

11 October 2023

**Gas Reserves and Resources Upgrade:**

**Blue increases Sapphire Block 2P Reserves by 36% and Contingent Resources by 19%**

Blue Energy Limited (ASX: BLU, ‘Blue Energy’, ‘Blue’ or ‘the Company’) is pleased to report that the independent reserve and resource certifier, Netherland Sewell and Associates Inc (NSAI) of Dallas, Texas, has upgraded its estimates of gas reserves and resources in Blue’s 100% owned and operated Sapphire Block which is also located in Authority to Prospect (ATP) 814. ATP 814 is located in the North Bowen Basin, Queensland.

**Summary of reserve and resource upgrades for Sapphire Block (PJ of recoverable gas)**

- NSAI review is based on new geological data from 2022 drilling program.
- **Increase in 2P and 3P gas reserves** of 36% and 13%, respectively, to **91 PJ** and **287 PJ**.
- **Increase in 1C, 2C and 3C Contingent Resource category** of 11%, 18% and 19%, respectively, to 171 PJ, 251 PJ and 256 PJ.
- **Increase in 3P+2C aggregate gas resource available** of 16% to 543 PJ of recoverable gas.
- Brings Sapphire 2P reserves to 80% of total envisaged gas supply volume required under the non-binding MoU between QPM and Blue.

**Table 1: Updated summary of reserve and resource changes for Sapphire Block (PJ of recoverable gas)**

Permit	1P (PJ)		2P (PJ)		3P (PJ)		1C (PJ)		2C (PJ)		3C (PJ)	
	new	*old	new	*old	new	*old	new	*old	new	*old	new	*old
ATP 814P, Sapphire Block, Qld	–	–	90.7	66.5	287.0	253.2	171.2	154.3	251.7	213.9	256.0	214.4
% change	–	–	+36.4%	–	+13.0%	–	+11.0%	–	+17.7%	–	+19.4%	–

Source: NSAI, Blue Energy.

\*Previous reserve and resource numbers for the Sapphire Block were released to the market in the Company’s announcement 14 July 2022.

NSAI undertook this subsequent review as part of the post Sapphire Pilot appraisal drilling program conducted in the last half of 2022. This review incorporates the geological data from the drilling of the Sapphire wells in late 2022. Blue will continue to work with NSAI on the ongoing reserve upgrade process through the production testing program.

NSAI conducted the assessment, and classified the resources and reserves, using the current Society of Petroleum Engineers – Petroleum Resources Management System (SPE–PRMS) (2018 Update), together with technical geological data relating to coal seam thickness, coal seam depth, gas content data, seam continuity data and production data from the adjacent activity to the Sapphire Block.

The review of this new data and information has resulted in the certifier increasing its estimates of the certified resources and reserves for ATP 814 as at 9 October 2023. (LR 5.32.2)

