Remarks by Peter Lovie on the Contractors' Panel

Thank you to IBC for inviting me to join this panel. These commercial conferences are valuable for learning what is really going on in the industry. There's a serious difference between conferences organized by a technical society like SPE and one from a commercial conference organizer like IBC - it's the fee that is charged for these commercial conferences. It filters out who is here – your company has to be genuinely serious that you should be here and that you are at a senior enough level to really benefit from the investment!

This is the fourth commercial conference on FPSOs that I've been asked to chair and/or speak at in the last two years, and I learn from them. Sure, it's a way to keep up to speed about FPSOs, but it's about people and ideas and change.

I claim to qualify for being on this Contractors' Panel from having served 12 years hard labor with two FPSO contractors - Bluewater and Teekay - and after that the pleasure of sitting on the other side of the table – the oil company side - at Devon Energy in Houston, where I could chuckle inwardly at the contractors' sales pitches to us of the kind I used to engage in! More seriously, it was also a chance to draw out the best from the contractors where they really had something to offer and could help us.

Ten months before the *Macondo* spill, Devon, at that time the largest of the US independents, chose in its wisdom to re-organize and reduce their exposure to the high risks of deepwater Gulf of Mexico where they had almost as large a position as Chevron in the Lower Tertiary. But of course Chevron was much bigger, like BP, and both had five or more times the market capitalization of Devon. So a bunch of us in deepwater projects and planning, working on drilling and field developments generally like *Macondo* were no longer needed, and that's why the agenda for

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conferences says that I am "Ex Devon". However as people say, "it's an ill wind that blows no one any good" and I'm now on to new business, as a consulting advisor on floating systems and a principal in a new venture for West Africa.

But back to business. I have two contributions for this panel.

ONE: NEAR TERM OUTLOOK

It is good to listen to these financial and market analyst guys who have these wonderful graphs that show things getting better in the future, going steadily upwards to heaven on the right! But being a simple man I want to earn the daily crust today and tomorrow - or at least this quarter and some of next year - and somehow the graphs are uncertain and don't quite jibe with the shorter term. I respect the view that there might be about 180 floating production projects of all kinds in the planning stages or more advanced stages today versus maybe 155 six months ago, but they can so easily slip back, often for very good reasons, such as the wells put down after the discovery well are just not as promising, or the operator's latest capital allocation means something else is higher up the hierarchy for CAPEX dollars, or the oil market and world conditions are uncertain and too risky for now.

I do not see such a wonderful time ahead near term. This *Macondo* spill logically indicates it may not make such an immediate difference on FPSO business, but who knows the minds of the oil companies in looking at their capital allocations and how much they want to put off spending for a bit. BP selling off assets and Shell getting ready to do a round of divestitures of FPSO based developments means delays in related field development decisions as buyers take over these field developments. All of which is pointing back to the FPSO contractor's BD guy on the firing line and how

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well he knows his customers and what they are going to do next. And that is the inner thought process that does not always get talked about here.

Far vision is not so bad, the trouble with available crystal balls is their near vision – always seems to be a bit fuzzy and therefore in need of Lasik or cataract surgery.

Let me explain about this fuzzy near term vision. A disquieting sign in our industry is the current status of the world's FPSO fleet and the number of FPSOs without contracts. I count 152 existing and 39 building in shipyards, about half owned by oil companies and the balance owned by contractors and leased to oil companies.

I count 3 incomplete FPSOs at shipyards that had started to be built on speculation, and 8 more FPSOs currently idle or soon to be idle, then 4 owned soon to be on the market, overall mostly less than premier league vessels. So there's 3 + 8 + 4 = 15 available candidates against a fleet of 152 in operation - 10%, that's a significant overhang in the market. It's lower than a year ago when the figure was 17% but still high. And this is not allowing for any FPSOs known to be coming idle very soon but that has not been announced.

Each oilfield is different and each FPSO may need more modification and far more investment for the next assignment than typically happens with a drillship or a semi. At today's shipyard prices it may be economic to build a newbuild FPSO or do a conversion to exactly meet field needs rather than adapt one of these idle FPSOs – that's part of the predicament for owners of idle FPSOs.

So tomorrow has its uncertainties in today's FPSO world.

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It conjures up what the Vince Lombardi the American football coach said about "when the going gets tough the tough get going". Hey, with FPSOs, the going gets tough quite a lot of the time.

TWO: SPEC BUILDS

Secondly I want to comment on what has happened with FPSO spec builds. In the service vessel business and in the offshore drilling business spec builds seem to work fairly well quite a lot of the time. So why not with FPSOs?

In my time at Devon I had the opportunity to look at offerings from most of the spec build ventures. Some were attractive if we just had the right project for them The *Nexus 1* was one such, a good basic design and builder, but in the end of the day we just did not have a project to employ it. It turned out that no one else in the world did either, at day rates that the project needed for a satisfactory return and so this almost complete newbuild had to be sold. Published sources indicated a sales price of around $400million against a project total of about $640million. Sooner or later the deal probably would have worked but there was no telling how long the owners would have had to wait: it was understandable how the owners chose to take that $240 million hit.

