Eskom’s 5MVA line supplying grid power to the Platreef Project

Work is complete on the Platreef electrical substation, which has a capacity of five million volt-amperes (MVA). Construction recently was completed on the power transmission lines from Eskom, South Africa’s public electricity utility, which now is supplying the electricity for shaft sinking. Back-up generators have been installed to ensure continued sinking operations during any interruptions in Eskom’s supply. The new transmission lines also are expected to provide power to an adjacent community near the Platreef Project, which will be a major, added community benefit.

Figure 3. Eskom’s five-million-volt-ampere power line, energized last month, now is supplying electricity from the national grid for shaft sinking and construction activities at Platreef.

Platreef implementing a phased approach to a large, underground, mechanized mine

Ivanhoe plans to develop the Platreef Mine in phases. The initial annual rate of four million tonnes per annum (Mtpa) is designed to establish an operating platform to support future expansions. This is expected to be followed by a potential doubling of production to eight Mtpa; and then a third expansion phase to a steady-state 12 Mtpa, which would establish Platreef among the largest platinum-group-metals mines in the world.

Ivanhoe has made good progress on advancing the feasibility study of the first phase, which began in August 2015. The study is being managed by DRA Global – with specialized sub-consultants including Stantec Consulting, Murray & Roberts Cementation, SRK, Golder Associates and Digby Wells Environmental – and is expected to be completed in the first half of 2017.

Planned mining methods to incorporate highly productive, mechanized methods

The selected mining areas in the current mine plan occur at depths ranging from approximately 700 metres to 1,200 metres below surface. The main access to the Flatreef Deposit and ventilation system is expected to be through four vertical shafts: 1, 2, 3 and 4. Shaft 2 will host the main personnel transport cage, material and ore-handling system; shafts 1, 3 and 4 will provide ventilation to the underground workings. Shaft 1, now under development, also will be used for initial access to the deposit and early underground development.