

Record of Determination

DET 25-H109

In the Matter of

- Requestor NexGen Energy Ltd.
 - Subject Review of the facts stated in the Notice of Violation related to the Administrative Monetary Penalty 2024-AMP-06 and the amount of the penalty
- Hearing Date April 8, 2025

RECORD OF DETERMINATION - DET 25-H109

Requestor:	NexGen Energy Ltd.
Address/Location:	Suite 3150, 1021 West Hastings Street Vancouver, BC V6E 0C3
Purpose:	Review of the facts stated in the Notice of Violation related to the Administrative Monetary Penalty 2024-AMP-06 and the amount of the penalty
Request received:	January 9, 2025
Date of hearing:	April 8, 2025
Location:	Virtually via Microsoft Teams
Members present:	P. Tremblay, Panel
Registrar: Recording Secretary: Senior General Counsel:	C. Salmon C. Moreau L. Thiele

Graeme Johnson	Chief Project Officer	
Luke Moger	VP, Environment, Permitting & Licensing	
Adam Engdahl	VP, Community	
Jon Henderson	Director, Compliance	
Nick Espenberg	Director, Mine Technical Services	
Greg Newman	Director, Newmans Geotechnique Inc.	CMD 25-H109.1
Chief Teddy Clark	Chief, Clearwater River Dene Nation	
Camm Willier	Engagement Lead, Clearwater River Dene Nation	
Leonard Montgrand	Director, Métis Nation - Saskatchewan Northern Region II	
Rangi Jeerakathil	Partner, MLT Aikins]
Nando De Luca	Partner, Goodmans LLP	

Luc Sigouin	Director General, Directorate of Nuclear Cycle and Facilities Regulation (DNCFR)	
Patrick Burton	Director, Uranium Mines and Mills Division (UMMD), DNCFR	CMD 25-H109
Dana Pandolfi	Senior Project Officer, UMMD, DNCFR	
Sandhya Chari	Counsel	

Determination: NexGen Energy Ltd. Committed the Violation

Administrative Monetary Penalty Amount: Corrected

Table of Contents

1.0	INTRO	DUCTION	1
2.0	ISSUE	S	1
3.0	RELEV	ANT LEGAL PROVISIONS	1
4.0		IISSION REVIEW AND DETERMINATION	
5.0	COMM	IISSION FINDINGS	3
5.1	Facts	of the violation	3
5	.1.1	NexGen's activities were not solely exploratory	5
5	.1.2	NexGen's activities constituted site preparation and/or construction	8
5	.1.3	NexGen committed the violation	13
5.2	Pena	lty amount	13
5	.2.1	Review of determining factors	14
5	.2.2	The penalty is reduced to \$11,920	20
6.0	CONC	LUSION	20

1.0 INTRODUCTION

- NexGen Energy Ltd. (NexGen) has applied to the Canadian Nuclear Safety Commission (CNSC) to prepare a site and construct a uranium mine and mill for the <u>Rook I Project</u> on Patterson Lake, Saskatchewan. The project proposes the construction, operation, and eventual decommissioning of a uranium mine and mill. To date, no licence has been issued to NexGen. NexGen has occupied the Project site for the purposes of mineral exploration, an activity not regulated by the CNSC, but by the Province of Saskatchewan.
- 2. On December 12, 2024, a CNSC Designated Officer issued a Notice of Violation¹ to NexGen, believing on reasonable grounds that NexGen performed site preparation and construction of a nuclear facility without the required CNSC licence, contrary to paragraph 26(e) of the Nuclear Safety and Control Act (NSCA). To promote compliance with the NSCA, the Designated Officer issued an Administrative Monetary Penalty (AMP) to NexGen in the amount of \$29,080: 2024-AMP-06.
- 3. On January 9, 2025, pursuant to section 65.1 of the NSCA, NexGen requested a review of both the facts of the violation and the amount of the AMP.

2.0 ISSUES

- 4. Pursuant to subsection 65.14(1) of the NSCA, the Commission must determine whether:
 - 1. NexGen committed the violation as stated in the Notice of Violation; and
 - the amount of the penalty was determined in accordance with the <u>Administrative</u> <u>Monetary Penalties Regulations (Canadian Nuclear Safety Commission)²</u> (AMPs Regulations).

3.0 RELEVANT LEGAL PROVISIONS

5. The NSCA prohibits people from preparing a site for the construction or operation of a uranium mine or mill using the following terms:

26 Subject to the regulations, no person shall, except in accordance with a licence,

[...]

(e) prepare a site for, construct, operate, modify, decommission or abandon a nuclear facility

¹ The Notice of Violation for 2024-AMP-06 is provided in Reference 13 of CNSC staff's CMD 25-H109.

² SOR/2013-139.

- 6. Section 1 of the NSCA defines "nuclear facility" to include a uranium mine or mill.
- 7. If the Commission determines that the person who requested the review committed the violation, the person is liable to the penalty as set out in the determination: see subsection 65.14(4) of the NSCA.
- 8. If the Commission determines that the amount of the penalty for the violation was not determined in accordance with the regulations, the Commission shall correct the amount of the penalty: see subsection 65.14(3) of the NSCA.