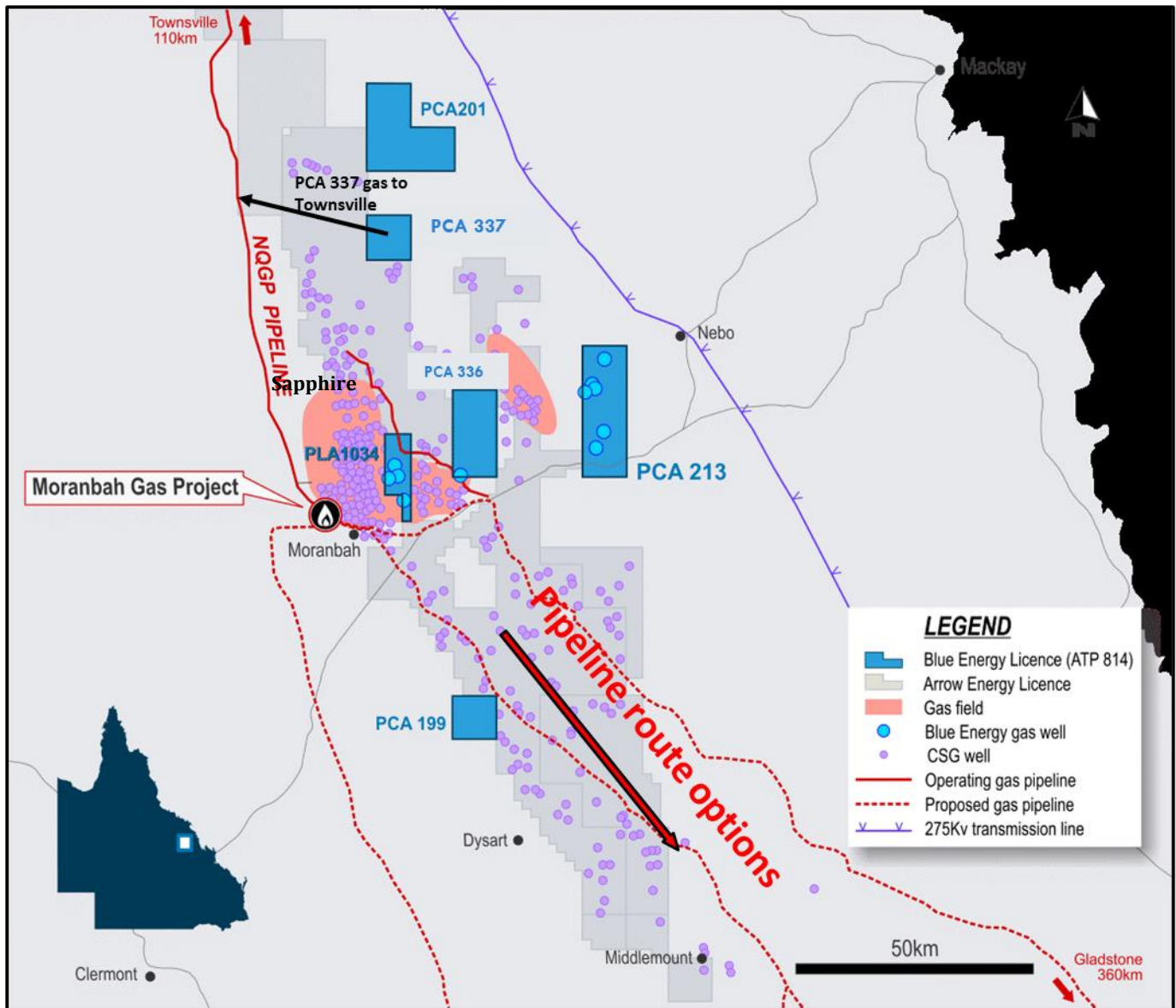


Figure 1: Blue Energy acreage position in the North Bowen and Sapphire Lancelwood and Central Blocks in which the Company has booked its independent certified resources and reserves.

Source: Blue Energy

This latest reserve upgrade sees the Sapphire 2P reserve volumes building to 80% of the total contract volume envisaged in the non-binding Blue Energy - QPM MoU for the 15 year of gas supply to their proposed Nickel refinery, initially executed and announced to the market 12 November 2019.

## APPENDIX 1 – ADDITIONAL INFORMATION REQUIRED UNDER CHAPTER 5 OF THE LISTING RULES

### Listing Rules 5.31 - 5.36

#### *Listing Rules 5.32 and 5.34*

A large range of technical geological and production data has been obtained over a wide area, particularly within the proximity of the Sapphire Block, Central and Lancewood Blocks, including the results of the recent Sapphire Pilot appraisal drilling program in order to understand the technical and commercial nature of this resource.

NSAI utilises proximal data from the adjacent producing gas fields to assess and estimate the gas reserve and resource quantities in Blue Energy's ATP 814.

