



# PALADIN ENERGY LTD

ACN 061 681 098

Ref: 153958

27 January 2010

Company Announcements Office  
Australian Securities Exchange  
20 Bridge Street  
SYDNEY NSW 2000

*By Electronic Lodgement*

Dear Sir/Madam

## QUARTERLY ACTIVITIES REPORT FOR PERIOD ENDING – 31 DECEMBER 2009

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### HIGHLIGHTS

- **Safety focus having positive impact**
- **Record quarterly production of 987,310lb U<sub>3</sub>O<sub>8</sub>**
- **Langer Heinrich achieves Stage 2 production levels**
  - 36% increase in production over Sept quarter
- **Kayelekera production ramp-up slower than anticipated but rapidly improving**
  - all circuits technically sound
  - resin transfer only remaining bottleneck for which a solution is being implemented
- **Record quarterly sales volume of 1,095,000lb U<sub>3</sub>O<sub>8</sub> at an average realised sales price of US\$56.54/lb**
- **Execution of Paladin's long term contracting strategy with the signing of a substantial long term contract totaling 4Mlb commencing in 2012**

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### SAFETY

Paladin has made significant improvements in its safety performance over the last quarter recording only one lost time injury (LTI) for the period. Langer Heinrich Mine continued its excellent safety record reporting zero LTI's in the quarter and is on track to surpass 1 million "Lost time Injury Free" hours in January 2010.

The National Occupational Safety Association (NOSA) system (a recognised and proven South African developed programme) was introduced into both operations during the quarter. A NOSA initial baseline audit was conducted at Langer Heinrich Mine in November which indicated Langer Heinrich's baseline places the operation into the 4 STAR category. At Kayelekera Mine, NOSA workshops for the site implementation team, comprising of employees of all departments on site, were conducted in October. A baseline audit and additional training is scheduled in early February 2010.

Significant improvements in respect to vehicle traffic, a major safety risk identified for both operations, have been implemented. At Langer Heinrich Mine, speed limiters, satellite tracking and radar monitoring of vehicle movement has significantly reduced the number of vehicle-related incidents. At Kayelekera Mine, bus driver competency training and testing has been introduced, and comprehensive condition inspections on all transport vehicles have been imposed. The Company will progressively assume responsibility for employee bus travel with plans to purchase its own buses.

## RECORD QUARTERLY URANIUM SALES

Record quarterly sales of 1,095,000lb U<sub>3</sub>O<sub>8</sub> generated US\$61.9M in revenue and represented an average sales price of US\$56.54/lb U<sub>3</sub>O<sub>8</sub>. (For comparison the unweighted average spot price for the quarter was \$45.44/lb U<sub>3</sub>O<sub>8</sub>.)

## Significant New Long Term Contract

Paladin has concluded a new long term sales contract with a major Asian utility covering the supply of more than 4Mlb U<sub>3</sub>O<sub>8</sub> commencing 2012 on terms which will capture the expected strengthening market price. Work is also well advanced on making a trial shipment of uranium directly to China to test and demonstrate the efficiency of logistics from Africa to Chinese conversion facilities.

## LANGER HEINRICH MINE (LHM), Namibia

	Oct	Nov	Dec	Qtr Total
Production lb U <sub>3</sub> O <sub>8</sub>	276,758	256,518	308,719	841,995

Langer Heinrich reached Stage 2 production rates mid quarter, with part November and December production slightly exceeding design parameters. All circuits are running to design capacity. LHM has identified additional low cost modifications that will be implemented during the first half of 2010 which are expected to optimise production comfortably at or slightly above Stage 2 design.

## Mining

The mining and plant ore feed during the quarter was as follows:

	Oct	Nov	Dec
Ore mined (t)	353,748	596,257	553,499
Grade (ppm)	631	786	822

Additional low grade mined (t)	246,352	154,605	176,880
Grade (ppm)	326	305	270

Waste/Ore ratio	1.22	0.85	1.02
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	Oct	Nov	Dec	Qtr Total
Ore crushed, dt	155,728	160,113	177,427	493,268
Ore grade, ppm U <sub>3</sub> O <sub>8</sub>	1020	998	910	973

The mining activities for the quarter followed the latest mine plans, recording excellent reconciliation between actual grades and the resource model.

### Process Plant

Tonnage through the process plant was continually increased during the Stage 2 ramp-up reaching a record 177,427t for December and is expected to continue to increase during the March quarter.

Performance of the front end circuits has improved steadily over the period as improved maintenance systems have successfully applied higher priorities to critical items, directly increasing plant availability.