4.0 COMMISSION REVIEW AND DETERMINATION

- 9. Pursuant to section 22 of the NSCA, the President of the Commission established himself as a Panel of the Commission to consider the request from NexGen. The Commission, in making its determination, considered information presented in a hearing held on April 8, 2025. During the hearing, the Commission considered written submissions from NexGen (CMD 25-H109.1) and the Designated Officer (CMD 25-H109), as well as oral information and submissions presented during the hearing by both NexGen and CNSC staff.
- 10. For the reasons described below, the Commission determined that **NexGen Energy Ltd. committed the violation** set out in the Notice of Violation.
- 11. The Commission also corrected the amount of the administrative monetary penalty in accordance with the AMPs Regulations. Therefore, **NexGen Energy Ltd. is liable to pay \$11,920**. Payment is due within 30 days of the date of this determination.
- 12. With this decision, the Commission emphasizes that NexGen should not undertake any additional work at its Rook I site without first communicating with CNSC staff. While CNSC staff cannot authorize any activities that would be subject to a licence under the NSCA, the Commission expects NexGen to seek advice and direction from CNSC staff, and clearly communicate its intentions for any future work at the Rook I site. NexGen must understand what is and is not acceptable between now and the upcoming hearing on the Rook I environmental assessment and licence application.

5.0 COMMISSION FINDINGS

5.1 Facts of the violation

- 13. In accordance with section 65.15 of the NSCA, the person who issued the Notice of Violation bears the burden of proof. Thus, on this review, the Designated Officer must establish, on a balance of probabilities, that NexGen committed the violation identified in the Notice of Violation.
- 14. In the Notice of Violation, the Designated Officer alleged that NexGen violated paragraph 26(e) of the NSCA by "[performing] site preparation and construction of a uranium mine and mill facility without a CNSC licence."³ This was done by creating two large circular arrays of cased drill holes, intended for the creation of freeze walls for the development of mine shafts. NexGen's application indicates that, due to unconsolidated ground conditions from the surface down to basement rock, construction of the nuclear facility would require freeze ring infrastructure to freeze the ground and allow safe construction of their production and ventilation mineshafts.
- 15. In the Notice of Violation, the Designated Officer detailed certain facts, as follows:⁴
 - In November 2023, CNSC staff was informed by counterparts from the Province of Saskatchewan that NexGen had constructed two large pads (100 metres by 100 metres each), at locations consistent with the locations of Rook I's two mineshafts, described in NexGen's licence application.
 - On January 16, 2024, CNSC staff undertook a site visit to the Rook I site and viewed the two large pads in question. During that site visit, CNSC staff observed drilling activities on the pads.
 - On May 13, 2024, CNSC staff were informed by NexGen that, "Design confirmation drilling is now complete, and the disturbed areas are being decommissioned and reclaimed in the summer 2024 in accordance with permit conditions...".
 - On October 8, 2024, a web interview took place between TD Securities and NexGen's Vice President of Corporate Development. CNSC staff observed that the video was publicly available and linked from NexGen's public website. During the interview, NexGen's Vice President claimed that:
 - two large "shaft pads" for the production and exhaust shafts for the Rook I Project were in place; and

³ See Reference 13 of CNSC staff's CMD 25-H109.

⁴ See Reference 13 of CNSC staff's CMD 25-H109.

- "freeze rings" were in place and ready to go pending approvals.
- On October 15, 2024, CNSC staff were informed by Province of Saskatchewan counterparts that an array of holes in the form of a ring at each pad at the Rook I site was present in May of 2024, and that signage present at the Rook I site on one of the pads and adjacent to one of the rings of holes indicated that the area was the "Production Shaft".
- On November 19, 2024, a CNSC inspector conducted an inspection at the Rook I site. CNSC staff confirmed the presence of the rings of cased and capped drill holes filled with brine solution on each of the large pads. The inspection also identified signage present at both pads indicating that the areas were the future sites for both the production and exhaust shafts.
- On the basis of the on-site observations made at the NexGen Rook I site on November 19, 2024, and compared to documents submitted to the CNSC as part of NexGen's licence application, CNSC staff concluded that: (1) the ringshaped arrays of holes are freeze rings which, according to NexGen's plans, are necessary for the construction of a nuclear facility; and (2) NexGen has therefore violated NSCA 26(e).
- 16. As part of this proceeding, NexGen has asked the Commission to review the facts of the violation.⁵ NexGen submits that the work conducted at the Rook I site was a design confirmation drilling program, and:
 - is neither site preparation nor construction
 - represents activities which are universally regarded in the industry as exploratory in nature
 - has been conducted in accordance with an authorization that the Province of Saskatchewan issued to NexGen and that explicitly contemplates exploratory activities only
- 17. On the timing of the Notice of Violation, the Designated Officer stated that it was not until the fall of 2024 that CNSC staff became aware of the specific location and layout of the drill holes. In particular, the Designated Officer highlighted the information received from the Province of Saskatchewan and NexGen's public remarks in October 2024, along with CNSC staff's inspection in November 2024.⁶
- 18. NexGen responded noting that CNSC staff had conducted a site visit in January 2024 and had been aware of the drilling plans at least since that time.⁷

⁵ NexGen to CNSC – Request for Review (9 January 2025) – Cover Letter and additional information.

⁶ Transcript, page 57.

⁷ Transcript, page 57.

