have to buy from you, then you are in a position where you can sort of bump up the price’ as compared with the discipline of current negotiations, where it is at equal arm’s length and just sorting out that way.

Mr DAVIS — I understand your point entirely. It is just a question of trying to quantify the impact.

Mr RUSSELL — I can say that at the start of this year we were very close to closing a deal for supply in New South Wales and then when the possibility of a mandate came out, negotiations were very, very slow.

Mr DAVIS — That is almost a sort of gaming aspect, is it not, or an unhelpful intervention into the progression of the fuel, as I can see it there? It seems to me that in fact discussion of a mandate might actually cause contracts to be moving more slowly.

Mr RUSSELL — Yes.

The CHAIR — By way of background you have given us a lot of information on Queensland and New South Wales. In relation to Victoria, what would your capacity be to roll out ethanol-blended fuel in Victoria, and are there any specific logistical problems in Victoria that would work against ethanol-blended fuel in Victoria?

Mr RUSSELL — Our vision is for all of our unleaded petrol to be E10. So all the 91 octane fuel that we put into the marketplace, the unleaded petrol, we would like to see as E10. Currently we draw from the Yarraville terminal, and we have a joint venture with Mobil at that terminal. For us to get E10 into the marketplace we need storage at Yarraville plus a blending facility at Yarraville terminal. I do not know how much that would cost but clearly we would have to work very closely with Mobil to get agreement to do that.

The CHAIR — Are there any other questions?

Mr FRILAY — Before that, Chair, of course you have got to get the ethanol. Then there is the blending and persuading your dealers that this is a good way to go. It is almost a three-step chain in getting it out there. We have solved those three points in New South Wales just in this last month. Virtually every drop of ethanol is now being used.

Mr RUSSELL — It is gone. There is no spare ethanol in Australia at the moment.

Mr CRISP — That is interesting because 12 months ago there was capacity. Is that being driven by the E5 mandate in New South Wales?

Mr RUSSELL — It is E2 at the moment.

Mr CRISP — E2 — my apologies.

Mr RUSSELL — I do not think so. BP, Shell and certainly Caltex have been trying very hard to get biofuels into the marketplace. Like any big organisations, we do move slowly at times. We also have to be very careful of the quality of the product we are putting into the marketplace, and that takes time. The Queensland producer was fully committed, probably two years ago, so there was no more volume coming out of Queensland, and there was only one other ethanol producer in the country. Things were just very slow. I do not know where the next ethanol is going to come from.

The CHAIR — Our inquiry is not just about ethanol; it is biofuels generally. If you were here for the previous evidence you would have heard of smaller-scale production in country Victoria. I imagine those small-volume sites would not be of interest to a large company such as BP.

Mr RUSSELL — I think that is correct. I think the strategy to absorb any smaller production into the local area is a very wise way to go because it cuts down on the transportation costs. The difficulty they face is meeting the quality requirements.

Mr CRISP — And the cost of a testing regime associated with small lots.

Mr RUSSELL — Yes, it is just enormous — for instance, the B20 blend, to get any rebates or grants, has to meet the diesel standard. There are very few organisations outside of the larger fuel companies that can do that testing.

The CHAIR — Who, outside of the big fuel companies, does testing?

Mr RUSSELL — There are some independent testing people like Intertek. They are in Melbourne. There is also Caleb Brett and places like that where they can do it, but it is quite expensive — for instance, if you did the full diesel testing, and the Australian standard has about 15 different test points, it may cost you $2000.

The CHAIR — How often?

Mr FRILAY — Each batch.

Mr RUSSELL — Yes, you are supposed to do it with each batch. If you do not you have to have some traceability so that you can prove that product met their specifications. From that point of view it is quite expensive, so I would say that for a small biodiesel producer and supplier, assistance with a testing facility would be useful. Diesel equipment now, particularly in trucks and sedans, is very finely engineered. If the product does not meet the requirements, those injectors can stick very quickly.

Mr CRISP — One last question, if I may, Chair, and it is on notice. Biobutanol is of interest. If you have some information could you forward it, because we have had our appetite stimulated about this because it does appear to solve some of the issues around ethanol that are of difficulty. We know it is second generation and a long way down the track. It would be great if you could forward the Committee some further information on that so that we can keep an eye on it.

Mr FRILAY — Sure.

The CHAIR — On behalf of the Committee, thank you, Mr Russell and Mr Frilay. We appreciate your assistance here this morning and with the question that you have just taken on notice. You will be provided with copies of the Hansard transcript, to which you will be free to make any typographical corrections. They should reach you within about a fortnight. Thank you, and good afternoon.

Witnesses withdrew.