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## ASX Announcement

23 August 2016

**1P RESERVE VALUES UP BY 65%  
 FIRST AMENDMENT TO CREDIT FACILITY  
 CAPITAL RAISING APPROVAL**

### RESERVES UPDATE

The following table summarises Empire Energy Group Limited's reserves and resources based on NYMEX strip prices as at June 30, 2016:

#### NET RESERVES & CASH FLOW - NYMEX STRIP, JUN 30, 2016

Reserves - As of June 30, 2016	Oil (Mbbbls)	Gas (MMcft)	MBoe	Gross Wells	Capex US\$M	PV0 US\$M	PV10 US\$M
Region (Reserves) - USA							
Proved Developed Producing	1,495	25,187	5,693	1,991	\$0	\$70,133	\$29,725
Proved Developed Non-producing	517	0	517	28	\$2,434	\$13,156	\$6,517
Proved Behind Pipe	146	38	152	15	\$575	\$5,372	\$1,467
Proved Undeveloped	861	95	877	36	\$9,023	\$26,770	\$9,226
<b>Total 1P</b>	<b>3,019</b>	<b>25,320</b>	<b>7,239</b>	<b>2,070</b>	<b>\$12,032</b>	<b>\$115,431</b>	<b>\$46,935</b>
Probable	2,772	22,314	6,491	149	\$51,839	\$96,783	\$23,862
<b>Total 2P</b>	<b>5,791</b>	<b>47,634</b>	<b>13,730</b>	<b>2,219</b>	<b>\$63,871</b>	<b>\$212,214</b>	<b>\$70,797</b>
Possible	1,660	3,820	2,297	225	\$28,116	\$77,143	\$12,112
Possible - NY Shale	90,740	12,460	92,817				
<b>Total 3P</b>	<b>98,191</b>	<b>63,914</b>	<b>108,843</b>	<b>2,444</b>	<b>\$91,987</b>	<b>\$289,357</b>	<b>\$82,909</b>
Prospective Resource New York Shale P(50)	203,500	1,221,000	407,000				
Prospective Resource P(50) - Australia (NT)	222,000	11,076,000	2,068,000				
<b>Total Reserves &amp; Resources</b>	<b>523,691</b>	<b>12,360,914</b>	<b>2,583,843</b>				

USA Reserves by: RE Davis Associates, Inc & Pinnacle Energy Services, LLC.  
 Northern Territory Resources by: Muir & Associates P/L and Fluid Energy Consultants

Movement in PV10 values since December 31, 2015 are as follows:

- PDP - 30% higher at ~\$30 million
- 1P - 65% higher at ~\$47 million. Increase in reserves due to finalisation of design and engineering of a water flood project, review of all behind pipe opportunities and the further review of acquired 3D seismic to identify proved developed locations for drilling.
- 2P - 59% higher at ~\$71 million; and
- 3P - 77% higher at ~\$83 million.

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The following NYMEX price strip, as at June 30, 2016 was used to calculate reserves:

Year	\$/Bbl	\$/Mcf
2016	49.00	3.07
2017	52.17	3.18
2018	53.45	3.02
2019	54.60	3.00
2020	55.44	3.06
2021	56.22	3.19
2022	57.98	3.35

As per previous reports, no cash flow calculations were undertaken for the New York shale 3P reserves of 92.8MMBoe due to the existing fracking ban in the State.

No drilling program is currently contemplated with the Company targeting a WTI of around \$55/Bbl to ensure adequate returns are generated. With the exception of the 5,000 acres held in Kay County, Oklahoma most other development locations are held by production.

The Company continues to seek opportunities where it can identify low cost growth opportunities to continue to build reserves and production.

### **CREDIT FACILITY UPDATE**

In early 2016 the Company finalised a rollover of its Credit Facility with Macquarie Bank Limited. As a component of the 3 year extension, the Company agreed to allocate US\$5 million of the initial US\$7.5 million payment to be received from American Energy Partners, LP (AEP) on April 20, 2016 as the first of two payments for an 80% Farmout of the Company's interest in its McArthur Basin, Northern Territory project. The unexpected death of Mr. Aubrey McClendon, Founder of AEP has meant that the closing of Farmout is unlikely to occur, with the AEP Farmout now an asset controlled by the Trustee of the McClendon Estate.

Without receipt of the US\$5 million, the Company has entered into a First Amendment to the Credit Facility rollover of April 2016. The key items and covenants of the Revolver and Term Loan Facility are now as follows:

- The payment of US\$5 million from the Farmout Agreement has been cancelled, along with any additional Farmout payments received (as per the First Amendment).
- In its place, a payment of US\$1.5 million is due on August 31, 2016 (as per the First Amendment).
- Interest Rates for both the Revolver and the Term Loan have been increased from an average of L+~4.4% to L+6.5% (as per the First Amendment).
- The Adjusted PDP PV10 asset coverage ratio to total debt (defined in Credit Facility and adjusted for hedges and cash) is to be no less than 1:1 at November 1, 2016 (as per the First Amendment). The Borrowing Base ratio set by the Lender may not reflect exactly the calculation of the Independent Economic Reserve Report. Post the capital raising, with an increase in net cash assets, based on the unaudited June 30, 2016 Balance Sheet, the PDP PV10 ratio is expected to be over 1:1.

Working capital through the proposed equity raising will be allocated towards oil and gas assets that will grow reserves, production and EBITDAX. Further, should the Company's oil price expectations be realized over the short to medium term, this will add to Company liquidity, further enhancing debt metrics and ensuring additional flexibility and headroom availability under the Credit Facility.

