ENSURING SUFFICIENT CAPACITY TO POWER THE 2010 WORLD CUP

Author & Presenter: T A Carolin MSc (Eng) – Corporate Specialist, System Operator, ESKOM

1. Introduction

Despite the fact that the 2010 World Cup is being held during winter, typically a period of high demand on the South African power system, the possibility of failure to power the event is not an option that can even be considered. The period leading up to this event has been characterised by a significant load reduction, driven strongly by the economic recession and before this by unprecedented load shedding throughout the country. So, while there is confidence that the event itself will proceed and be broadcast uninterrupted, the goal must be to have at least thirty days free of supply interruptions across the country. The responsibility for this lies not only with the national utility, Eskom, but with all licencees and host cities. The focus of this paper is not related to ensuring the reliability and availability of network infrastructure, but rather around ensuring that at all times sufficient power is available to ensure an interruption free event, and that all South Africans are able to participate in this significant milestone in our country's development.

2. Background

If any person had predicted fourteen months ago what the state of the world economy and associated impact on electrical energy would have been, it is unlikely they would have been taken seriously. Together with numerous interventions carried out through Eskom's Recovery Team after the load shedding events of late 2007 and early 2008, this load reduction afforded an opportunity for increasing the amount of maintenance done on generation plant as well as an opportunity to expedite the costly building up of primary energy resources. However, the lack of predictability relating to the electricity reduction, continues as the economy perhaps starts turning and industry starts returning to previous levels of production. Fowles' paper [1] detailed the electricity supply chain related to the provision of power to the World Cup, and while the adequacy of the transmission, distribution and reticulation networks can not be underestimated, without sufficient generating capacity, this is meaningless.

As a reminder, key stadia installations, including broadcasting, will be run off independent generation. However, to enable an incident free event, sufficient power is required to all surrounding and enabling infrastructure too.

3. Background to current supply situation

4. Eskom actions to date

4.1 Actions taken during Recovery Process

4.2 Initiatives for the World Cup

5. Indicative Capacity Outlook

6. Common philosophies

6.1 Engagement with end use customers

- Base load reduction
- Flexibility to reduce load if the need arise

6.2 Communication processes

- Response during events

7. Conclusions

Watching the final whistle on the 11th July 2009, will bring much relief to many people across South Africa. Having successfully hosted the world's biggest sporting event, and ensured that it could be enjoyed around the world this will be a job well done. In terms of the power system, keeping the lights on for this event will be a substantial feat and will encourage the confidence in our ability to keep the lights shining.

This accountability lies with each of us across the value chain, and the benefits can be enjoyed by us all. In the upcoming months, engagement will occur with various parties to ensure all possible avenues have been followed up. There will be strong reliance on accurate information, specific processes and flexibility to respond to those events not expected. There will be challenges, but let these be worked through prior to the event. This is our opportunity to shine!

8. References

[1] *Mitigation of operational risks for the 2010 FIFA Soccer World Cup*, PE Fowles and A Sprunt, AMEU Convention, October 2007.

[2] *The January 2008 Power Crisis in South Africa and lessons learnt* , M Chettiar, K Lakmeeharan and R Koch, Cigre Regional Conference, August 2009

.