- 19. Regardless of whether CNSC staff were aware of NexGen's drilling plans, the Designated Officer asserted that they could not have authorized the work and maintained that the AMP was issued within the 2-year time limit in section 65.09 of the NSCA.⁸ The Designated Officer also emphasized changes to the site based on pictures taken in January 2024 (photographs 1 and 3 in the Notice of Violation) and November 2024 (photograph 2 in the Notice of Violation).⁹
- 20. As part of the hearing, both NexGen and the Designated Officer agreed that the key facts are documented in the submissions provided to the Commission, even if the two interpret the facts differently.¹⁰
- 21. As a result, the question before the Commission is whether the design confirmation drilling program, consisting of two large circular arrays of cased drill holes, constitutes "site preparation and construction", pursuant to the NSCA and the *Uranium Mines and Mills Regulations* (UMM Regulations).

5.1.1 NexGen's activities were not solely exploratory

- 22. During the hearing, the Designated Officer stated that any physical work occurring at a site where there will be a nuclear facility is considered site preparation and construction. However, it was recognized that this may be different for mines, and that work related to prospecting and surface exploration can be excluded from the requirements for site preparation and construction.
- 23. Notably, subsection 2(2) of the UMM Regulations exclude exploration activities:

2(2) These Regulations do not apply in respect of uranium prospecting or surface exploration activities.

- 24. The Designated Officer explained that the term "exploration" in relation to the NSCA and UMM Regulations relates to prospecting, and the locating and quantifying of minerals. The Designated Officer added that such exploration is not for the purpose of gathering information to inform the detailed design of components or parts of a mine or mill.¹¹
- 25. In CMD 25-H109, the Designated Officer says that "NexGen never openly, clearly nor proactively informed CNSC staff of the full extent of design confirmation drilling works that their planned design confirmation drilling would involve drilling the same number and location of holes as specified by their freeze ring design, and that the holes would be cased and preserved, and that they would not be decommissioned with the two large pads. Had NexGen done so, CNSC staff would have advised NexGen that

⁸ Transcript, page 56.

⁹ Transcript, page 65.

¹⁰ Transcript page 48-49.

¹¹ Transcript page 32.

such works are prohibited without a CNSC licence to prepare site and construct their nuclear facility."¹²

- 26. The Designated Officer also noted that "the pads are subject to a Provincial requirement to decommission and as such, the pads on their own cannot constitute site preparation or construction works."¹³ In addition, "the presence of circular arrays of drill holes only became concerning from a regulatory point of view in light of information indicating that they had been actively preserved and were not subject to the Provincial decommissioning commitment."¹⁴
- 27. The Designated Officer underlined the fact that the design confirmation drill holes are purposefully aligned with aspects of NexGen's design and have been cased and filled with brine for preservation. This is contrary to CNSC staff's understanding that the drill holes would be decommissioned in the same manner as those associated with exploration across the site: cut down and backfilled, cemented, or grouted in.¹⁵ Rather, the Designated Officer states that the preserved drill holes remain available for future use.¹⁶
- 28. NexGen argues that numerous factors, including the following, confirm that its design confirmation drilling program was exploratory in nature:
 - the design confirmation pads are temporary structures;
 - the drill holes are needed to provide necessary and essential information on subsurface conditions;
 - drill holes remaining at the Rook I site are an artifact of the design confirmation drilling program and analogous to the many other standard exploration holes that remain across the Rook I site;
 - the mining industry considers design confirmation drilling programs to be exploratory in nature; and
 - the purpose of the program is "to inform detailed engineering design," and that "this information is required to further refine the engineering design of the freeze infrastructure, shaft liners, and shaft sinking methodology for the Rook I Project."
- 29. In support of its arguments, NexGen argued that its design confirmation drilling program was performed under an authorization issued by the Province of Saskatchewan. Plus, in January 2024, Saskatchewan officials confirmed to NexGen that

¹² CMD 25-H109, page 13.

¹³ CMD 25-H109, page 21.

¹⁴ CMD 25-H109, page 24.

¹⁵ Transcript page 50–51.

¹⁶ CMD 25-H109, page 25.

they viewed the design drilling program as being focused on geotechnical aspects of the project, and not construction.

- 30. NexGen also provided a copy of a February 2024 letter from the Acting CEO of the CNSC to the Premier of Saskatchewan regarding a temporary airstrip proposed by NexGen for its exploration camp. In the letter, the author wrote that "the CNSC conducted a site inspection of NexGen's exploration camp in mid-January. This inspection confirmed the work conducted to date is consistent with exploration."¹⁷
- 31. During the hearing, a NexGen representative said that surface exploration includes geotechnical activities, including those that come with informing design and conducting the environmental assessment baseline.¹⁸
- 32. In its submissions, NexGen included a technical memorandum on the Rook I Project shaft freezing methodology. It provides an overview of the design, site preparation, and construction stages for a typical shaft sinking project that employs artificial ground freezing as a means of water control and geotechnical stabilization.¹⁹
- 33. During the hearing, a NexGen representative discussed the importance of conducting design confirmation drilling, noting that it informs whether the project proceeds to site preparation.²⁰ NexGen stated that the final location and spatial positioning of the freeze holes that would be required for the Rook I Project are being determined based on the results of the design confirmation drilling program.
- 34. NexGen also argued that "the design confirmation drilling conducted has enabled the iterative design process to be advanced, though detailed design 'for construction' is not complete."²¹ NexGen explained that "if data was collected from locations that differed from the preliminary (i.e., FEED or 'basic engineering') design basis submitted in support of the licence application, the modelling work performed would be invalid and the freeze infrastructure, shaft liners, and shaft sinking designs would be inaccurate which defeats the purpose of performing the design confirmation field work."²²
- 35. In its submission, NexGen acknowledged that it had no plans to decommission the design confirmation drill holes:

"The drill holes will remain in place, filled with calcium chloride brine and capped. The collars around each hole will be removed and backfilled with local material sourced from the drill pad.