Ion Exchange (IX) continues to offer the most significant opportunity to raise both product throughput and plant efficiency. An internal task group has identified a list of priorities for optimisation and some recommendations are already being implemented. The two highest priority items are CO<sub>2</sub> injection into the bi-carbonate strip solution and a system to remove resin from the fixed columns for cleaning. Both projects are expected to be operational by mid year.

Plant efficiency in December ended on a high note with an overall recovery of 83.0%. The front-end scrubbing efficiency trended up positively with the commissioning of the new crushing circuit. The second leach circuit also contributed to slightly higher leach extraction. The wash efficiency under-performed slightly during the quarter and it is in this area that some real opportunity exists for even higher production levels to be achieved.

	Oct	Nov	Dec
<b>Overall Efficiency</b>	77.6%	73.5%	83.0%

### Tailings

The construction of the current tailings storage facility (TSF #1) has progressed well, is 98% complete and its operating capacity will be sufficient until the planned extension is available.

Work on the tailings extension is progressing well with construction of the seepage cut-off trench now completed and ancillary sump pumps installed. Construction of the embankment to the extension is expected to be completed by mid March 2010. This facility will provide additional storage capacity until mid 2011 at the planned production rates. Design work for the first In-pit Tailings Facility (TSF #2) is progressing well and construction start is planned for March 2010.

In-pit tails deposition is scheduled to commence in mid 2011

### Expansion Programmes (Stages 3 and 4)

Stage 3: The design of the Stage 3 expansion to 5.2Mlb pa is progressing well with purchase orders placed for most of the long lead items and site earthworks already underway. The capital cost estimate has risen to US\$99.5M from the US\$71M indicated earlier. The main reason for the increase is changes of project scope that have occurred with expansions to incorporate a “flash-splash” heating system, additional reagent mixing facilities and additional IX capacity. The scope changes offer either reduced operating costs and/or better recoveries. Strengthening of the Rand also contributed slightly to the capital increase.

Stage 4: Funding was approved at the November Board meeting for a Stage 4 expansion feasibility study which is targeting a further production increase to 10Mlb pa by mid 2014 designed to maximise the potential of this truly world class deposit. An internal Pre Feasibility Study has indicated an IRR in excess of 25% for the project.

Resource development work has started with the design of a drilling programme targeted to convert the bulk of the current inferred resources into the indicated or measured categories for the Stage 4 feasibility study. The current drilling programme consists of 36,000m and 1,360 holes are planned to be completed May/June 2010.

## Post Quarter Trends

With January 2010 production levels at the new nameplate rates, management is confident that the Stage 2 design output of 3.7Mlb pa has now been realised. The end of January marks three consecutive months of commercial drumming to nameplate production levels. Several activities are underway particularly with IX as well as investigations into how best to process the significant low grade stockpiles that will be generated by future activities.

## KAYELEKERA URANIUM PROJECT (KM), Malawi

### Production

	Oct	Nov	Dec
<b>Production lb U<sub>3</sub>O<sub>8</sub></b>	34,976	44,158	66,181
<b>Cumulative lb</b>	34,976	79,134	<b>145,315</b>

The Kayelekera production ramp-up has been slower than anticipated. The conventional components of the plant are running well and in some cases are exceeding design, but problems with the slow movement of resin from Resin In Pulp (RIP) to elution have restricted plant feed capacity. The predominant cause is the inability of the loaded resin wash screen to achieve target throughput which results in extended resin transfer times from RIP to elution. A secondary wash screening facility has been designed and ordered and is planned to be installed in March/April. In the meantime, improvements to the existing screening facility implemented during January have greatly reduced resin transfer times (with nameplate rates now being regularly achieved) and are expected to result in much improved production from the end of January 2010. Furthermore, a new type of screen cloth with 50% greater open area is now on site is expected to enable target transfer to be consistently achieved.

RIP resin loadings continue to exceed design values by 25% and good elution efficiencies are being demonstrated. Were it not for the problems associated with the loaded resin screen, plant throughput would have shown a significant increase across the quarter. However, by taking advantage of the recently improved resin transfer times and the higher resin loadings a significant step change in production is expected during February, the expectation remaining that nameplate capacity will be achieved by the end of the March quarter.

The mechanical availability of various circuits has improved significantly from past quarters and continuous improvement is expected to increase plant availability further.

