16 February 2007

Ninham Shand

Att: Brett Lawson

By: Email



MARK WOOD CONSULTANTS

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Dear Sir,

INDEPENDENT REVIEW – ESKOM'S PROPOSED COAL FIRED POWER STATION IN THE WITBANK AREA

Strategic Issues

The consultants provide a simple, clear, account of the hierarchy of policy and planning documentation that has informed Eskom's decision to seek approval for a coal fired power station in the Witbank area. While the consultant's immediate responsibility is limited to an assessment of impact of the power station in the Witbank area, there has been the recognition, in the EIA report and other supporting documents, that strategic location decisions about large projects tend to bedevil project level assessment. Consequently, the consultants have made a reasonable effort to clarify how the high level strategic decisions were made and have made the reports prepared by Eskom in this regard available to stakeholders.

The consultant's starting point for the EIA can be justified in terms of accepted EIA process, although it is axiomatic that a weak strategic framework undermines the credibility of the EIA investigation as a whole. Eskom's Final Site Selection Report (Eskom, Final Site Selection Report, 09 June, 2006) provides a summary analysis of the procedure that was followed to select the preferred area for the power station site. While the statements made about the undesirable impacts of a power station at greater distance from the coal source may be true, there is no analysis presented in the report to justify this claim, nor is there any information to show what additional costs Eskom would incur for the additional transport to a remote power station site.

In my opinion, the most important issue that has a bearing on regional site selection for this power station, apart from cost, is air quality. The NEM-AQA SO₂ ambient air quality standards are already exceeded in the area in which the alternative sites are situated. The air quality is assumed to be equally degraded for all of these sites. (Eskom, Final Site Selection Report, page13) and none of them, therefore, can be considered to be a suitable alternative if compliance with NEM-AQA is a site selection criterion. Presumably, Eskom will motivate to DEAT why non-compliance with the legislation should be considered to be acceptable on the

grounds of the scale of the development, its National importance, the magnitude of the additional cost for transport of coal to a remote site, the low population levels in most of the affected study area, and/or the efficiency of the proposed scrubbing technology as a means of minimizing cumulative impact. One or all of these may be good reasons, but they are not presented in Eskom's report in a manner in which a reasonable judgment can be made about the argument.

With regard to the comparison of local sites near the pit head, and the selection of a preferred site; Eskom uses a weighted ranking system in a workshop approach, but fails to provide any meaningful information as to how this approach was applied and the reader is therefore unable to verify that the conclusions that are drawn, in favour of the East site, are reasonable.

Public Participation

Some participants in the public meeting that was held on 28 November 2006 raised issues about two aspects of the public participation process. It was alleged that the process was insufficient and that farmers, in particular, had inadequate opportunity to participate. It was stated at this meeting that farmers within 10km of the sites should have been directly notified of the project. In addition, objections were raised about the timing of the EIA review phase, which extended across the Christmas holiday period.

Chapter 3 of the EIR provides a summary of the public participation that was undertaken during the EIA. There has been an ongoing process to draw additional stakeholders into the EIA, as they became known to the consultants. Correct minimum procedures were followed to announce, notify and capture issues raised by stakeholders at different stages of the process. Landowners potentially affected by the project were identified. Due to difficulties experienced in engaging with all relevant landowners during the scoping process, a conveyancer was brought onto the team to supplement the data base, in respect of landowners directly affected within the area (while it is not altogether clear in the report, it is understood that the conveyancer only identified additional stakeholders owning land within the boundaries of Site X, presumably because this was the alternative that was emerging as being preferred).

There is no information presented in the EIR which demonstrates the number of landowners that responded to the call for participation and what proportion of the nearby land owners were on the EIA database and were invited to and attended meeting. However, the call for greater direct participation of nearby landowners and the unfavourable comparison of the power station pp process and Anglo Coal's more extensive process is misleading since the Anglo Coal consultant had to contact all stakeholders whose land is potentially directly affected by surface mining, of whom there would be many.

In the case of the power station, any decision to directly involve landowners would be complicated by the fact that the air quality impact of the station loops (mainly because of stack height and exit velocity of pollutants), and is worse many kilometers away than it is near the site. If potential impact is to be used as a criterion for who to select for direct participation in the study, then this would have had to be an important criteria, rather than proximity alone.

