

NewBuild News

Chimney ascends with pride

By Mashudu Ramulifho



chimney base totalled 1828,5 cubic meters and for the chimney shell totalled 6648,5 cubic meters. The outer shell of the chimney will enclose 3 flue cans which protrude 7 metres outside the chimney opening, making the whole structure 220 metres.

The chimney stands out proudly as the tallest structure at the construction site dwarfing by far the height of the two 120 metres lift shafts and the 40 metres high air cooled condensers column for Unit 6 and 5. The team responsible for the chimney and silos package, whose achievement of completing the first chimney shell was celebrated, is led by Mr Isaac Mwansa, Package Project Manager, Mr Ditau Selamolela, Assistant Package Project Manager and Mr Ntshavheni Phidza, Construction Manager. This saw the presence of Mr Kobus Steyn, Enterprises Division, Acting Managing Director and Mr Lourens Peters, KC-JV Project Manager celebrating this accomplishment with Roman Crookes, Medupi Project Manager. Most importantly, the celebration was done with Medupi Execution Team where Hank Vaughn, Site Director thanked and celebrated with the team by having a braai on-site. The south chimney will be serving Unit 6, 5 and 4 whereas the north chimney will be for Unit 3, 2 and 1. According to Mr Selamola, the foundation for the construction of the north chimney has been completed and the setting up of the sliding platform will commence mid-July 2010.

Amongst the many milestones that the project has celebrated, as it heads up to commissioning the first unit in 2012 is the completion of the South chimney shell. The much awaited chimney was completed as of 12 May 2010. The sliding of the windshield started on 16 February 2010 and was completed on 12 May 2010, which was exactly 86 days after the start thereof. The stripped sliding shutters on the South chimney will be used to slide the North chimney.

The south chimney outer shell stands out at 213 metres high at completion; and amazingly, the total quantity of concrete casted on the

01

02

03

Unit transformers transforms the little town of Lephalale

Ingula Update

Kusile Power Station's Information Centres

Unit transformers transforms the little town of Lephalale

By Mashudu Ramulifho

The magnitude of Medupi, a greenfield dry cooled coal-fired baseload power plant, is leaving no stone unturned in this small town of Lephalale in the Limpopo Province. Since the commencement of this mega construction project, designed to boost the national grid with a total of 4800MW installed capacity, the town has been faced with continuous transformation and development.

It was Saturday, 8 May 2010 when the two unit transformers were delivered to the Medupi project site where the Medupi Execution Team had been waiting in anticipation. This follows a 10-day journey by road that these unit transformers travelled. The journey to the final destination was approximately 1100km. The delivered two transformers of Unit 6 were the first of six sets required to power up each unit of the 6 X 800MW of this fourth largest power station in the world. "The function of the unit transformers is to power up the unit; that means that they take the power back to feed what is required to run that specific unit" says Murray Silkirk, Electrical Construction Manager. Siemens is the company behind the manufacturing of these 110MVA unit transformers, each weighing approximately 80 tons. The manufacturing was done at Reinstannin

in Germany and thereafter shipped to Richards Bay, Durban in South Africa. These are triple core unit transformers, making them unique and complex. Most importantly, triple core unit transformers had never been manufactured in South Africa prior to this one.

Siemens was responsible for the transportation of these unit transformers from Dresden Factory to Durban, where they were delivered by road to the final destination in Lephalale, Limpopo Province. These were transported using special trucks designed to transport equipment of this massiveness. It is notable that the delivered unit transformers arrived as per schedule. Mr Silkirk indicated that each of the six units will need two unit transformers. Therefore the remaining ten units for the other five units will be delivered as the project progresses. According to Mr. Sellkirk, various evaluations were conducted by Eskom on the different companies that tendered before the contract was awarded to Siemens. These unit transformers are definitely on their way to transform the town of Lephalale, as all possible is done to power the nation with this mega 4 800MW coal-fired power station.

Ingula Update



1. A major milestone was reached in that, the rockfill on the left flank reached its top level in April. The total rockfill placed to date is 861000 m
2. Starter slabs for the concrete face at Bedford Dam
3. The main achievement at Braamhoek was the roller compacted concrete (RCC) on the left flank

reached spillway level. Another 8700m₃ of RCC needs to be placed before the dam wall is complete.

4. The tailrace tunnel downstream stands at 1660m excavated, 41% complete. Upstream, the tunnel stands at 378m, 37% complete. Work has started on the draft tubes, with a draft tube 4 already

on 28m excavated (19%). Work is progressing on draft-tubes 1 to 3. The surge chamber access tunnel has been completed and the progress on surge chamber link tunnels 1 & 2 stand at 64% complete. Tunnels 3 & 4 have been completed. At the outlet structure more than 11313m₃ concrete has been poured (includes outlet walls).

