

NOTICE OF ANNUAL GENERAL AND SPECIAL MEETING OF SHAREHOLDERS

| WHEN: | WHERE |
|---|--|
| Thursday, June 15, 2023 2.00 p.m. (Pacific time) | The Offices of NexGen Energy Ltd. Suite 3150 - 1021 West Hasting Street Vancouver, BC, V6E 0C3 |

Shareholders will also be able to access but not participate in the formal aspect of the Meeting by webcast or teleconference using the details below:

WEBCAST URL: https://app.webinar.net/49m7apn2Dxe

CONFERENCE DIAL-IN:

To instantly join the conference call by phone, please use the following URL to easily register yourself and be connected into the conference call automatically or dial direct.

URL: https://emportal.ink/3Kd7WKp

Conference ID: 46397367

Toronto: 416-764-8659 / Vancouver: 778-383-7413

North American Toll Free: 1-888-664-6392

International Toll Free: Australia 1800076068 / Hong Kong 800962712

Please plan to vote in advance of the meeting.

The purposes of the meeting are to:

- 1. Receive the audited consolidated financial statements of the Company for the financial year ended December 31, 2022, together with the report of the independent auditor thereon;
- 2. Set the number of directors of the Company at ten;
- 3. Elect the directors of the Company for the ensuing year;
- 4. Re-appoint KPMG LLP as independent auditor of the Company for the 2023 financial year and to authorize the directors to fix their remuneration;
- 5. Consider and, if deemed advisable, approve an ordinary resolution authorizing the amendment, restatement and continuation of the Company's existing shareholder rights plan for an additional three-year term; and
- 6. Transact such other business as may properly come before the Meeting or any adjournment or postponement thereof.

Your Vote is Important

The nature of the business to be transacted at the Meeting is described in further detail in the accompanying Management Information Circular (the "Circular"), which is deemed to form part of this notice of meeting. Please read the Circular before you vote on the matters being transacted at the Meeting.

Your vote is important regardless of the number of NexGen shares you own. Registered NexGen Shareholders who are unable to attend the Meeting or any postponement or adjournment thereof in person are requested to complete, date, sign and return the enclosed form of proxy or, alternatively, to vote by telephone, or over the Internet, in each case in accordance with the enclosed instructions. To be used at the Meeting, the completed proxy form must be deposited at the office of Computershare Investor Services Inc., no later than 2:00 p.m. (Pacific Time) on June 13, 2023 or, if the Meeting is adjourned or postponed, not later than 48 hours (excluding Saturdays, Sundays and statutory holidays in the Province of British Columbia) prior to the time set for the adjourned or postponed Meeting.

Non-registered NexGen Shareholders who receive these materials through their broker or other intermediary should complete and send the form of proxy or voting instruction form in accordance with the instructions provided by their broker or intermediary.

Your vote is important and the Company encourages you to vote promptly. The deadline to submit your vote is 2:00 p.m. Pacific Time on June 13, 2023.

DATED at Vancouver, British Columbia, this 24th day of April 2023.

BY ORDER OF THE BOARD OF DIRECTORS OF NEXGEN ENERGY LTD.

"Leigh Curyer"
President & Chief Executive Officer