

POET Technologies Inc.

(the "Company")

VOTING INSTRUCTION FORM ("VIF")

Annual General Meeting
 July 13, 2017, 10:00 a.m. (PDT)
 Holiday Inn San Jose Silicon Valley,
 1350 N. 1st Street, San Jose, CA, USA
 (the "Meeting")

RECORD DATE: May 26, 2017**CONTROL NUMBER:****SEQUENCE #:****FILING DEADLINE FOR PROXY:** July 11, 2017, 10:00 a.m. (PDT)

VOTING METHOD	
INTERNET	Go to www.voteproxyonline.com and enter the 12 digit control number above
FACSIMILE	416-595-9593
MAIL or HAND DELIVERY	TSX Trust Company 200 University Avenue, Suite 300, Toronto, Ontario, M5H 4H1

The undersigned hereby appoints **David E. Lazovsky, Executive Chairman** of the Company, whom failing **Suresh Venkatesan, CEO** of the Company, or failing both of them **John F. O'Donnell, Secretary** of the Company (the "Management Nominees"), or instead of any of them, the following Appointee

Please print appointee name

as proxyholder on behalf of the undersigned with the power of substitution to attend, act and vote for and on behalf of the undersigned in respect of all matters that may properly come before the Meeting and at any adjournment(s) or postponement(s) thereof, to the same extent and with the same power as if the undersigned were personally present at the said Meeting or such adjournment(s) or postponement(s) thereof in accordance with voting instructions, if any, provided below.

- SEE VOTING GUIDELINES ON REVERSE -

RESOLUTIONS – MANAGEMENT VOTING RECOMMENDATIONS ARE INDICATED BY HIGHLIGHTED TEXT ABOVE THE BOXES

1. Election of Directors

- a) Todd A. DeBonis
- b) David E. Lazovsky
- c) Ajit Manocha
- d) John F. O'Donnell
- e) Chris Tsiofas
- f) Suresh Venkatesan
- g) Mohandas Warrior

FOR**WITHHOLD**

<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>
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<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>

2. Appointment of Auditors

Re-appoint Marcum LLP and authorize the directors to fix their remuneration.

FOR**WITHHOLD**

<input type="checkbox"/>	<input type="checkbox"/>
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This VIF revokes and supersedes all earlier dated proxies and **MUST BE SIGNED**

PLEASE PRINT NAME

Signature of beneficial owner(s)

Date (MM/DD/YYYY)

Voting Instructions – Guidelines and Conditions

The Company is providing you the enclosed proxy-related materials for their security holder Meeting. Your name, address and information about your security holdings have been obtained in accordance with applicable securities regulations from the intermediary holding them on your behalf (which is identified by name, code or identifier in the information on the top right corner on the reverse). The Voting Instruction Form (“VIF”) is to enable your vote to be submitted on the stated matters. Please complete, sign, date and return the VIF. Unless you appoint yourself or a delegate to attend the Meeting and vote, your securities can be voted only by Management Nominees in accordance with your instructions.

We are prohibited from voting these securities on any of the matters to be acted upon at the Meeting without your specific voting instructions.

The completed VIF should be delivered to TSX Trust Company, in the envelope provided or by fax to 416-595-9593. Alternatively, if available, you may vote online at www.voteproxyonline.com. The matters to be voted on at the Meeting are set out on the reverse.

By providing voting instructions as requested, you are acknowledging that you are the beneficial owner of, and are entitled to instruct us with respect to the voting of, these securities.

THIS VOTING INSTRUCTION FORM MUST BE READ IN CONJUNCTION WITH THE MEETING MATERIAL. YOUR VOTING INSTRUCTIONS MUST BE RECEIVED NO LATER THAN THE DEADLINE SPECIFIED ON THE REVERSE IN THE UPPER LEFT SECTION OF THE VIF OR THE EQUIVALENT TIME BEFORE THE TIME AND DATE OF ANY ADJOURNMENT OR POSTPONEMENT OF THE MEETING.