The KwaZulu-Natal Local Government Association, (KWANALOGA), a member of SALGA (South African Local Government Association), embarked on a brief-site tour of the Ingula Project on the 15th April 2010. KWANALOGA is an employer body responsible for giving support, advice, and lobby for 61 Municipalities in KwaZulu-Natal.

The objective of the site tour was for the KWANALOGA EXCO (mayors within KZN) to view economic developments within the uThukela District for best practice purposes and to establish a working relationship with the Ingula

Project. The delegation was led by Mayor Dudu Mazibuko from the eMnambithi local municipality and the chairperson of KWANALOGA Mayor Obed Mlaba. Nonhlanhla Shezi made an extensive presentation giving an overview of the Ingula Project and general project progress. The site tour culminated with the delegation viewing the braamhoek dam construction works and the quarry at the lower site.

"We will continue to establish strategic relations with relevant institutions in the province," Mlungisi Shongwe, Ingula Project.



L to r: Mayor Obed Mlaba (chairman: Kwanaloga and Mayor Durban Metro), Mlungisi Shongwe (Ingula project) and Mayor Dudu Mazibuko (emnambithi local municipality)

Kusile Power Station's Information Centres

Kusile Power Station project has opened a network of three Project Information Centres that are key to the project's ability to reach the people of the Mpumalanga Province and to share the Kusile Power Station Project story with them in their own languages.

These centres, in coordination with the Kusile Power Station's Stakeholder Management & Communications, reach out to the local businesses, representatives of business, local civil society organisations and the private sector, and they also maintain information packaging. The Kusile Information Centres are the primary sources of public information about the Kusile Power Station project. They promote greater public understanding of and support for the aims and activities of the Kusile Power Station project by disseminating information on the construction progress, employment opportunities, skills development opportunities and the overall information about the power station.

The Kusile Power Station Information Centres in Witbank, Ogies, and Delmas cover the whole of Mpumalanga Province, providing the public with information on Employment Opportunities, Business Opportunities, Skills Development Programmes offered by contractors, Corporate Social Investment Programmes, Construction Project updates and other information pertinent to the project.

To learn more about the services provided by the information centres, you can email kusileproject@eskom.co.za

Kusile Civil Works Joint Venture's R2 Million Investment In Building A Police Station In Phola

Kusile Civil Works Joint-Venture has committed R2 million towards the construction of the Police Station in Phola, a township in close proximity to the Kusile Power Station.

KCW Joint Venture was awarded a R2,9 billion contract by Eskom for the main civil works at Kusile Power Station and the joint venture comprises of Stefanutti Stocks, Basil Read, Group 5 and WBHO. Building the police station was one of the joint-venture's commitments presented to Eskom during the tendering process for the main civil works.

This commitment is part of KCW Joint-Venture's broader commitment to Corporate Social Investment in the area of eMalahleni. The actual construction of the police station has not commenced due to various regulatory and other technical requirements required when building police stations. The Mpumalanga Department of Community Safety and Liaisons is fully behind the project and has been engaged by both Eskom and KCW Joint-Venture.

Kusile Power Station's Update

Kusile Executive Project Manager, Mr Abram Masango accompanied by Paul from Roshcon donated T-shirts and water bottles to Sibongindawo Primary School as part of the capacity programme. The primary school is situated close to the Kusile Power Station project. Sibongindawo Primary School, formerly known as Honingkrans is Kusile Executive Project Manager's former primary school. Abram Masango was a pupil at Honingkrans primary school from 1977 to 1983 and as the project manager; he gave back to the school that he attended. He inspired the children who all excitedly confirmed that they would end up being like Baba Masango when they grow up.



Kusile Power Station Project is

progressing well beyond expectation.

Civil works on site to date have comprised the installation of piles for foundation purposes for units 1 and 6, the pile caps/foundations for boiler and turbine of unit 1, the foundations and columns for the air cooled condensers of unit 1, as well as the lift shafts for units 1 and 2 and part of the auxiliary structure that will be linking the various units. The two completed lift shafts were slip-formed. This process will also be used for four other shafts that are still to be constructed. The condenser columns are also being slip-formed. The shafts stand 118 m high while the columns are 55m high. The piling work is done by Frankipile and Steffanuti Stocks under a subcontract to the KCW-JV. Another work package on the civil side, the contract for the erection of the two chimney shells/ structures for housing the six exhaust flues, has gone to a joint venture formed between Karina and Concor.