¹⁷ Letter from R. Jammal (CNSC) to The Honourable Scott Moe, Premier of Saskatchewan, February 12, 2024. (CMD 25-H109.1, page 19).

¹⁸ Transcript, page 62–63.

¹⁹ CMD 25-H109.1, page 6.

²⁰ Transcript, pages 68–71.

²¹ NexGen to CNSC – Request for Review (9 January 2025), page 11.

²² NexGen to CNSC – Request for Review (9 January 2025), page 16.

As the drill casings are grouted and have been pressure tested, the potential for subsurface loss of calcium chloride brine is considered low. However, ongoing environmental monitoring of shallow groundwater in the area will be used to detect potential subsurface leaks from the drill holes."²³

- 36. A NexGen representative argued that "there are many exploratory operations that might have some commercial utility once operations have commenced. That, however, does not change their original essential character." ²⁴ A NexGen representative added that "the potential for exploration infrastructure then to serve a purpose later is clearly evident across industry and at the Rook I site."²⁵
- 37. The Commission acknowledges that NexGen's design confirmation drilling program was undertaken in accordance with a permit from the Province of Saskatchewan. As a result, the Commission recognizes that NexGen could have reasonably come to the view that the design confirmation drilling constituted exploration.
- 38. However, the Commission is not satisfied that these activities were solely exploratory, entirely outside of the purview of the NSCA.
- 39. The uranium mining industry is unique: activities that may be considered exploratory in the conventional mining industry may be considered site preparation work in the uranium mining industry. In addition, some activities can be considered both "exploratory" and "site preparation" and/or "construction." While the former may be allowed under a provincial permit, that does not supersede the requirement for a CNSC licence for the latter.
- 40. The Commission notes particularly the following condition from NexGen's provincial permit.
 - 5. This permit does not replace or supersede any approvals, licenses or authorizations, including building permits that may be required from municipal, federal, or other provincial agencies.²⁶
- 41. The Commission will further examine this issue in the next section.

5.1.2 NexGen's activities constituted site preparation and construction

42. The Designated Officer explained that the two large circular arrays of cased and preserved holes at NexGen's site are consistent with designs submitted as part of the

²³ NexGen Reference 17, Rook I Property Design Confirmation Drilling Decommissioning and Reclamation Work Plan, NexGen, June 2024, page 8.

²⁴ Transcript, page 83.

²⁵ Transcript, page 63.

²⁶ NexGen Reference 2, Permit #21-15-M0090 originally issued by SMOE to NexGen on 25 August 2022 (and as amended on 8 March 2023, 18 March 2023, 18 April 2023, and 22 January 2024).

licence application and thus "NexGen has carried out works at the Project site that are site preparation for or construction of their proposed nuclear facility, and as proposed by NexGen in its Application."²⁷ The Designated Officer added that "nowhere in NexGen's submissions to the CNSC, either those related to their Request for Review of 2024-AMP-06 or other submissions related to their licence application, is there a statement from NexGen indicating that they cannot or will not use the two circular arrays of design confirmation drilling holes as part of their planned ground freezing during mineshaft construction."²⁸

- 43. The Designated Officer acknowledged that the design confirmation drill holes are not suitable to support ground-freezing operations and would require additional work before being used for that purpose. In the Designated Officer's view, however, that does not mean that the drill holes cannot constitute site preparation and construction work. Instead, the Designated Officer highlights how "the two circular arrays of cased and preserved drill holes may serve more than one purpose."²⁹
- 44. The Designated Officer added that:

"The statement regarding the locations of design confirmation drill holes needing to be aligned with the preliminary design basis, is both technically sensible and also an indicator that the design confirmation drill holes have indeed been placed where NexGen intends to develop their freeze infrastructure. Unless the two circular arrays currently in place are themselves the freeze rings, it is difficult to conceive of how NexGen's 'thermal, geotechnical, hydrogeological and geological' ground models will include the two circular arrays of cased and preserved drill holes. It is also difficult to understand how NexGen's future mineshaft construction plans can proceed in the same location as the two circular arrays currently in place, unless those circular arrays themselves are part of the construction plans."³⁰

- 45. The Designated Officer added that "CNSC staff did not expect NexGen to provide any information related to that drilling campaign in relation to their submissions for the EA. That was not required, and it was not required for the application.... This work was beyond exploration work and was done in support of site preparation and construction activities."³¹
- 46. Specifically, the UMM Regulations list certain information that must be included with an application for a licence in respect of a uranium mine or mill:

3 An application for a licence in respect of a uranium mine or mill, other than a licence to abandon, shall contain the following information in addition to the

²⁷ CMD 25-H109, pages 11 and 19.

²⁸ CMD 25-H109, pages 18-19.

²⁹ CMD 25-H109, page 26.

³⁰ CMD 25-H109, page 19.

