

**NEXT HYDROGEN SOLUTIONS INC.
MATERIAL CHANGE REPORT
FORM 51-102F3**

Item 1. Name and Address of Corporation

Next Hydrogen Solutions Inc.
6610 Edwards Blvd.
Mississauga, Ontario L5T 2V6

Item 2. Date of Material Change

September 28, 2023

Item 3. News Release

A news release was disseminated on October 10, 2023 via GlobeNewswire.

Item 4. Summary of Material Change

Next Hydrogen Corporation entered into a \$7.7M agreement for a project involving a specialized nuclear application.

Item 5. 5.1 Full Description of Material Change

See Schedule "A" attached hereto.

Item 6. 5.2 Disclosure for Restructuring Transactions

Not applicable.

Item 7. Reliance on Section 7.1(2) of National Instrument 51-102

This Report is not being filed on a confidential basis in reliance on subsection 7.1(2) of National Instrument 51-102.

Item 8. Omitted Information

Not applicable.

Item 9. Executive Officer

The name and business number of the executive officer of the Corporation who is knowledgeable about the material change and this report is:

Raveel Afzaal, President and Chief Executive Officer
Email: rafzaal@nexthydrogen.com
Phone: 647-961-6620

Date of Report

October 10, 2023

SCHEDULE "A"

Next Hydrogen secures \$7.7M agreement for a project involving a specialized nuclear application

Mississauga, October 10, 2023 - Next Hydrogen Solutions Inc. ("Next Hydrogen") ([TSXV:NXH](#), [OTC:NXHSE](#)) is pleased to announce it has entered into a \$7.7M agreement for a project involving a specialized nuclear application (the "Project"). Under the agreement, Next Hydrogen will conduct design engineering (Phase 1) and subsequently provide the electrolyser needed (Phase 2) for the Project. A \$5M purchase order has been received for Phase 1 with a follow-on order of \$2.7M planned for Phase 2 with electrolyser delivery expected to occur in 2025.

Raveel Afzaal, President and CEO of Next Hydrogen stated "We are very grateful to be awarded this project with blue-chip industry partners. Our unique, advanced electrolyser design is well suited to this important application and was successfully tested for the application in the past. This project will provide us with the resources to deliver and demonstrate a strong solution for an application with high growth potential, for example, in nuclear fusion demonstrations, while accelerating our product roadmap for large scale green hydrogen production. Operating our electrolyser in such a stringent application will provide an excellent reference point for our next generation high performance electrolysers."

About Next Hydrogen Solutions

Founded in 2007, Next Hydrogen is a designer and manufacturer of electrolyzers that use water and electricity as inputs to generate clean hydrogen for use as an energy source. Next Hydrogen's unique cell design architecture supported by 40 patents enables high current density operations and superior dynamic response to efficiently convert intermittent renewable electricity into green hydrogen on an infrastructure scale. Following successful pilots, Next Hydrogen is scaling up its technology to deliver commercial solutions to decarbonize transportation and industrial sectors. For further information: www.nexthydrogen.com

Contact Information

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Cautionary Statements

This news release contains “forward-looking information” and “forward-looking statements”. All statements, other than statements of historical fact, are forward-looking statements and are based on expectations, estimates and projections as at the date of this news release. Any statement that involves discussions with respect to predictions, expectations, beliefs, plans, projections, objectives, assumptions, future events or performance (often but not always using phrases such as “expects”, or “does not expect”, “is expected”, “anticipates” or “does not anticipate”, “plans”, “budget”, “scheduled”, “forecasts”, “estimates”, “believes” or “intends” or variations of such words and phrases or stating that certain actions, events or results “may” or “could”, “would”, “might” or “will” be taken to occur or be achieved) are not statements of historical fact and may be forward-looking statements including but not limited to ability to proceed to Phase 2 of the Project and expected delivery of the electrolyser under the Project in 2025 . Forward-looking statements are necessarily based upon a number of estimates and assumptions that, while considered reasonable, are subject to known and unknown risks, uncertainties, and other factors which may cause the actual results and future events to differ materially from those expressed or implied by such forward-looking statements. Such factors include, but are not limited to: the risks associated with the hydrogen industry in general; delays or changes in plans with respect to infrastructure development or capital expenditures; the uncertainty of estimates and projections relating to costs and expenses; failure to obtain necessary regulatory approvals; health, safety and environmental risks; uncertainties resulting from potential delays or changes in plans with respect to infrastructure developments or capital expenditures; currency exchange rate fluctuations; as well as general economic conditions, stock market volatility; and the ability to access sufficient capital. There can be no assurance that such statements will prove to be accurate, as actual results and future events could differ materially from those anticipated in such statements. Accordingly, readers should not place undue reliance on the forward-looking statements and information contained in this news release. Except as required by law, there will be no obligation to update the forward-looking statements of beliefs, opinions, projections, or other factors, should they change.