

#### ASX: PEN, PENOC, PENOD

#### Peninsula Energy Limited ABN 67 062 409 303

#### **Directors**

Richard Lockwood - Non Exec Chairman Gus Simpson - Managing Director/CEO Warwick Grigor - Non Exec Director Neil Warburton - Non Exec Director John Harrison - Non Exec Director Evgenij Iorich - Non Exec Director Harrison Barker - Non-Exec Director

#### Management

Gus Simpson - CEO Ralph Knode - CEO, Strata Energy Inc David Coyne - CFO

Jonathan Whyte - Co Secretary

#### **Head Office**

Unit 17, Level 2 100 Railway Road Subiaco WA 6008

Telephone: +61 8 9380 9920 Facsimile: +61 8 9381 5064

#### Website

www.pel.net.au

#### **Capital Structure**

173.4 million shares 19.7 million \$1.20 2015 options 44.3 million \$2.00 2018 options

Cash at 30 September 2015 \$18.5 million

Market cap at 30 September 2015 \$173.4 million

For further information please contact: info@pel.net ac

# QUARTERLY ACTIVITIES REPORT

**30 SEPTEMBER 2015** 

28 October 2015

# **HIGHLIGHTS**

# WYOMING, USA - LANCE URANIUM PROJECTS

- Commencement of production imminent
- Final construction and operational site activities being completed in readiness for NRC pre-operational inspection
- Wellfield data package submitted to regulators
- US EPA Aquifer exemption approved
- > Acquisition of Hauber Uranium Project completed

# SOUTH AFRICA – KAROO URANIUM PROJECTS

Environmental Impact Assessment commenced for Mining Right Applications

# **CORPORATE**

- Two new uranium sales contracts signed
- Additional Term sale contract negotiations progressing well
- Senior Nuclear Fuel Manager appointed to Board
- Share Consolidation approved at EGM
- > Cash as at 30 September 2015 of A\$18.5m





# WYOMING, USA - LANCE PROJECTS

(Peninsula Energy 100%)

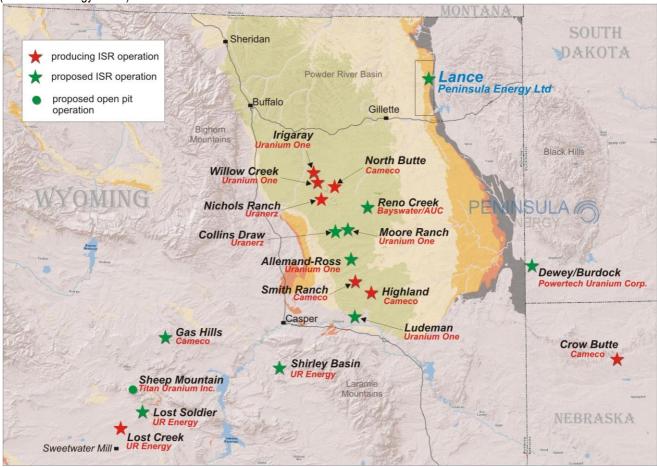


Figure 1: Lance Projects location, Wyoming USA

# Plant construction and wellfield development continuing on schedule

Peninsula Energy Limited's (Peninsula) wholly-owned subsidiary Strata Energy Inc. (Strata) continued development of the Lance Projects during the quarter and is on schedule for first production to commence in the final quarter of calendar year 2015.

### Wellfield Development

Wellfield development activities in Mine Unit 1 (MU1) were substantially progressed during the quarter. All mining wells have now been installed in the first production area for MU1. This followed the completion of all 73 monitor wells in MU1 in the previous quarter. Monitor well drilling also commenced in Mine Unit 2 (MU2) during September.

Large diameter trunk lines were installed from the Central Processing Plant (CPP) to deep disposal well (DDW) and to the edge of MU1 during the guarter.

As detailed further in this report, the MU1 wellfield data package was submitted to the Wyoming Department of Environmental Quality and the US Nuclear Regulatory Commission (NRC) during the quarter for review and consent prior to the commencement of production.