³¹ Transcript, page 87.

information required by section 3 of the <u>General Nuclear Safety and Control</u> <u>Regulations</u>:

- (a) in relation to the plan and description of the mine or mill,
 - (i) a description of the site evaluation process and of the investigations and preparatory work to be done at the site and in the surrounding area,
 - (ii) a surface plan indicating the boundaries of the mine or mill and the area where the activity to be licensed is proposed to be carried on,
 - (iii) a plan showing the existing and planned structures, excavations and underground development,
 - (iv) a description of the mine or mill, including the installations, their purpose and capacity, and any excavations and underground development,
 - (v) a description of the site geology and mineralogy,
- 47. The UMM Regulations list additional information that must be submitted when the application is for a licence to prepare a site for and construct a uranium mine:

5 (1) An application for a licence to prepare a site for and construct a uranium mine shall contain the following information in addition to the information required by section 3 and subsection 4(2):

- (a) a description of the proposed design of the mine;
- (b) the proposed construction program, including its schedule;
- (c) a description of the components, systems and equipment proposed to be installed at the mine, including their design operating conditions;
- [...]
- (j) the proposed commissioning plan for the components, systems and equipment to be installed at the mine.
- 48. Parenthetically, the Commission notes that under the UMM Regulations, the licensed activities "prepare a site for and construct" are part of a single licensing stage, so covered by one application. By contrast, they are separate activities under the NSCA.
- 49. During its oral submissions, a NexGen representative noted the absence of clear guidance for new applicants regarding the definition of site preparation and noted that it has been over 20 years since a shaft-access uranium mine and mill project has gone through the licensing process.³²

³² Transcript, page 61.

- 50. NexGen's position is that the design confirmation drill holes are not freeze holes and do not contain the necessary infrastructure required to freeze the ground and prepare the shafts for construction. NexGen submits that "It is clear that the cased design confirmation drill holes do not contain the necessary infrastructure required to freeze the ground and begin preparing the site for uranium mine construction" and that "in their current form, the existing bore holes are not suitable to support ground-freezing operations. Much additional work will be required, should the site preparation and construction licence be issued by the CNSC, to establish the ground-freezing infrastructure required for the Rook I Project."
- 51. On the potential to use of the design confirmation drilling holes for the establishment of freeze infrastructure, a NexGen representative reported that:

"...if design confirmation drill holes were to be utilized to support the establishment of freeze infrastructure in addition to the substantive engineering and construction activities required, modification of casing used for the design confirmation drilling activities would be required."³³

The NexGen representative also reported that:

"Repurposing of exploration drill casings is common practice both prior to and following commencement of site preparation activities."³⁴

- 52. The Commission recognizes that, in their current state, the boreholes do not constitute a freeze ring. However, NexGen's arguments are focused very much on the lack of **construction activities**, whereas the NSCA prohibits **both construction and site preparation activities**. Indeed, the Commission finds that the confirmation drill hole locations directly connect the drilling activities to site preparation and construction, and that the freeze holes are the act of establishing basic infrastructure to support the future construction.
- 53. In support of its conclusion, the Commission relies on CNSC <u>REGDOC 3.5.1</u> Licensing Process for Class I Nuclear Facilities and Uranium Mines and Mills, version 2, which provides additional relevant guidance:

The objective of the site preparation stage is to assess whether the site is suitable for the construction and operation of a nuclear facility. An application for a licence to prepare site (LTPS) does not require detailed design information or specifications of a facility design but must provide enough information to demonstrate that releases of radioactive and hazardous substances are within limits claimed in the EA, and meet all applicable regulatory requirements.

³³ Transcript page 16.

³⁴ Transcript page 16.

And that

A licence to construct enables a licensee to construct, commission and operate some components of the facility (e.g., security systems). Some commissioning activities may be allowed in order to demonstrate the facility has been constructed in accordance with the approved design and that the structures, systems and components (SSCs) important to safety are functioning as intended.

An application for a licence to construct contains more detailed information about the design of the facility and the supporting safety case. The applicant must demonstrate that the proposed design of the facility conforms to regulatory requirements and will provide for the safe operation on the designated site over the proposed life of the facility.

The applicant is expected to address all follow-up activities identified during the EA, including those relevant to the design, construction and commissioning stages and verify that any outstanding issues from the site preparation stage have been resolved.

With respect to a uranium mine, the REGDOC provides:

During [the prepare site and construct] stage a licensee may prepare the site, construct, commission and operate some components of the facility (e.g., a mine water treatment plant). Some commissioning activities may also be allowed in order to demonstrate the facility has been constructed in accordance with the approved design and that the SSCs important to safety are functioning as intended. All relevant commissioning tests must be satisfactorily completed and documented before an operating licence is issued.

CNSC <u>REGDOC-3.6</u>, *Glossary of CNSC Terminology*, also provides the following relevant definitions:

construction

The process of procuring, manufacturing and assembling the components, carrying out civil work, installing and maintaining components and systems, and performing associated tests.

site preparation

The act of establishing basic infrastructure to support the future construction and operation of a nuclear facility regulated under the *Nuclear Safety and Control Act*.

54. It is clear to the Commission that the Designated Officer had a reasonable basis to find that NexGen made its design confirmation drill holes in the same number and location as specified by its freeze ring design. It is also clear to the Commission that the holes have been cased and preserved, and that NexGen has no intention of decommissioning them. NexGen's assertion that it intended the design confirmation drilling to be

exploratory in nature at the time they were drilled is belied by the fact that NexGen does not intend to decommission them.