## **CAPITAL RAISING APPROVAL**

On 12 August 2016 Company's shareholders voted in favour of the Company raising A\$5 million. In addition, the Company has the capacity to raise additional funds under its Listing Rule 7.1 & 7.1(a). Funds resulting from the recapitalisation of the Company will be allocated to a number of activities, which may include; increase production, reserves and to enhance liquidity, take advantage of the distressed A&D market, complete and fund previous/ongoing minor work programs in the McArthur Basin including the continuation of alternative farmout discussions and general working capital requirements.

## **NOTES TO RESERVES**

- "Prospective Resources" is the estimated quantities of petroleum that may potentially be recovered by the application of a future development project(s) relate to undiscovered accumulations. These estimates have both an associated risk of discovery and a risk of development. Further exploration appraisal and evaluation is required to determine the existence of a significant quantity of potentially moveable hydrocarbons.
- The scope of the Reserve Studies reviewed basic information to prepare estimates of the reserves and contingent resources.
- The quantities presented are estimated reserves and resources of oil and natural gas that geologic and engineering data demonstrate are "In-Place", and can be recovered from known reservoirs.
- Oil prices are based on NYMEX West Texas Intermediate (WTI).
- Gas prices are based on NYMEX Henry Hub (HH).
- Prices were adjusted for any pricing differential from field prices due to adjustments for location, quality and gravity, against the NYMEX price. This pricing differential was held constant to the economic limit of the properties.
- All costs are held constant throughout the lives of the properties.
- The probabilistic method was used to calculate P50 reserves.
- The deterministic method was used to calculate 1P, 2P & 3P reserves.
- The reference point used for the purpose of measuring and assessing the estimated petroleum reserves is the wellhead.
- "PV0" Net revenue is calculated net of royalties, production taxes, lease operating expenses and capital expenditures but before Federal Income Taxes.
- "PV10" is defined as the discounted Net Revenues of the company's reserves using a 10% discount factor.
- "1P Reserves" or "Proved Reserves" are defined as Reserves which have a 90% probability that the actual quantities recovered will equal or exceed the estimate.
- "Probable Reserves" are defined as Reserves that should have at least a 50% probability that the actual quantities recovered will equal or exceed the estimate.
- "Possible Reserves" are defined as Reserves that should have at least a 10% probability that the actual quantities recovered will equal or exceed the estimate.
- "Bbl" is defined as a barrel of oil.
- "Boe" is defined as a barrel of oil equivalent, using the ratio of 6 Mcf of Natural Gas to 1 Bbl of Crude Oil. This is based on energy conversion and does not reflect the current economic difference between the value of 1 Mcf of Natural Gas and 1 Bbl of Crude Oil.
- "M" is defined as a thousand.
- "MMBoe" is defined as a million barrels of oil equivalent.
- "Mcf" is defined as a thousand cubic feet of gas.
- All volumes presented are net volumes and have had subtracted associated royalty burdens.
- Utica shale gas potential resources have only been calculated for the region where drill data is available.
- Very few wells have been drilled into the Utica in Western NY and NW Pennsylvania. Estimates for GIP have been made were the few existing wells have been drilled. Empire holds additional acreage outside the current potential resource region. It is expected that as with shale characteristics, the shale formations will continue within the remaining acreage. The potential GIP should increase if more data was available.

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- Reserve estimates have been prepared by the following independent reserve engineers:
- New York & Pennsylvania (Appalachia) and Kansas (Mid-Con) - Ralph E. Davis Associates, Inc.
- Oklahoma (Mid-Con) - Pinnacle Energy Services, LLC.
- Northern Territory - Muir & Associates P/L and Fluid Energy Consultants.

## COMPONENT PERSONS STATEMENT

The information in this report which relates to the Company's reserves is based on, and fairly represents, information and supporting documentation prepared by or under the supervision of the following qualified petroleum reserves and resources evaluators, all of whom are licensed professional petroleum engineer's, geologists or other geoscientists with over five years' experience and are qualified in accordance with the requirements of Listing Rule 5.42:

Name	Organisation	Qualifications	Professional Organisation
Allen Barron	Ralph E Davis Associates, Inc	BSc	SPE
John P Dick	Pinnacle Energy Services, LLC	BPE	SPE
Wal Muir	Muir and Associate P/L	BSc,MBA	PESA

\* SPE: Society of Petroleum Engineers

\*PESA: Petroleum Exploration Society of Australia

None of the above evaluators or their employers have any interest in Empire Energy E&P, LLC or the properties reported herein. The evaluators mentioned above consent to the inclusion in the report of the matters based on their information in the form and context in which it appears.

## ABOUT EMPIRE ENERGY GROUP LIMITED

Empire Energy is a conventional oil and natural gas producer with operations in Appalachia (New York and Pennsylvania) and the MidCon (Kansas and Oklahoma). The Company has ~14.6 million acres in the McArthur & Beetaloo Basins, Northern Territory, both of which are considered highly prospective for large shale oil and gas resources. Work undertaken by the Company over the past 5 years demonstrates that the Central Trough of the McArthur Basin, (of which the Company holds around 80%), is a major Proterozoic depo-centre that forms one segment of a series of extensive prolific hydrocarbon basins similar to those extending through Oman, Siberia and Southern China and which contain resources of billions of barrels of oil equivalent.

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