In addition to the mining and monitor well drilling program above, Strata continues to re-enter abandoned historic drill holes in the MU1 and MU2 areas with modern abandonment materials in order to meet current license conditions. Re-entry to abandon historic holes in the Mine Unit 3/Mine Unit 4 area, down gradient from MU1, was also conducted during the quarter.

#### Construction

Construction is now well advanced at the Lance Projects with both the CPP and Administration buildings completed during the quarter. Within the CPP, all tanks, pumps and piping have been placed within the building structure and cladding of the structure is complete. Construction of the administration and workshop building was completed during the quarter and our project and operations team have now moved into this building.



Figure 2: The Lance Projects, Wyoming USA - 10 September 2015

Construction activities for the first wellfield production unit and the installation of final pipework and control systems within the CPP are also near completion.

Other key activities conducted during the quarter included:

- Completion of site final grading work;
- Completion of excavation of retention ponds and final grading in bottom of ponds;
- Completion of liner system installation;
- Installation of motor control centre equipment and main switchgear in the CPP;
- Continuation of process piping installation;
- Began installation of non-potable water system;
- Completion of installation of internal high voltage power to CPP, Deep Disposal Well and MU1; and
- Receipt of instrumentation, piping materials, majority of process pumps and resin screen.

A newly constructed resin trailer was delivered to site in September and the first shipment of Ion Exchange (IX) resin was received during the quarter.







Figure 3 : Installed Ion-Exchange Vessels in the CPP, Lance Projects – 13 October 2015



Figure 4: Installed Pumps in the CPP, Lance Projects – 13 October 2015







Figure 5: High Density Large Diameter Polyethylene Trunklines from CPP to Well Fields, Lance Projects – 28 September 2015







Figure 6: Installation of Carbon Dioxide tank at the CPP Lance Projects - 29 September 2015

# Submission of Wellfield data package

In July 2015, Peninsula announced a major project development milestone at the Lance Projects with the submission of the wellfield data package for MU1 (Wellfield Data Package) to the US Nuclear Regulatory Commission (NRC) and the Wyoming Department of Environmental Quality (WDEQ).

As part of its pre-operational license requirements, Strata is required to submit to the NRC and WDEQ the Wellfield Data Package for their respective review and consent prior to the commencement of production. Submission of the Wellfield Data Package follows the completion of installation of all MU1 monitor wells, well pump tests and four rounds of baseline water sampling.

In making the submission to the NRC and the WDEQ, Strata has validated through testing that the hydrological aspects of the MU1 orebody and its perimeter will function in a manner consistent with previous pump tests and modelling. This includes demonstrating that the ore zone aquifers are effectively isolated from the overlying and underlying aquifers.

Water quality information obtained from pre-production baseline water sampling will also be used to set upper control limits for all monitor wells during production and set restoration standards during future groundwater restoration and rehabilitation of depleted wellfields.

## About the Wellfield Data Package

The Wellfield Data Package is a comprehensive hydrologic evaluation of MU1, detailing wellfield conditions as they exist prior to the injection of lixiviant. In order to prepare the Wellfield Data Package it was necessary to implement a comprehensive





baseline groundwater monitoring program. Strata also further defined the exempted portions of the uranium ore zone aquifer and also used the monitor wells to perform additional hydrological testing.

Amongst other items, the Wellfield Data Package contains the following:

- Geological demonstration of the uranium mineralised ore zone's hydraulic isolation from vertically adjacent aquifers;
- Results of aquifer testing, which demonstrate that the perimeter production zone monitor wells are in communication with the MU1 mineralised ore zone wells;
- Data from the overlying and underlying aquifers demonstrate effectively no hydraulic communication with the ore zone aquifer;
- Baseline water quality data and proposed groundwater restoration standards and monitor well upper control limits:
- Verification that the ore zone aquifer meets exemption requirements within the perimeter monitor well ring;
- Individual well mechanical integrity test records;
- Abandonment records of historic exploration drill holes located within and adjacent to the perimeter monitor well ring; and
- Numeric groundwater model simulating operational conditions that verified wellfield performance using wellfield specific conditions.