The proximity to existing infrastructure consists of a large producing well field, gas gathering, gas conditioning and compression facilities and connection to the Moranbah–Townsville pipeline, which has supplied gas to the Townsville market since 2006. This information has also been utilised by NSAI in the estimation of the economic thresholds for Blue Energy's gas reserves and resources.

Since the most recent Reserves and Contingent Resources updates were reported for the Sapphire Block on 14 July 2022, a series of Sapphire Pilot Appraisal wells have been drilled, the geological data from which has been incorporated in the current assessment by NSAI.

Since the reserves for the Sapphire Block were last reported the market on 14 July 2022, the following data or information has been secured, enabling an upgrade of the reserves and resources. The changes include the following:

- Coal Overburden and Coal Net Thicknesses from the new Sapphire Pilot wells have been incorporated into the estimates across the areas.
- Regional geologic features have been incorporated with more clarity.
- Gas Content and Recovery Factor calculations have been adjusted for regional historical trends.

The upgrade of Reserves and Contingent Resources have been prepared by NSAI utilising a deterministic estimation method.

The new technical data and refined interpretation incorporated since the reserves and resources upgrade announcement of 14 July 2022 has resulted in an increase in the 2P, 3P reserves and an increase in Contingent Resources assigned to the Sapphire Block. The block area referred to in this announcement is the subject to a Production Licence (PL) Application while the Lancewood and Central Blocks are subject to Potential Commercial Area Applications with the Queensland Government. A Field Development Plan has been lodged as part of the PL Application.

In addition to the new data gained from the Pilot drilling programme NSAI has also taken into account the large amount of technical data, the production performance of Moranbah Gas Field over 18 years and the proximity of that existing gas field to the Sapphire Block and gas market at both Moranbah and Townsville resulting in NSAI reaffirming its previous opinion that both 2P and 3P reserves volumes are justified and warranted.

#### *Listing Rule 5.32.2*

As previously announced Blue undertook in 2022 a drilling programme consisting of 9 wells as part of the Sapphire Block Pilot. of the 9 wells drilled 7 of these are undergoing production testing operations. Gas is currently being flared from these wells as part of the Production Test Authority granted to Blue. Blue has entered into non-binding

gas supply agreements with the new Moranbah Gas Project Facility owner Queensland Pacific Metals in order to commercialise the gas from the Sapphire Block pilot wells. Recovery of gas from the permit will be conducted through future investment in development infrastructure of the currently undeveloped reserves, subject to award of the Production Licence by the Qld Government.

Given appropriate approvals and grant of the Production Licence by the Queensland Government, it is expected that development of the field will take between 3 and 5 years with first gas expected in 2025, subject to access to construction of connections to existing gas infrastructure. The Company is confident that the project has a positive economic outlook as the Company has already executed a number of memorandums of understanding for the supply of gas, the potential buyers of which include Queensland Pacific Metals in Townsville, and EnergyAustralia and Origin Energy. As stated, the Company is presently waiting for the Queensland Government to issue the Petroleum Licence for PL 1034, and other Potential Commercial Area (PCA) grants.

As announced 14 July 2022 the estimates of reserves and resources reported include unconventional. The details of the project area, the method of extraction and number of wells that may be required are not yet finalised.

*Listing Rule 5.31.8*

Due to the large amount of technical data, combined with the close proximity of the Sapphire Block to the Moranbah Gas Field and the adherence to a deterministic well spacing assessment criteria (using SPE/PRMS criteria), NSAI is of the opinion that 2P and 3P reserves volumes are justified and warranted. To date there are no binding agreements for the sale of gas from the project and the certifier has not recorded and 1P reserves for the area.

**Listing Rule 5.31.5 and 5.33.2**

The Reserves and Contingent Resources which are reported herein have been estimated using the deterministic method, with classification and categorisation based on incremental well spacing concepts. The estimates have not been adjusted for development risk.

**Listing Rules 5.33.3 and 5.33.5**

The Reserves and Contingent Resources which have been certified by NSAI for ATP 814 are based upon the incorporation of additional technical data by the independent certifier NSAI, from Blue's recent drilling and regional geologic and production interpretations, to establish the commercial viability of project development and commitment to develop the Sapphire Block resources and revision of Central and Lancewood contingent resource estimates.

