

Cahora Bassa Apollo

Connecting remote generation

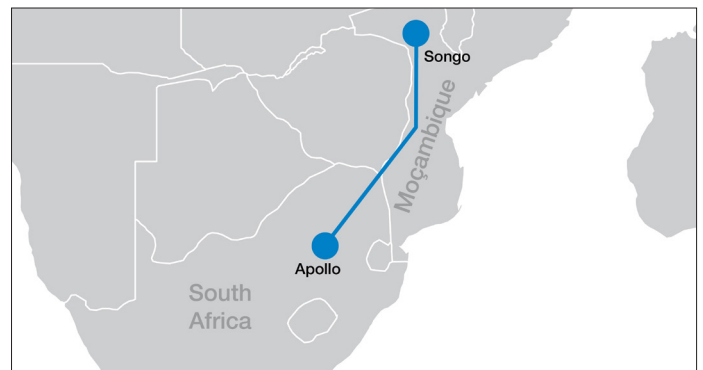


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The Cahora Bassa HVDC transmission system is an important source of imported power for the South African grid.

The link provides 1,920 MW of power transmission capacity from a hydropower plant on the Zambezi River in northern Mozambique, and was put into service in three stages, from 1977 to 1979.

The HVDC system includes the Songo converter station in Mozambique near the Cahora Bassa hydropower plant, and the Apollo converter station in South Africa near Johannesburg, which were built by the ZAMCO consortium (AEG-Telefunken, Brown Boveri Company (BBC) and Siemens). The power link is owned by the power utilities, Hidroeléctrica De Cahora Bassa (HCB) in Mozambique and Eskom in South Africa. The system comprises two parallel monopolar lines across a 1,400-km long route; 900 km is in Mozambican territory.



Main data:

Commissioning year:	1977 - 79 Apollo refurbishment: 2008 Songo refurbishment: 2013-2014
Power rating:	1,920 MW
No. of poles:	2
AC voltage:	220 kV (Songo), 275 kV (Apollo)
DC voltage:	±533 kV
Length of overhead DC line:	1,420 km
Length of DC submarine cable:	2 x 125 km
Main reason for choosing HVDC:	Long distance
Application:	Connecting remote generation, Upgrade