After experiencing several early issues with teeth wear on the mineral sizer, crusher availability has gradually increased and reached over 80% for December. A new jaw crusher is on-site and installation is well advanced. As expected, the ball mill circuit is proving capable of operating at a much finer grind than was originally specified and this is proving effective for ensuring trouble free inter-stage screening in the RIP circuit. Leaching continues to perform in accordance with testwork results (currently at 87% extraction) and will reach final design of 91% once installation of the hydrogen peroxide system is completed by the end January. The quality of the final drummed product is excellent.

### Mining

	Oct	Nov	Dec
<b>Operating time, hrs</b>	282	359	433
<b>Ore crushed, dt*</b>	27,272	33,541	42,608

\*dry tonnes

During the quarter, the mine/plant reconciliation continued its positive trend with the plant feed grade being higher than the estimated mined grade fed to the plant while a preliminary comparison between the resource and grade control models showed a favourable reconciliation for the six month period.

Minimal ore mining took place during the period owing to the 'full' ROM pad and mainly waste rock was mined.

## **Project Development**

### Acid plant

The acid plant operated generally trouble free. Downtime was attributed mainly to mechanical maintenance issues (50.8 hours) centred around repair of leaks in the gas and acid trains. Instrumentation faults contributed 21 hours. Other downtime causes were minor holdups due to operating problems (9.9 hours) and external influences (7.1 hours).

### **Tailings Dam**

#### Decant Pond

The south wall of the decant pond is complete other than rock armour for slope stabilisation. The interior decant wall is complete to 807m ASL, but requires the west side to be raised to 811m ASL as time allows. The polyethylene lining of the pond is complete and operations have initiated water pumping into the pond. The only remaining work is minor roadworks.

#### North Wall

The north wall is 63% complete for the volumes of Stage 2, including rock armour.

### **Post Quarter Trends**

Although the challenges in RIP have restricted planned production, steady improvement in performance is evident. January is continuing this trend and with the big advances made in resin transfer capacity over the past few weeks a positive step change in production rates can be expected for February and onwards. The installation of the secondary resin cleaning screen by late March is expected to further resolve any remaining resin movement issues. As a consequence, Paladin remains confident of achieving nameplate capacity by the end of the current quarter.

### **ISA URANIUM JOINT VENTURE, Queensland - (Paladin Energy Ltd 50%, Summit Resources (Aust) Pty Ltd 50% Operator)**

Geological mapping as well as ground and helicopter borne geophysics were utilised at all three Mount Isa Projects to better define drill targets for 2010. In the Mount Isa Joint Venture area a new clear target was identified north of the Valhalla orebody. In the Isa North Project, drilling is planned on six target areas. On the Fusion tenements drilling is planned to better define and increase resources of Duke Batman, Honey Pot and Sunshine.

Drilling during the quarter concentrated at Bikini and Woomera and involved 65 holes totalling 8,195m.

In 2009, 34,000m of RC and diamond core drilling was carried out in 12 mineralised target areas increasing the total resources in the project area by 111Mlb U<sub>3</sub>O<sub>8</sub>. Drilling in 2010 will be increased to 40,000m to increase the overall resource base to enable commencement of a feasibility study late 2010/early 2011.

### **BIGRLYI URANIUM JOINT VENTURE, Northern Territory - Australia (Paladin 42.06%, Energy Metals Ltd 53.74% Operator)**

Energy Metals Ltd completed the 2009 resource drilling in December. 67 RC holes for 8,118m and 9 diamond holes for 750m were completed. A new resource estimate is expected late in the March quarter of 2010.

### **ANGELA JOINT VENTURE, Northern Territory - Australia (Paladin 50%, Cameco 50% Operator)**

The final assays of the 2009 drilling programmes were received in early January and a new geological model was completed. A new resource estimate will be completed in the March quarter.

## CORPORATE

### Chief Financial Officer Appointment

Garry Korte was appointed as Chief Financial Officer, 16 November 2009. Garry is a Chartered Accountant with 20 years experience in mining and related industries, including at Director level. Garry completed his training with PricewaterhouseCoopers before working for Credit Suisse in London. This was followed by 10 years in financial controller and CFO roles in the mining and construction sectors in Africa. More recently Garry gained investment banking experience with Resource Finance Corporation in Australia, held the position of General Manager Commercial for Brambles' mining services division and was an Executive Director and the CFO of Windimurra Vanadium Limited.

He holds a Bachelor of Commerce and is a member of the Australian Institute of Chartered Accountants. He also qualified as a Chartered Institute of Management Accountants (C.I.M.A) (United Kingdom) and Chartered Accountant (South Africa).