- 55. The Commission recognizes that there's room for more clarity and guidance in the definition of site preparation for uranium mines and mills under the CNSC regulatory framework, including REGDOCs 3.5.1 and 3.6. The Commission also recognizes the evolution of mining techniques and practices over the years since the coming into force of the UMM Regulations. However, the Commission notes that nothing under the NSCA or UMM Regulations required NexGen to provide as part of its license application the information that NexGen was seeking to obtain as part of its design confirmation drilling program.
- 56. NexGen's submissions indicate that the design confirmation drilling is "to inform detailed engineering design." Design confirmation drilling is not required for an applicant to provide, "a description of the proposed design of the mine." From the Commission's perspective, NexGen had conducted its exploration of the Rook I site in order to apply for a licence. To date, NexGen has filed an application for a licence to prepare a site and construct a uranium mine and mill, and conducted studies necessary for an environmental assessment under the CEAA 2012. Under the CNSC's regulatory framework, NexGen must wait for decisions on those matters before undertaking site preparation and construction.

5.1.3 NexGen committed the violation

- 57. The Commission recognizes that the practice of design confirmation drilling may be a good practice in the mining industry; however, that does not mean that it can be undertaken without a CNSC licence when it relates to a uranium mine. Since the circular array matches exactly in size and number of holes with the drawings and description provided in the licence application document *Ground Freezing FEED Stage Design for the NexGen Rook I Shaft Sinking* of the proposed Rook I nuclear facility, the Commission finds that the work performed by NexGen was site preparation work. This work was performed with the goal of assessing whether the site is suitable for the shaft construction and NexGen planned to reuse the drill holes as they were preserved for the future.
- 58. The activities being undertaken were part of the licence application and are part of the site preparation for or construction of the proposed nuclear facility. This activity required Commission authorization under the NSCA. As a result, NexGen committed the violation stated in the Notice of Violation associated with 2024-AMP-06.

5.2 Penalty amount

59. In accordance with section 65.14(1) of the NSCA, the Commission considered whether the amount of the penalty for the violation was determined in accordance with the

AMPs Regulations. The Commission focused its review on the determining factors set out in section 5 of the AMPs Regulations, which are as follows:

- 5. The amount of a penalty is determined by the Commission having regard to
 - (a) the compliance history of the person who committed the violation;
 - (b) the degree of intention or negligence on the part of the person;
 - (c) the harm that resulted or could have resulted from the violation;
 - (d) whether the person derived any competitive or economic benefit from the violation;
 - (e) whether the person made reasonable efforts to mitigate or reverse the violation's effects;
 - (f) whether the person provided all reasonable assistance to the Commission; and
 - (g) whether the person brought the violation to the attention of the Commission.

5.2.1 Review of determining factors

- 60. When determining the amount of the AMP, the Designated Officer considered the factors in section 5 of the AMPs Regulations. The Designated Officer reported that the penalty amount was determined by following the calculation equation and factor values described in <u>CNSC REGDOC-3.5.2</u>, *Compliance and Enforcement: Administrative* <u>Monetary Penalties</u>.³⁵ The ratings given by the Designated Officer for each factor were as follows:
 - 5(a) Compliance History, rating of +2 (on a scale from 0 to +5)
 - 5(b) Degree of Intention or Negligence, rating of +5 (on a scale from 0 to +5)
 - 5(c) Actual or Potential Harm, rating of +2 (on a scale from 0 to +5)
 - 5(d) Competitive or Economic Benefit, rating of +5 (on a scale from 0 to +5)
 - 5(e) Efforts to Mitigate or Reverse Effects, rating of +3 (on a scale from -2 to +3)
 - 5(f) Assistance to Commission, rating of +2 (on a scale from -2 to +3)
 - 5(g) Attention of Commission, rating of +2 (on a scale from -2 to +3)
- 61. In its Request for Review, NexGen disputed the ratings for each factor and asked that each factor be reduced to 0.³⁶ CNSC staff provided written responses to NexGen's

³⁵ REGDOC-3.5.2, *Compliance and Enforcement: Administrative Monetary Penalties*, Version 2, CNSC, August 2015.

³⁶ NexGen to CNSC – Request for Review (9 January 2025), pages 44–60.

requests in CMD 25-H109. NexGen did not provide any further written response to

CNSC staff's submissions regarding the penalty amount in CMD 25-H109.1.

Compliance History

- 62. Under paragraph 5(a) of the AMPs Regulations, the Designated Officer justified the rating of +2 by noting that NexGen has repeatedly provided CNSC staff with assurances, verbally and in writing, that site preparation and construction activities were not occurring at the Rook I site. However, the Designated Officer asserts that these statements were proven false during CNSC staff's inspection of November 19, 2024.
- 63. The Designated Officer also notes that, despite having the opportunity to do so, NexGen has never provided "clear information on the purpose of the circular arrays of cased and preserved drill holes at the Rook-I site, for instance a clear statement that they cannot or will not use these for ground freezing...."³⁷
- 64. NexGen asked that the rating for this factor be reduced to 0. In its Request for Review, NexGen submitted that its communication with CNSC staff regarding the purpose and nature of the design confirmation drilling program has been consistent and accurate, and that the work performed at the Rook I site to date is neither site preparation nor construction, but consistent with exploration. NexGen added that it's sought to ensure effective communication with CNSC staff and the Provincial regulators for the ongoing work at the Rook I site.³⁸
- 65. At the hearing, a NexGen representative also stated that they informed CNSC staff of the planned end state of the design confirmation drill holes: the holes were to be capped and secured.³⁹
- 66. In response to questions from the Commission about the gap in understanding between NexGen and CNSC staff, a NexGen representative underlined how there is no definition of site preparation or construction in the NSCA and how the CNSC does not have clear guidance for new applicants for uranium mines. The NexGen representative noted that it would be helpful for the CNSC to provide better guidance as to what constitutes "exploration" and that scope of what is covered under the UMM Regulations.⁴⁰
- 67. The Commission acknowledges the lack of clarity in the definition of exploration and site preparation work. Nevertheless, the Commission agrees with the Designated Officer that NexGen ought to have clarified its position in follow-up discussions with

³⁷ CMD 25-H109, page 31.

