

the Naledi3d Factory Proposed wind farm - Western Cape (2001)

Purpose: The VR model demonstrates how modern wind-farms look in reality and show the relative size of the towers and turbine blades as compared to two known entities, namely Athlone power station cooling towers (Cape Town) and transmission pylons. The model was used very effectively as part of the projects' Environmental Impact Assessment PPP exercise, held in 2001. Construction on the actual farm began in 2003.



Partner:
Eskom



In a Nutshell:

The VR model is made up of a realistic Klein Karoo 3D world - with the addition of 3 wind turbines, 2 cooling towers and a transmission line. The landscape is based on the proposed construction site - approximately 30km north-east of Cape Town. The wind turbines rotate at a realistic 3 rpm and the model is sound enabled to represent the "whoosh" of the rotating turbine blades.

Moving Around:

The user can move around the environment by using either the mouse or conventional keyboard keys. A menu also helps the user to move to one of three pre-defined points (top, bottom and overview) at each of the three features (wind turbines, cooling towers and transmission pylons). At each point, the user can get a true visual perspective of that feature and get a feel for how the wind towers would look if built.



Interactivity:

Apart from being able to move around and explore the environment, the user view can be changed from a geospatial view (the terrain) to a logical view (the three main elements). After all, the aim is to compare size. As cooling towers are not used at wind-farms, the cooling towers can also sink into the ground (and back again). Who needs dirty cooling towers when you have wind!

