The report should include a better overview of offshore petroleum exploration activity that has occurred in the past, and is occurring presently, on the Grand Banks. This would then offer an objective and regional context for offshore oil and gas activities and may help frame the discussion of the potential for cumulative effects. A map depicting other projects in the NL offshore, and specifically the Jeanne d'Arc Basin, would also be helpful in assessing cumulative impacts.

CWS has developed a pelagic seabird monitoring protocol that we are recommending for all offshore projects. These protocols are a work in progress and we would appreciate feedback from the observers using them in the field. A guide sheet to the pelagic seabirds of Atlantic Canada is available through CWS in Mount Pearl. A report of the seabird monitoring program, together with any recommended changes, is to be submitted to CWS on a yearly basis.

The FLO's role will be very important because of the potential for interaction with fishing gear and vessels transiting to, and from, the fishing grounds. It is important to keep in mind that harvesting locations for each species can vary over the years, as well as within the same season. This can occur due to migration patterns, catch rates, quotas, resource issues, weather, technology, fuel costs, etc. Effective communication of all operations in the Study Area is imperative. In addition to other notices on this program, the FFAWU expects to have a new issue of the Union Forum out by late May. This would be a good opportunity for proponents to illustrate their seismic program (timing/location) for the season.

Industry Research Programs for 2008 are expected to follow the same trends as recent years. There also may be more new research initiatives begin this year, and will be communicated to all oil and gas and seismic proponents as they arise.

Page 98. There have been sightings of northern bottlenose whales at depths less than 500 m (including within meters of shore), so depth should not be the sole criteria used to exclude the possibility that this species might be seen within the project area.

Page 160. Previous coordination between offshore oil and gas operators and DFO has proved to successfully mitigate the potential for overlap between offshore oil and gas activities and DFO/Industry research surveys. It is requested that the Department be notified of survey locations and project timing as soon as they are known.

Page 160. Ramp-up procedures are only mentioned for the onset of the seismic survey. If for any reason airguns are shut down, ramp-up procedures should be followed prior to recommencing survey operations.

Page 160. DFO requests that it be notified, in addition to C-NLOPB, if dead or distressed marine mammals or sea turtles are spotted and particularly in the event that sea turtles or mammals are injured or killed by project activities.

The following comments were received from a member of the public.

***Is less than 10% negligible?***

I have trouble with the designation of impacting 10% of a population as representing a low effect. I recognize that the designation has been in use and there is something to be said for consistency. Furthermore, it is a quantitative reference point which makes assessing a qualitative concept very useful. I feel that in this case, the criteria in use are inconsistent with the qualitative descriptor. Suppose that a new factory was proposed to be built in St. John's and that up to 2,000 people of the approximate 200,000 population would be inconvenienced (if not killed) by the factory. That impact would not be identified as "negligible", why should it be considered negligible in the context of an environmental assessment? I believe it would be reasonable to reduce the 10% to something more like 1%. Another aspect to this issue is that, while 10% is considered low, more than 25% is considered high. What magnitude of impact would be considered unacceptable?

***Study area, Project area, or Seismic survey (2008)***

On page 150, in discussing the possible disturbance effects from project activity on toothed whales, the area impacted is identified as ranging from anywhere between 10 to 1000 $km^2$. In fact, my own rough calculation on this impact zone came in at 600 $km^2$ and given the uncertainties in these estimates, I believe that this range is defensible. What I do not understand is how this number is then converted into a "negligible" impact. My interpretation is that this area is compared to the overall study area (about 222 km by 185 km or about 41,000 $km^2$, from page 6 of the document). The area against which the area being impacted is being compared should be clearly identified here.

The choice of a large study area is laudable in the context of identifying the widest range of ecosystems or environmental conditions that might be impacted. However, given that the study area dimension defines a metric against which the area of impact is judged, a large study area means that only the very largest of impacts could ever be judged as "significant". In the present case, the 1000 $km^2$ that might be impacted by the seismic survey is only 2.5% of the 41,000 $km^2$ study area and the impact is considered "negligible". However, given that the operating area identified for 2008 is restricted to ELs 1100 and 1101 that have an area of about 1000 $km^2$ (estimated from figure 1.1), the 1000 $km^2$ impacted area is in fact about 100% of the survey area anticipated for 2008. Is this a negligible impact?

In fact, a more appropriate reference area in this context would be one determined by biological characteristics of the species in question.

***Cumulative Impact***

The footprint of a seismic survey is on the order of 1000 $km^2$. While it is not clear how many surveys might be conducted on the Grand Banks in a season, it appears that at the moment, two or three seems a possible number. That would suggest that on an annual basis, 2000 to 3000 $km^2$ of the Grand Banks are impacted. At what point does this cumulative impact become recognized

and how will a mitigation be introduced? With this proposal, StatoilHydro has laid claim to 1000 $km^2$/year for an 8 year period.

It is not clear how the proponent can evaluate cumulative impact with limited knowledge of other projects that might be introduced in the future. I believe it would be useful for the Board to identify a maximum allowed density of seismic operations so that proponents can gauge there contribution to the overall "allowed" impact.

***Recognition for support***

I found the following statement taken from page 41 of the document inappropriate:

> *It is noteworthy that the comprehensive summary report on deep-water corals and their habitats off Atlantic Canada (Mortensen et al. 2006) was made possible through the financial support of the oil and gas industry through the Environmental Studies Research Fund (ESRF).*

I appreciate the significant funding contribution that was provided in this case and believe that the ESRF has enabled meaningful and needed science. But, in my mind this statement at this point in the document actually takes away from the spirit of the contribution. I am familiar with the specific research and recognize it to be sound but a reader without such familiarity might question the results being presented. There are numerous results presented throughout the document that have been made possible by the Government of Canada (for example). If the proponent should interrupt the text in the middle of an environmental assessment document and take credit for a funding contribution, perhaps the text should also pause to recognize the Canadian taxpayers whenever a scientific study is referenced.