³⁸ NexGen to CNSC – Request for Review (9 January 2025), page A3-17.

³⁹ Transcript, page 55.

⁴⁰ Transcript, page 63.

CNSC staff. However, as NexGen has no previous reported history of non-compliance, the Commission has changed the rating for the compliance history factor to 0.

Degree of Intention or Negligence

- 68. Under paragraph 5(b) of the AMPs Regulations, the Designated Officer chose a rating of +5 for negligence. CNSC staff had previously expressed concerns to NexGen about whether some of its activities at the Rook I site required a CNSC licence to prepare the site and construct a uranium mine and mill. NexGen responded by saying that it was doing exploratory work, and that both drill pads would be decommissioned prior to requesting a licence from the Commission.
- 69. The Designated Officer noted NexGen's continued lack of clarity about whether the circular arrays of cased and preserved drill holes would or could be used for ground freezing. The Designated Officer also noted NexGen's public statements of October 8, 2024.
- 70. NexGen requested that the rating for this factor be reduced to 0. In its written submissions, NexGen noted that the Province of Saskatchewan issued authorizations for the design confirmation drilling program on the basis that these activities constituted exploration. NexGen reported that, starting in July 2021, it participated in meetings with CNSC staff and exchanged correspondence about the difference between planned exploration and site preparation and construction activities. NexGen also reported that feedback received from CNSC staff confirmed to it that the proposed design confirmation drilling work was considered exploration and not site preparation and construction. NexGen added that this feedback contributed to its decision to seek provincial authorization to perform the design confirmation drilling program.
- 71. The Commission acknowledges that the definitions of exploration and site preparation work could be clearer. However, the Commission finds that NexGen ought to have clarified its position in follow-up discussions with CNSC staff. In recognition of the fact that a violation was committed, the Commission concludes that the rating for the degree of intention or negligence factor should be reduced to +1.

Actual or Potential Harm

- 72. Under paragraph 5(c) of the AMPs Regulations, the Designated Officer explained the rating of +2 by saying that NexGen performed work that required a licence prior to the licence being issued and prior to an environmental assessment under the *Canadian Environmental Assessment Act, 2012.* As a result, NexGen disturbed the environment and altered the baseline.
- 73. In CMD 25-H109, the Designated Officer also noted that, as part of its filings for the AMP review, NexGen included a document that CNSC staff have never seen:

Screening Level Risk Assessment, Canada North Environmental Services, September 2024 (NexGen Reference 24). The Designated Officer noted that the document includes two inconsistencies that cast a doubt over NexGen's statement that downstream groundwater and surface water remain within the range of natural variability. A NexGen representative noted that the design confirmation drill holes could be used for the installation of instrumentation that is used for groundwater monitoring during environmental assessment baseline studies.⁴¹

- 74. NexGen asked that the rating for this factor be reduced to 0. NexGen submitted that design confirmation drilling was conducted in accordance with the conditions of its provincial permit and industry best practices for exploration drilling in Saskatchewan, as outlined in the *Mineral Exploration Guidelines for Saskatchewan*. NexGen also submitted its decommission plan for the drilling pads.
- 75. NexGen denies that any actual or potential harm has occurred on account of the design confirmation drilling program, or that the baseline been altered. NexGen claims that this has been demonstrated through its environmental monitoring and other information shared with the CNSC. NexGen added that the CNSC's technical review of the Rook I Project Environmental Impact Statement was completed on November 18, 2024, confirming that "the information provided by NexGen addresses the regulatory requirements for the environmental assessment."
- 76. The Commission recognizes that NexGen has a provincial permit for the design confirmation drilling program. However, it is for the Commission to decide on the environmental assessment, regardless of how CNSC staff have assessed the adequacy of the information that NexGen has submitted.
- 77. Recognizing that a violation was committed, and given that the Commission has not yet rendered a decision on the environmental assessment, the Commission concludes that the rating of +2 is appropriate for the potential harm factor.

Competitive or Economic Benefit

- 78. The Designated Officer explained the +5 rating for this factor by saying that NexGen could realize both commercial and competitive benefits by having started its site preparation work prior to receiving a licence. For example, NexGen may have gained an advantage relative to competitors who are also seeking to develop or operate uranium mines and mills in Canada. As a result, investors may show a preference to NexGen. The Designated Officer also noted the comments made in the October 8, 2024, interview with TD Bank about the work already completed.
- 79. The Designated Officer also submitted that Newmans Geotechnique's Technical Memo
 Shaft Design Confirmation Drilling Freeze Performance Assessment (NexGen Reference 11) makes clear that, while the drill holes are not currently useable for

⁴¹ Transcript, page 16.

ground freezing, they could be further developed for that purpose in the future. As a result, works at the Rook I site have progressed beyond NexGen's approvals, generating benefits from contravening the NSCA.