### Areva Legal Settlement

On 3 December 2009, Paladin announced that its subsidiary, Mt Isa Uranium Pty Ltd (MIU) had entered into a conditional agreement with (amongst others) Areva NC (Australia) Pty Ltd (Areva), Resolute Limited (Resolute) and Summit Resources Limited (Summit) (the settlement agreement)

The settlement agreement relates to Areva's application to the Supreme Court of Western Australia under section 237 of the Corporations Act 2001 (Cth) for leave to intervene in the proceedings that were brought by Summit's wholly owned subsidiary, Summit Resources (Aust) Pty Ltd (SRA), against Resolute and MIU.

The settlement agreement is conditional upon the Honourable Chief Justice making orders in the form sought by the parties.

Paladin will make a further announcement to the market once it becomes known whether the Honourable Chief Justice will make the orders sought by the parties. There is no guarantee that such orders will be made, or made in the form sought by the parties.

### Annual General Meeting

At the Annual General Meeting held on 25 November 2009 all resolutions were passed.

### Change of Head Office Address

Paladin Energy Ltd moved its head office premises on 7 December 2009. The street address is now:-

Level 4, 502 Hay Street, Subiaco, Western Australia, 6008.

All other contact details remain the same: –

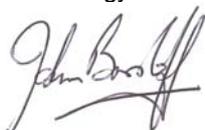
Postal address:	PO Box 201, Subiaco, Western Australia, 6904.
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## MARKET COMMENTS

The Ux spot price moved from US\$43.50/lb U<sub>3</sub>O<sub>8</sub> at the beginning of October to US\$44.50/lb U<sub>3</sub>O<sub>8</sub> at the end of December, after briefly spiking to \$49.50/lb in late October. The long term indicator price eased from US\$64/lb U<sub>3</sub>O<sub>8</sub> to US\$62/lb U<sub>3</sub>O<sub>8</sub>.

World Nuclear Association (WNA) data released in January 2010 reaffirms the continuing swing to nuclear power worldwide. While the number of operating reactors remained at 436 at the beginning of 2009 and 2010 respectively, the number of reactors in the “under construction”, and “planned and proposed” moved significantly upwards. In 2010 there were 53 reactors under construction worldwide, compared with 43 in 2009, reflecting the start of the massive new build programme underway in China (9 new starts) and the early stages of India’s new nuclear commitment (1 start). Of much greater significance is the dramatic increase in the number of reactors in the “planned and proposed” category which has risen from 374 at the beginning of 2009 to 469 at the beginning of 2010. The recent decision by the United Arab Emirates to sign a contract with KEPCO of Korea for the construction of four new 1400MWe nuclear plants to be in service between 2017 and 2020 signals the start of an aggressive new phase in the move to substitute nuclear energy for fossil fuels in base load power generation in countries that do not presently have a civil nuclear industry. The UAE decision also demonstrates the international nuclear industry’s capacity to undertake new builds on a cost-competitive basis. Paladin remains positioned to play a leading role in this expanding, under-supplied market.

Yours faithfully  
Paladin Energy Ltd



**JOHN BORSHOFF**  
Managing Director/CEO

#### Declaration

*The information in this announcement that relates to Exploration, Mineral Resources and Ore Reserves is based on information compiled by Eduard Becker B.Sc, David Princep B.Sc and Andrew Hutson B.E., all of whom are members of the AusIMM. Messrs Becker, Princep and Hutson each have sufficient experience that is relevant to the style of mineralisation and type of deposit under consideration and to the activity that he is undertaking to qualify as Competent Persons as defined in the 2004 Edition of the “Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves”, and as a Qualified Person as defined in Canadian National Instrument 43-101. Messrs Becker, Princep and Hutson are full-time employees of Paladin Energy Ltd and consent to the inclusion of the information in this announcement in the form and context in which it appears.*

#### **Caution Regarding Forward Looking Statements:**

*The forward-looking statements made in this quarterly activities report are based on management’s assumptions and judgments regarding future events and results. Such forward-looking statements, including but not limited to those with respect to the Company’s plans for expansions of the Langer Heinrich and Kayelekera mines and Financial Year 2010 production guidance, involve known and unknown risks, uncertainties and other factors which may cause the Company’s actual results, performance or achievements to be materially different from any anticipated future results, performance or achievements expressed or implied by such forward-looking statements. Such factors include, among others, the actual market prices of uranium, changes in project parameters as plans continue to be evaluated, and the possibility of cost overruns, as well as those factors disclosed in the Company’s filed documents. There can be no assurance that the expansion of the Langer Heinrich and Kayelekera mines will proceed as planned or be successfully completed within expected time limits and budgets or that, when completed, the expanded facilities will operate as anticipated.*