As far as the time available for comment on the Draft EIR is concerned, it is understood from the document that the availability of the report was first announced to all stakeholders on 13 November, 2006, with the closing date on 8 January 2006. This is a short time period for so large a project, over the December break, with the effective period for comment being only a month (school holidays started after the first week in December in 2006). Nevertheless, it complies with a minimum reasonable standard.

On balance, in my opinion, the process followed by NS to notify stakeholders of the EIA and the methods used to convey information and gather and respond to issues and concerns has been acceptable and, if not exhaustive, has at least been sufficient to meet the minimum legal requirement.

Handling of Key Stakeholder Concerns

Stakeholder concerns have been accurately captured in the Issues trails that are included with the report. The consultants have also, in my opinion, responded appropriately to most of the pressing concerns of stakeholders. The issues raised by Mr Byrne, a large-scale chicken farmer in the district, who expressed concerns about the absence of any assessment of the impact of air pollution on poultry toxicology, have been managed professionally and correctly. When it became apparent that there was insufficient information in the report to respond adequately to the concerns being raised, a focus group meeting was held with Mr Byrne and his representatives, the issues were discussed, information about risks was exchanged and the study team's air quality expert then prepared final comment on the significance of the impact, which was circulated to all parties present at the meeting.

The issues relating to the cumulative impacts of the mining and the power station are the least satisfactorily resolved of all of the stakeholder concerns. NS explains the difficulties about coordinating the two studies in the Issues Trail (4) of the report and acknowledges that there were many requests by stakeholders for better integration of the work. The main reason for Eskom and Anglo's inability to coordinate the studies is not explained in detail, but is probably, as stated by NS, because the programmes for the two investigations did not correspond due to the shorter lead times required by the mine and because the mine is applying for approvals under different legislation (DEAT not being the lead authority). The two activities are so integrally related that it is difficult to envisage how DEAT or DME can consider cumulative effects to have been adequately evaluated without the findings of both studies being available and fully integrated. For future reference, it is my opinion that DEAT and DME should put pressure on developers, in such cases, to conduct the necessary technical investigations with sufficient lead-time to allow the environmental studies to be properly integrated. It is difficult to believe that, for projects of this magnitude, there cannot be proper integration if the issue of coordination is flagged by the applicants sufficiently in advance.

Clarity and Objectivity of the EIA Report

The EIA report is clearly presented and should be understandable to lay people. The consultants have integrated the specialist reports well, making a seamless document that follows a logical time line from the beginning to the end of the EIA process. Stakeholder issues have been properly considered and there is evidence

throughout the report that the investigation has responded to concerns that have been raised at the various stages of process.

Specialist Studies

A comprehensive range of specialist studies were completed for the EIA, responding to issues raised by stakeholders as well as those necessary in the professional judgment of the study team. The issues trail reflecting comment on the Draft EIR shows that no-one has seriously challenged the accuracy of the specialist investigations, besides Mr Byrne, whose concerns are discussed above and whose issues have been dealt with by the consultants.

In my opinion, the specialist studies are generally well prepared, are clear and provide the necessary basis for an objective evaluation of the overall impact of the project.

Specific Air Quality Issues

Airshed (2006:7-7) makes an observation that the installation of FGT in order to control sulphur dioxide will have an impact on the ground level concentrations of other pollutants due to reduced exit gas temperatures. More detailed work to evaluate these changes is recommended. It is not clear from the statement in the report whether Airshed anticipates that this could change the concentrations of other pollutants to a significant extent, bringing them into conflict with other legal standards or guidelines (in addition to SO₂). The EIR does not mention these issues at all and the significance of Airshed's statement is therefore unknown.

In addition, Airshed prepares an analysis of vegetation impact, caused by sulphur, which appears to be fairly significant around the existing Kendal power station where abatement technology is not used. This is not referenced in the EIR nor is the suggestion that additional research is done to verify whether the British evaluation criteria are applicable in our conditions.

While these are probably not major issues, they warrant attention going forward in the formulation and implementation of the EMPs.

Yours faithfully

MARK WOOD

For Mark Wood Consultants