## **US Environmental Protection Agency Aquifer Exemption**

During the quarter the US Environmental Protection Agency (EPA) approved an aquifer exemption surrounding the DDW at the Ross Permit Area (RPA) of the Lance Projects.

As announced in the previous quarter, Strata. successfully completed the DDW to a depth of 8,607 feet at the RPA. Strata subsequently submitted an aquifer exemption request to the Wyoming Department of Environmental Quality (WDEQ) to include a portion of the Flathead aquifer that surrounds the DDW.

Based on a review of supporting information provided to the WDEQ, including water quality data, the EPA approved "a non-substantial program revision to include exemption of a portion of the Flathead formation surrounding the Ross DDW". Specifically, the depths and extent of the aquifer exemptions are "the portion of the Flathead formation one-quarter mile from the Ross DDW No.2 wellbore and at approximate depths of 8,277 to 8,565 feet below ground surface".

### **Operational Readiness**

Alongside construction and wellfield development progress, Strata also continued operational readiness activities during the quarter. Submissions on all pre-operational license conditions have been made to the NRC. These pre-operational conditions are a regular component of the Source Materials License issued by the NRC and establish specific conditions to be met prior to commencing production.

Final closure of the conditions will be achieved during the pre-operational site inspection by the NRC that will take place shortly before production commences. The NRC conducted a preliminary site inspection during October as part of its standard protocol.

Project staffing numbers continue to increase in the lead-up to the commencement of production. As at 30 September 2015, a total of 35 employees are now directly employed on the project (excluding construction and drilling contractor personnel). Operational training for wellfield and CPP operations commenced during the quarter and will continue in the lead up to the commencement of production. The majority of personnel hired during the calendar year are residents of Crook County or counties close to the Lance Projects.





### **Hauber Uranium Project Acquisition**

In July Peninsula acquired the Hauber Uranium Project (Hauber) in Wyoming USA from Royal USA Inc., a wholly owned subsidiary of TSX Venture-listed uranium and vanadium company Aldershot Resources Limited (Aldershot).

Under the terms of the Agreement Peninsula acquired 41 mineral claims located approximately 15 miles to the north-northeast of the Lance Projects. Consideration for the acquisition was US\$20,000, with Peninsula responsible for all future ongoing costs for maintaining the properties in good standing and for all future exploration and development funding.

Previous project holders have undertaken extensive drilling within the Hauber properties and the surrounding regional area. Data for approximately 5,000 drill holes (both rotary and core) from Hauber and the surrounding region, along with maps, gamma logs and chemical assay information was received by Peninsula as part of the acquisition.

Whilst the immediate focus for the Company is on completion of construction and commissioning of the Lance Projects, Peninsula intends to conduct a detailed analysis of the acquired data and will develop an exploration and delineation drilling program for future execution.

Given the high historic mining grade and its proximity to the Lance Projects' CPP, Peninsula has identified Hauber as a strategic regional opportunity that has the potential to be developed as a future satellite operation that could utilise the additional 700,000lb p.a. U3O8 capacity that has been licensed at the Lance CPP.

About the Hauber Uranium Project

Hauber is situated in the Black Hills area of Wyoming. The Black Hills are a broad uplift spanning approximately 150 miles in length in a NNW-SSE direction and 50 miles wide.

During the 1950's and 60's Hauber was a uranium producing project. The then owner, Homestake Mining Company, produced approximately 2.6 million pounds U3O8 at an average head grade of 2,200ppm U3O8.