The advocates of these FPSO spec builds were generally pretty experienced people. However this was unlike doing a spec build drilling rig. An oil company can contract for a period to employ a MODU and wells may be in a number of parts of the world over say a 3-5 year term of the initial drilling contract. But with an FPSO it is for the life of the field and the characteristics of each oilfield is different: generally a wider

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range of equipment requirements than for drilling wells. The decision process to choose the field development solution and contract it takes more time.

So while the *Nexus 1* situation was made worse by the downturn and crash in end 2008, the venture was well known from early 2006 onwards and in retrospect it struggled against the effects of a much thinner market than MODU speculations in the same era.

Another one we looked at and tried to see if we could make it work was the MPF. It was attractive from the viewpoint of being able to immediately follow on with appraisal wells once a discovery well was completed and was being tested, even for several months or a year or two. It had plenty of capacity for remote operations on very deep wells and overall was a high spec vessel.

However there were non technical matters that were deal killers. One was that planning appraisal wells takes some time and often serious time to get funding as these are often $100-300+ million commitments for what we were looking at in GoM. Additionally partner approvals have to be secured for whatever development strategy is chosen and for a novel concept like MPF that can be difficult and time consuming. Lining up a work program to take advantage of all that the MPF could do was too difficult. Talking it through, the consensus was that it was too expensive as an FPSO alone and the FPSO capability was too much of an overhead for employing it as a drillship.

The interfaces, regulatory approvals and construction of a vessel that is both an FPSO and a drillship are serious matters that add to the time and project cost, something that Murphy experienced on a much simpler vessel than the MPF: the FDPSO that now

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works successfully at *Azurite* in The Congo. But MPF never got that far along. MPF Corp went bankrupt and published sources now indicate that the hull will now be used for a mega drillship under construction by Cosco in China and to be operated by Vantage Drilling of Houston.

Compared to the Suezmax size of hull on the MPF vessel, the spec build offerings from FPSOcean were much smaller, Aframax size or less, and employing an untried active stationkeeping system. For GoM service we required at least a storage capacity of 600,000 bbl, double hull and could not take a flyer on a new company with the risks of a new station keeping system. That one did not really make it in our books and it really was not a surprise that it eventually went bankrupt. The proponents gave it their best shot but the tool did not match our market.

The Petroprod people also had a spec build venture but it did match the requirements I had and so I cannot comment on that one, other than relay the bad news that it also went bankrupt.

The apparent attraction of spec build FPSOs have been how the vessel could be economically taken off station at the end of the assignment and reused relatively easily as opposed to a spar or semi that is a much more site specific design of floating production system. After all, the FPSO is the most commonly used type of FPS in the world and it should be easy to find another home for it!

Despite that perception Exmar speculated on building a deepwater semisubmersible with topsides aimed for GoM fields. Exmar's Opti-Ex spec build semisubmersible confounded the skeptics and will now go to work for LLOG in GoM in 2011. This project was first announced in May of 2006 and for years people wondered if it would

ever succeed while it was touted for one field development after another. Instead of the original idea of chartering it, a sale was announced in June of 2010. Press reports indicate a construction cost in the region of $320million and revenues from the sale coming in over the six years of 2011-2016, totaling about $400 million. So Exmar in the end of the day came out better than all the spec build FPSOs, although the true NPV10 of the transaction may not line up too well against a conventional non speculative venture!

Diagnosing what went wrong with these spec builds, I think there was a lack of understanding in the minds of spec build proponents in the true ability of oil companies to hire their spec builds.

Oil companies are happy to talk positively about employing available options but translating that to serious talk on hiring or buying is often another thing when the decision is usually one that needs time for partners' blessings and a lot of planning and integration into a field development, i.e. a quite different game from hiring a MODU for the appraisal or production wells in the same development. It is relatively rare to find a field development where the FPS spec build is right on availability, matching the timing for the operator's decision making and has the right specification.

In a downturn the spec builds have to compete with bids on conversions or newbuilds at the rates in effect in the downturn. That risk gets forgotten about in the heat of enthusiasm in a booming up-market. History shows that shipyard and services rates do plunge seriously in a downturn like 2008-2009! Deflating values in 2009-2010 was a trap for the likes of the *Nexus 1* spec build!

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The two biggest and best established contractors in the FPSO building and owning business – SBM and Modec don't do it – they take another approach, they either own tankers and trade them until an FPSO opportunity comes up, or they have some close link to be able to secure a suitable vessel and have done their project homework in advance so they can move very quickly. They don't want the risks of spec builds!

A lot has changed in the last two years. One thing that has come into clear focus in my mind is the business of FPS spec builds – it is too much of a niche business and the risks in a downturn can be horrendous. Conclusion: a spec build is a very risky business in the FPS world, don't do it!

So with that cheerful note, on now to the thoughts of the other members of this Contractors' Panel.

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