## Micro Modular Reactor<sup>®</sup> Project at Chalk River



Virtual Open House: November 15 to 30, 2021

Please visit **www.gfpcleanenergy.com** for more information including:

- A copy and transcript of this presentation
- Supporting information (such as fact sheets and links to useful information)
- A comment form
- Our previous virtual open house presentation, held March 2021

We would appreciate your comment forms by December 1, 2021.

## Welcome to Fall 2021 Virtual Open House

- Global First Power (GFP) proposes to construct, own and operate a very small modular reactor (SMR) referred to as the Micro Modular Reactor (MMR<sup>®</sup>) Project at Chalk River\* (the Project)
- Purpose: to update you on Project progress, next steps and opportunities for involvement

\*The Chalk River site is owned by Atomic Energy of Canada Limited (AECL) and managed by Canadian Nuclear Laboratories (CNL) Your input and feedback will help us understand your thoughts, perspectives and interests in the Project.





## **Commitment to Indigenous Communities**



GFP is committed to building mutually beneficial working relationships with Indigenous communities with rights and/or interests proximate to the project site and operations.

GFP is committed to engagement with all Indigenous communities with treaty and Aboriginal rights as well as those with interests in the vicinity of the Project site.

Engagement with identified Indigenous communities began at the onset of our licence application process and we commit to ongoing engagement throughout all phases of the Project.



## A Joint Venture









- International technology developer based in Seattle, Washington
- Designer and supplier of the Micro Modular Reactor (MMR<sup>®</sup>) technology

- 50 years of nuclear expertise
- Coordinator of the Project, environmental assessment, licensing, Indigenous and public engagement

## **The Proposed Project**



- Demonstration project at the Chalk River Laboratories site
- 15 megawatts (MW) of heat energy (approx. 5 MW of electricity)
- Lifespan anticipated to be 20 years, after which the reactor will be decommissioned and the site restored
- Have applied for a Canadian Nuclear Safety Commission (CNSC) Licence to Prepare Site
- Environmental Assessment (EA) underway



An artist rendering of USNC's Micro Modular Reactor®

### **Project Site**



The preferred location is currently an employee parking lot located in the Chalk River site



#### Site Layout





### Site Layout





An Artistic rendering (subject to change)

## **Environmental Assessment (EA) Process**

• The project is subject to the requirements of CEAA 2012, the Generic EA Guidelines and the scope of the environmental assessment established by the CNSC

 In addition to CNSC's EA scope requirements, GFP plans to address the sustainability of the Project and consideration of effects through gender-based analysis plus in response to feedback from Indigenous communities



Indigenous knowledge shared for inclusion may be integrated throughout the steps in the process

# Aspects of the Environment to be Considered

The EA will consider the effects of the Project on various aspects of the environment, such as:

- Interests of Indigenous Peoples
- Atmospheric Environment
- Surface Water Environment
- Geology and Hydrogeology
- Terrestrial Environment
- Aquatic Environment
- Land and Resource Use
- Socio-economic Conditions
- Human and Ecological Health
- Radiation and Radioactivity



GLOBAL

#### **Understanding the Site**





- Characteristics of the site are well understood based on years of study by CNL
- Additional focused studies have been undertaken by GFP relevant to this project:
  - Geophysics investigation
  - Aquatic habitat assessment
  - Regional public attitude survey

Preferred location for the Project

### **EA Study Areas**



• Site Study Area: Project location

- Local Study Area: area surrounding the site study area that may be affected by project activities
- **Regional Study Area:** where the Project may interact with effects of other existing or planned infrastructure



Site Study Area



Local Study Area Example (Aquatic Environment) – drainage area that includes the Site Study Area

*Regional Study Area Example (Terrestrial Environment) -Chalk River site* 

### **Existing Environment**





The terrestrial regional study area (Chalk River site) supports a diverse mix of habitats including deciduous and coniferous forest types, with a wide variety of plant species



Habitat for Species at Risk (SAR) is present within the Chalk River site, including turtle, bird and bat species



The aquatic regional study area is dominated by the Ottawa River which supports a variety of aquatic species; the aquatic local study area provides limited habitat for aquatic species



Areas of natural vegetation or aquatic habitat are not present within the site study area

### **Existing Environment**



- Land uses in the vicinity of the Project include existing operations at the Chalk River site and Garrison Petawawa south of the site, both with restrictions on public access
- Predominant land uses in the area and along the Ottawa River include recreation and tourism, as well as forestry, limited agriculture, and trapping activities
- No known archaeological sites are within the site study area for land and resource use
- GFP is working with Indigenous communities to learn more about land and resource use



#### What We've Heard

We have hosted two well-attended town hall events and a virtual open house via a dedicated website

We have heard from a number of interested parties and answered questions and concerns

Commonly heard questions include: employment opportunities, project progress and information on GFP

Feedback from the Mar. '21 virtual open house showed general approval of the selected valued components

Please see the link on the virtual open house website to learn more about our Valued Components

Engagement with Indigenous groups and the public will continue throughout the life of the Project – we value your feedback





## **Timeline - For Planning Purposes**



**Commence Operations** 

Operation for 20 years Maintain licence to operate

#### **Next Steps**

![](_page_16_Picture_1.jpeg)

- We are currently seeking your input on our assessment approach and how you wish to be engaged in our Project going forward.
- As the EA progresses, we will be seeking feedback on the results of our studies and preliminary effects assessment and mitigation measures.
- Your feedback is important in shaping the direction of this exciting Project.

![](_page_16_Picture_5.jpeg)

### **Please Share Your Thoughts**

- Thank you for sharing your feedback on the Project through our comment module
- To access please click the 'share comments' button on our virtual open house website

![](_page_17_Picture_3.jpeg)

## How To Get Involved

![](_page_18_Picture_1.jpeg)

![](_page_18_Picture_2.jpeg)

Please fill out the comment form online or submit by email

![](_page_18_Picture_4.jpeg)

We would appreciate your comments by December 1, 2021

We are hosting our third telephone town hall on November 16, 2021, 7-8 pm. For more information, please visit the virtual open house website: www.gfpcleanenergy.com

Website: www.globalfirstpower.com

Email: <a href="mailto:info@globalfirstpower.com">info@globalfirstpower.com</a>

**Phone:** 1-800-892-9504

Twitter: @Global1stPower

## Thank You

![](_page_19_Picture_1.jpeg)

![](_page_19_Picture_2.jpeg)