If the contingencies are successfully addressed, further parts of the Contingent Gas Resources may be reclassified as reserves in due course. The estimates of Contingent Resources have not been risked to account for the possibility that the contingencies are not successfully addressed.

The estimates reported relate to unconventional petroleum reserves. The details of the project block areas, the method of extraction and number of wells that may be required are not yet finalised. The Contingent Resources estimated have been prepared in accordance with the definitions and guidelines set forth in the SPE-PRMS 2018.

**Listing Rule 5.33.4**

The report does not identify that the Contingent Resources are contingent on technology that remains under development.

**Listing Rule 5.32 and 5.34**

The Company confirms that it is not aware of any other information or data, other than that disclosed in this announcement and which has been provided to NSAI for the purposes of preparing the estimate of the Contingent Resources, that materially affects the information included in the original announcement relating to the Sapphire Block (PL 1034 application pending) and the Central Block and Lancewood Block of ATP 814 (ASX:BUL 14 July 2022 and 8 December 2015) plus this announcement and that all of the material assumptions and technical parameters underpinning the estimates in the original announcements continue to apply.

**Table 2: Blue Energy Updated Reserves and Resources Table at 11 October 2023**

Permit	Block	Date	Method	Certifier	1P (PJ)	1C (PJ)	2P (PJ)	2C (PJ)	3P (PJ)	3C (PJ)
ATP854P		25/01/2022	SPE/PRMS Det	NSAI	-	90	-	194	-	398
ATP814P	Sapphire	9/10/2023	SPE/PRMS Det	NSAI	-	171.2	90.7	251.7	287.0	256.0
ATP814P	Central	31/07/2023	SPE/PRMS Det	NSAI	-	39		111		469
ATP814P	Monslatt	8/12/2015	SPE/PRMS Det	NSAI	-	-	-	619	-	2,054
ATP814P	Lancewood	31/07/2023	SPE/PRMS Det	NSAI	-	203	-	232		573
ATP814P	Hillalong	27/02/2020	SPE/PRMS Det	NSAI	-	-	-	182	-	237
ATP814P	South	29/07/2013	SPE/PRMS Det	NSAI	-	15	-	27	6	30
<b>Total (PJ)</b>					-	<b>518</b>	<b>91</b>	<b>1,617</b>	<b>293</b>	<b>4,017</b>

Source: NSAI, Blue Energy.

**\*Listing Rule 5.42 Disclosure**

The estimates of Reserves and Contingent Resources noted throughout this ASX Announcement have been provided by Mr John Hattner of Netherland, Sewell and Associates Inc (NSAI) and were originally reported in the Company's market announcements of 25 January 2012, 26 February 2013, 19 March 2013, 8 December 2015, 28 February 2019, 22 January 2022, 14 July 2022, 31 July 2023 and 14 June 2023. NSAI independently regularly reviews the Company's Reserves and Contingent Resources. Mr Hattner is a full-time employee of NSAI, has over 30 years of industry experience and 20 years of experience in reserve estimation, is a licensed geologist and a member of the Society of Petroleum Engineers (SPE), and has consented to the use of the information presented herein. The estimates in the reports by Mr Hattner have been prepared in accordance with the definitions and guidelines set forth in the 2018 Petroleum and Resource Management System (PRMS) approved by the SPE, utilising a deterministic methodology.

*Listing Rule 5.43:* Blue Energy confirms that it is not aware of any new information or data that materially affects the information included in any of the announcements relating to ATP 814 referred to in this report and that all of the material assumptions and technical parameters underpinning the estimates in the announcements continue to apply and have not materially changed.

*\*\* Listing Rule 5.28.2:* 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.

**By Authority of the Board per:  
John Phillips  
Managing Director  
Blue Energy Limited**