# **SOUTH AFRICA - KAROO PROJECTS**

(Peninsula Energy 74% / BEE Groups 26%)

Peninsula has a 74% interest in a total of 40 prospecting rights (PRs) covering 7,774 km² of the main uranium-molybdenum bearing sandstone channels in the Karoo Basin (Karoo Projects) (see Figure 7). The residual 26% interest remains with BEE partners as required by South African law. The Karoo Projects are categorised into the Eastern and Western Sectors as shown in the diagram below. In the Eastern Sector, Peninsula has freehold ownership over an area of 322 km² which covers a significant proportion of the reported resource and allows unlimited surface access.





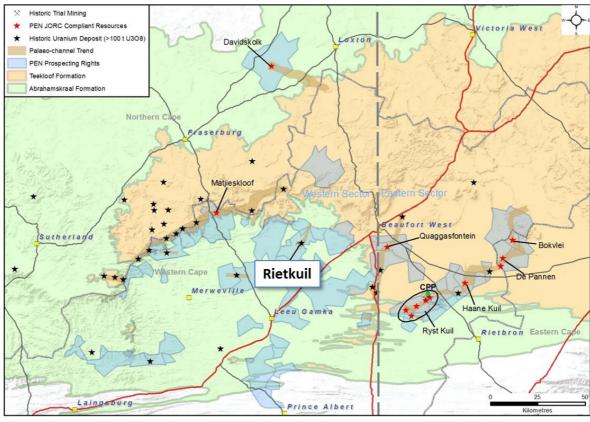


Figure 7: South Africa - Karoo Uranium Project Area Locations

During the quarter the Environmental Impact Assessment for the 16 mining rights applications in the Western, Eastern and Northern Cape provinces commenced. Biodiversity teams have been active on the various sites and it is anticipated that the draft Environmental Management Plan (EMP) reports will be completed during the December quarter 2015 for submission early in 2016.

The anticipated review process for the EMP reports is expected to take several months from submission at the regional Department of Mineral Resources (DMR) before the applications can be passed on to DMR head office for a final approval.

The public consultation process for the Mining Rights applications is ongoing.

#### **CORPORATE**

## Two New Uranium Sale Contracts entered

During the quarter Peninsula entered into two new uranium concentrate sale and purchase agreements with major United States power utilities. Deliveries of uranium concentrate will commence in 2016 and up to 1,935,000 pounds of uranium will be delivered by Peninsula under the new agreements.

The agreements contain prices that are consistent with the Term contract prices reported by uranium industry commentators during the first half of 2015. Other terms and conditions of the agreements reflect uranium industry norms.







Securing these new Term contracts means Peninsula has four significant agreements in place for a major portion of the U3O8 it wants contracted over the next five years. These committed sales contracts substantially increases revenue certainty whilst allowing an appropriate level of planned production free for future contracting in an increasing price environment.

Importantly, the weighted average delivery price across these four contracts over the next five years is approximately US\$59/lb U3O8, providing a significant cash margin over estimated all-in sustaining costs during stage 1 and 2 of the Lance Projects.

Negotiations with several other major utilities for additional new uranium concentrate sale and purchase agreements continued during the quarter.

## Senior Nuclear Fuel Manager appointed to the Board

During the quarter Peninsula appointed Mr. Harrison (Hink) Barker to its Board as a Non-Executive Director, effective 3 August 2015.

Until recently, Mr. Barker was a senior manager at Dominion Resources (Dominion) in the United States, where he worked for over 40 years, primarily with commercial and technical responsibilities for fossil and nuclear fuel.

Since 1992, Mr. Barker was Manager of Nuclear Fuel Procurement at Dominion with managerial oversight of Dominion's procurement of nuclear fuel and the related processing steps of conversion from U3O8 to UF6, enrichment of UF6, and fabrication of nuclear fuel bundles for power generation.

Dominion is a large producer and transporter of electricity in the United States, with a portfolio of approximately 24,600 megawatts of generation, including six operating nuclear power plants, located in both regulated and merchant markets, with an annual average requirement of 2.7 million pounds of uranium.

Mr. Barker holds a Bachelor of Science degree in Electrical Engineering, and a Master's in Nuclear Engineering Science both from the University of Florida.

