

18th January 2011

Companies Announcement Office Via Electronic Lodgement

## DRILLING TO COMMENCE AT KAROO

Peninsula Energy Limited (Peninsula) is pleased to announce that it has now received the necessary approvals from the Department of Mineral Resources (DMR) which will enable resource development drilling to commence at the Karoo Project Sites 22 and 29 in South Africa (Karoo Projects).

Formal notification was received from the DMR that the required Environmental Management Plans (EMPs) and Prospecting Work Programmes (PWPs) for Sites 22 and 29 had been approved. The EMP for Site 37 has also been approved and the Company has been informed by the DMR that the processing of the PWP is imminent.

The drilling programme is expected to commence by 24 January 2011, initially at Site 29, and is planned to operate over four phases. Ten high ranking drill targets have been prioritised, distributed across all six of the Company's Project Areas, from the 392 uranium occurrences generated by the helicopter-borne radiometric and magnetic surveys, site mapping, ground sampling and aerial extent studies of the project areas.

Further targets have been recently identified following location and review of exploration reports compiled by Union Carbide from their uranium exploration programme conducted during the 1970s and early 1980s. Peninsula obtained these reports from the South African Nuclear Energy Corporation during the September quarter.

## Drilling Programme

Sites 22, 29 and 45 contain historical mineral estimates based on drilling by JCI and Union Carbide during the 1970's. The first Phase of the drilling programme will be focused on a selection of the JCI and Union Carbide drill holes that will be re-drilled and logged to determine uranium correlations in order to confirm the historical resources. Should these results prove positive Phase 2 drilling will commence.

During Phase 2 of the programme all new surface uranium occurrences within the selected drilling areas will be subjected to an initial drilling programme to confirm subsurface extension of the mineralisation and to determine grades.

Should the Phase 2 programme results prove positive Phase 3 will be implemented, consisting of the drilling of widely spaced borehole grids to delineate the lateral extent, thickness and grade of the mineralisation.

The Phase 4 programme will consist of in-fill drilling on a more closely spaced grid than utilised in Phase 3 in order to produce a JORC compliant resource.

Over 1,000 holes were drilled by Union Carbide and JCI on Sites 22 and 29 respectively and follow up exploration work has identified numerous other untested uranium occurrences. Data capture from the historical JCI and Union Carbide boreholes has been finalised and the data formatted for use in Gemcom to enable 3-D modelling of the historically delineated ore bodies. This process will facilitate appropriate borehole positioning during the drilling programme as well as expedite resource calculations.

Following successful completion of the full four phase drilling programme a feasibility study will then be undertaken.

Peninsula Executive Chairman Gus Simpson said "After a lengthy process we are very pleased to be able to commence the confirmation and delineation drilling programme at the Karoo. The programme has been to designed to both delineate a JORC compliant resource as well as to test the significant exploration potential we believe exists across the 6 projects".

Karoo Projects – Exploration Potential

The preliminary geological studies have estimated a combined exploration potential in the Karoo of 30-60m tonnes @ 700 - 1,400ppm  $U_3O_8$  for 90 - 150m lbs  $U_3O_8$ . Although the potential for mineralised channels to be stacked vertically has not been fully tested at any of the project areas, mapping has identified its presence at five of the six project areas.

The goal over the next 18 months is to delineate 30mlbs of  $U_3O_8$  (15-25m tonnes @ 700 – 1,400ppm  $U_3O_8$ ) which will include the historically drilled deposits, their extensions and new exploration targets. The preliminary conceptual study has suggested that this quantity of uranium would likely support a development around a central processing facility near Site 29.

Yours sincerely

John (Gus) Simpson Executive Chairman

For further information, please contact our office on +61(0)89380 9920 during normal business hours.

## **Competent Person**

The information in this report that relates to Exploration Results, Mineral Resources or Ore Reserves is based on information compiled by Mr Alf Gillman. Mr Gillman is a Fellow of the Australian Institute of Mining and Metallurgy. Mr Gillman is General Manager Project Development and is a Competent Person under the definition of the 2004 JORC Code. Mr Gillman has sufficient experience which is relevant to the style of mineralisation and type of deposit under consideration and to the activity which he is undertaking as a Competent Person as defined in the 2004 Edition of the 'Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves'.

Please note that in accordance with Clause 18 of the JORC (2004) Code, the potential quantity and grade of the "Mineralised Potential" in this announcement must be considered conceptual in nature as there has been insufficient exploration to define a Mineral Resource and it is uncertain if further exploration will result in the determination of a Mineral Resource.