Voting Instructions and Authority - Notes

1. If you appoint the Management Nominees to vote your securities, they will vote in accordance with your instructions or, if no instructions are given, in accordance with the Management Voting Recommendation highlighted for each Resolution on the reverse. If you appoint someone else to vote your securities, they will also vote in accordance with your instructions or, if no instructions are given, as they in their discretion choose.
2. The appointment of the Management Nominees or another Appointee gives them discretion to vote on any other matters that may properly come before the Meeting.
3. If internet voting is available, you can provide your voting instructions on the website noted on the reverse.
4. To be valid, this VIF must be signed. Please date the VIF. If the VIF is not dated, it is deemed to bear the date of mailing to the security holders of the Company.
5. This form does not convey any right to vote in person at the Meeting. **We urge you to read the above instructions, and the Information Circular prior to completing, signing and returning the VIF so that your securities can be voted.**
6. Guidelines for proper execution of the proxy/VIF are available at www.stac.ca. Please refer to the Proxy Protocol.

For assistance, please contact TSX Trust Company.

Mail: TSX Trust Company
200 University Avenue, Suite 300
Toronto, ON
M5H 4H1

Telephone: 416-361-0930

Facsimile: 416-595-9593

Email: TMXInvestorServices@tmx.com

Appointing yourself or someone else to vote your securities

If you want to attend the Meeting and vote in person at the Meeting or appoint another person to do so, write your name or the name of the person attending the Meeting in the space labeled “Please print appointee name” on the VIF and return it. Unless prohibited by law, the person whose name is written in the space provided will have full authority to present matters to the Meeting and vote on all matters that are presented at the Meeting, even if those matters are not set out in this form or the information circular. Consult a legal advisor if you wish to modify the authority of that person in any way. When you or your Appointee arrives at the Meeting, they should give their name to the scrutineers and state that they are a proxy appointee. The Appointee must attend the Meeting in order for your securities to be voted.

Notice-and-Access

The Canadian securities regulators have adopted rules which permit the use of notice-and-access for proxy solicitation instead of the traditional physical delivery of material. This new process provides the option to post meeting related materials including management information circulars as well as annual financial statements and management’s discussion and analysis, on a website in addition to SEDAR. Under notice-and-access, meeting related materials will be available for viewing for up to 1 year from the date of posting and a paper copy of the material can be requested at any time during this period.

Disclosure regarding each matter or group of matters to be voted on is in the Information Circular in the Section with the same title as each Resolution on the reverse. You should review the Information Circular before voting.

POET Technologies Inc. has elected to utilize notice-and-access and provide you with the following information:

Meeting materials are available electronically at www.sedar.com and also at <http://www.poet-technologies.com/agm/agm2017.html>

If you wish to receive a paper copy of the Meeting materials or have questions about notice-and-access, please call 1-866-600-5869 or email TMXInvestorServices@tmx.com. In order to receive a paper copy in time to vote before the meeting, your request should be received by July 4, 2017.

Request for Financial Statements

In accordance with securities regulations, security holders may elect to receive Annual Financial Statements, Interim Financial Statements and MD&As.

Instead of receiving the financial statements by mail, you may choose to view these documents on SEDAR at www.sedar.com.

I am currently a security holder of the Company and as such request the following:

- Annual Financial Statements with MD&A
- Interim Financial Statements with MD&A

If you are casting your vote online and wish to receive financial statements, please complete the online request for financial statements following your voting instructions.

If the cut-off time has passed, please fax this side to 416-595-9593

- Check this box if you wish to receive the selected financial statements electronically and print your email address below

E-mail (optional)

By providing my email address, I hereby acknowledge and consent to all provisions outlined in the following: <https://www.voteproxyonline.com/equity/fsred.pdf>

POET Technologies Inc.
2017