#### **Share Consolidation**

On 24 September 2015 Shareholders voted to approve the consolidation of the Company's securities on a "1 for 40" basis. This consolidation has now taken place, with the result being that Company security holders now hold 1 security for every 40 securities held prior to the consolidation having taken place.

# **Change of Auditor**

During the quarter Peninsula received consent from the Australian Securities and Investments Commission (ASIC) to the resignation of the Company's auditors, Somes Cooke. The Company has included a resolution seeking to ratify the appointment of the incoming auditor, BDO Audit (WA) Pty Ltd (BDO) in the 2015 Notice of Annual General Meeting. The reason for the change of auditor is due to the fact that the Company is preparing an application for a secondary listing on the NYSE MKT and is therefore required to have an auditor registered with the United States Public Company Accounting Oversight Board (PCAOB). BDO is a PCAOB registered auditor whereas Somes Cooke is not registered with the PCAOB.

## **Cash Position**

The Company's cash position at the end of the quarter, including commercial bills, bonds and security deposits was A\$18.5 million. Drawn debt at the end of the quarter was A\$1.4 million.





### For further information please contact:

John Simpson (Gus)
Managing Director/Chief Executive Officer
Telephone: +61 9380 9920

#### **Competent Persons Statement**

The information in this report that relates to Exploration Results, Mineral Resources or Ore Reserves at the Lance Projects is based on information compiled by Mr Jim Guilinger. Mr Guilinger is a Member of a Recognised Overseas Professional Organisation included in a list promulgated by the ASX (Member of Mining and Metallurgy Society of America and SME Registered Member of the Society of Mining, Metallurgy and Exploration Inc). Mr Guilinger is Principal of independent consultants World Industrial Minerals. Mr Guilinger have 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 2012 Edition of the 'Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves'.

The information in this report that relates to Exploration Results and Exploration Potential at Peninsula's Karoo projects is based on information compiled by Mr George van der Walt. Mr van der Walt is a member of a Recognised Overseas Professional Organisation included in a list promulgated by the ASX (The South African Council of Natural Scientific Professions, Geological Society of South Africa). Mr van der Walt is a Director of Geoconsult International. Mr van der Walt 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 Competent Persons as defined in the 2012 Edition of the 'Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves'.

Mr Guillinger and Mr van der Walt consent to the inclusion in the report of the matters based on their information in the form and context in which it appears

Disequilibrium Explanatory Statement:  $eU_3O_8$  refers to the equivalent  $U_3O_8$  grade. This is estimated from gross-gamma down hole measurements corrected for water and drilling mud in each hole. Geochemical analysis may show higher or lower amounts of actual  $U_3O_8$ , the difference being referred to as disequilibrium. Disequilibrium factors were calculated using the Peninsula PFN database and categorized by area and lithological horizon. Specific disequilibrium factors have been applied to the relevant parts of the resource based on comparative studies between PFN and gamma data. There is an average positive 11% factor applied. All  $eU_3O_8$  results above are affected by issues pertaining to possible disequilibrium and uranium mobility.

Detailed Classified JORC-Compliant Resource Estimate, Lance Projects: U308

Resource Classification	Tonnes Ore (M)	U3O8 kg (M)	U3O8lbs (M)	Grade (ppm U3O8)
Measured	4.1	2.1	4.5	495
Indicated	11.6	5.7	12.7	497
Inferred	35.5	16.6	36.5	467
Total	51.2	24.4	53.7	476

(The JORC Resource is reported above a lower grade cut-off of 200ppm and a GT of 0.2)

2 Detailed Classified JORC-Compliant Resource Estimate, Karoo Projects: eU308

Classification	Sector	eU₃O <sub>8</sub> (ppm) CUT- OFF	Tonnes (millions)	eU₃O <sub>8</sub> Grade(ppm)	eU₃O <sub>8</sub> (million lbs)
Indicated	Eastern	600	7.1	1,206	18.7
mulcateu	Western	600	0.9	1,657	3.2
Informed	Eastern	600	11.8	1,046	27.2
Inferred	Western	600	3.5	1,019	7.8
Total	Total	600	23.3	1,108	56.9







# Schedule of Interests in Mining Tenements at 30 September 2015

Location/Project Name	Tenement	Percentage Held
Karoo Region, South Africa (Karoo Projects)		
Karoo Uranium, South Africa	PR (WC) 25	74%
Karoo Uranium, South Africa	PR (WC) 33	74%
Karoo Uranium, South Africa	PR (WC) 34	74%
Karoo Uranium, South Africa	PR (WC) 35	74%
Karoo Uranium, South Africa	PR (WC) 47	74%
Karoo Uranium, South Africa	PR (WC) 59	74%
Karoo Uranium, South Africa	PR (WC) 60	74%
Karoo Uranium, South Africa	PR (WC) 61	74%
Karoo Uranium, South Africa	PR (WC) 80	74%
Karoo Uranium, South Africa	PR (WC) 81	74%
Karoo Uranium, South Africa	PR (WC) 127	74%
Karoo Uranium, South Africa	PR (WC) 137	74%
Karoo Uranium, South Africa	PR (WC) 151	74%
Karoo Uranium, South Africa	PR (WC) 152	74%
Karoo Uranium, South Africa	PR (WC) 153	74%
Karoo Uranium, South Africa	PR (WC) 154	74%
Karoo Uranium, South Africa	PR (WC) 156	74%
Karoo Uranium, South Africa	PR (WC) 158	74%
Karoo Uranium, South Africa	PR (WC) 162	74%
Karoo Uranium, South Africa	PR (WC) 167	74%
Karoo Uranium, South Africa	PR (WC) 177	74%
Karoo Uranium, South Africa	PR (WC) 178	74%
Karoo Uranium, South Africa	PR (WC) 179	74%
Karoo Uranium, South Africa	PR (WC) 180	74%
Karoo Uranium, South Africa	PR (WC) 187	74%
Karoo Uranium, South Africa	PR (WC) 188	74%
Karoo Uranium, South Africa	PR (WC) 207	74%
Karoo Uranium, South Africa	PR (WC) 208	74%
Karoo Uranium, South Africa	PR (WC) 228	74%
Karoo Uranium, South Africa	PR (WC) 257	74%
Karoo Uranium, South Africa	PR (EC) 07	74%
Karoo Uranium, South Africa	PR (EC) 08	74%
Karoo Uranium, South Africa	PR (NC) 331	74%
Karoo Uranium, South Africa	PR (NC) 347	74%
Karoo Uranium, South Africa	PR (EC) 09	74%
Karoo Uranium, South Africa	PR (EC) 12	74%
Karoo Uranium, South Africa	PR (EC) 13	74%
Karoo Uranium, South Africa	PR (WC) 168	74%
Karoo Uranium, South Africa	PR (WC) 170	74%
Karoo Uranium, South Africa	PR (NC) 330	74%





Location/Project Name	Tenement	Percentage held
Wyoming, USA (Lance Projects)		
Lance Projects are located within the area contained within Township and A Township and Range System in Crook County, Wyoming USA.  USA, including various surface and mineral right holdings, hence tenement tenement references are not applicable.  Private Land (FEE) – Surface Access Agreements (approx. 24,581 acres)  Private Land (FEE) – Mineral Rights (approx.10,078 acres)  Federal Mining Claims – Mineral Rights (approx. 12,717 acres)  Federal Mining Claims – Surface Access – Grazing Lease (approx. 40 acres)  State Leases – Mineral Rights (approx.10,590 acres)  State Leases – Surface Access (approx.1,229 acres)  Strata Owned – Surface Access (approx. 320 acres)	N/A	100%

Location/Project Name	Tenement	Percentage held
<u>VitiLevu, Fiji (RakiRaki Project)</u>		
Raki Raki (Geopacific JV)	SPL 1231	50%
Raki Raki (Geopacific JV)	SPL 1373	50%
Raki Raki (Geopacific JV)	SPL 1436	50%