- 80. NexGen requested that the rating for this factor be reduced to 0. In addition to its argument that the design confirmation drilling program was exploratory, NexGen submitted that it has not gained any economic benefit from this program, nor has the construction schedule been advanced prior to full regulatory approvals.
- 81. As the first company to seek a CNSC licence to prepare a site and construct a shaftaccess uranium mine and mill in over 20 years, NexGen says that it recognizes the importance of getting the opinions of CNSC staff in advance of a licensing hearing and that it would not intentionally perform activities at the Rook I site that would undermine the confidence of CNSC staff and jeopardize licence hearing outcomes. NexGen acknowledged and expressed regret that the statements made in the October 8, 2024, interview mischaracterized the existing conditions at the Rook I site.
- 82. The Commission finds that by performing some aspects of site preparation work prior to a licence being issued, NexGen has realized both commercial and competitive benefits. However, the Commission also recognizes that the drill holes are not presently able to perform ground freezing operations. In the circumstances, the Commission assigns a rating of +1 to the competitive or economic benefit factor.

Efforts to Mitigate or Reverse Effects

- 83. Under paragraph 5(e) of the AMPs Regulations, the Designated Officer assigned a rating of +3 saying that the information that NexGen provided to CNSC staff did not represent the true nature of the work happening at the Rook I site.
- 84. The Designated Officer also submitted that, by not decommissioning or indicating the future use of the confirmation drill holes, NexGen had done nothing to mitigate the work or reverse its effects.
- 85. NexGen asked that the rating for this factor be reduced 0. In addition to its argument that work at the site has been exploratory in nature, NexGen maintained that its communications with CNSC staff regarding the purpose and nature of the design confirmation drilling program has been consistent and accurate. NexGen added that it has responded promptly and completely to requests for regulators and noted again that the work that's been done was covered by provincial authorizations.
- 86. The Commission recognizes that NexGen has a provincial permit for the design confirmation drilling program. However, the Commission notes that the decommissioning associated with the permit was limited to the drill pads and not the drill holes. NexGen has not decommissioned the drill holes and does not intend to do

so. In the circumstances, the Commission concludes that a rating of +3, on a scale from -2 to +3, remains appropriate for this factor.

Assistance to Commission

- 87. Under paragraph 5(f) of the AMPs Regulations, the Designated Officer assigned a rating of +2 because the information that NexGen provided to CNSC staff was not representative of the true nature of the work happening at the Rook I site.
- 88. The Designated Officer submitted that NexGen had not provided any additional information that would lead CNSC staff to a different conclusion: the drill holes are still in place, there are no plans to decommission them even though the confirmation drill program is complete, and there is no explanation of their future use. The Designated Officer added that the comments made by NexGen's employee on October 8, 2024, were not refuted by anything that NexGen provided in its Request to Review the AMP.
- 89. NexGen asked that the rating for this factor be reduced to 0. Beyond arguing that its work to date has been exploratory in nature, NexGen noted that it has proactively sought clarification and feedback from CNSC staff on the licensing process and requirements for the Rook I Project since 2019. It also says that it has spent considerable resources to fulfill and demonstrate understanding of CNSC expectations regarding licence application documentation. NexGen acknowledged and expressed regret that the statements made in the October 8, 2024, interview mischaracterized the existing conditions at the Rook I site.
- 90. The Commission recognizes NexGen's engagement with CNSC staff on the licensing process and requirements for the Rook I Project and acknowledges that the definitions of exploration and site preparation work could be clearer. However, the Commission finds that NexGen ought to have clarified its position in follow-up discussions with CNSC staff. In the circumstances, the Commission concludes that a rating of +1 is appropriate for the assistance to the Commission factor.

Attention of Commission

- 91. Under paragraph 5(g) of the AMPs Regulations, the Designated Officer provided a rating of +2, explaining that, while NexGen made efforts to inform CNSC staff in advance of works at its site, it described the works as "design confirmation drilling" authorized by the Province of Saskatchewan.
- 92. The Designated Officer also highlighted its regulatory forbearance in this case, noting that section 65.07 of the NSCA says that "A violation that is committed or continued on more than one day constitutes a separate violation for each day on which it is committed or continued."

- 93. NexGen asked that the rating for this factor be reduced to 0. It submits that "design confirmation work" was an appropriate expression in the circumstances and consistent with the purpose, scope, and objectives of the design confirmation drilling program, which was exploratory in nature.
- 94. Given that the definitions of exploration and site preparation work could be clearer, the Commission concludes that a rating of 0 is appropriate for the attention of Commission factor.

5.2.2 The penalty is reduced to \$11,920

95. Based on the above, the Commission has revised the determining factors as follows:

5(a) Compliance History, rating of 0 (on a scale from 0 to +5)

- 5(b) Degree of Intention or Negligence, rating of +1 (on a scale from 0 to +5)
- 5(c) Actual or Potential Harm, rating of +2 (on a scale from 0 to +5)
- 5(d) Competitive or Economic Benefit, rating of +1 (on a scale from 0 to +5)
- 5(e) Efforts to Mitigate or Reverse Effects, rating of +3 (on a scale from -2 to +3)
- 5(f) Assistance to Commission, rating of +1 (on a scale from -2 to +3)
- 5(g) Attention of Commission, rating of 0 (on a scale from -2 to +3)
- 96. Accordingly, the resulting penalty is \$11,920.

6.0 CONCLUSION

- 97. The Commission has considered all the information submitted by NexGen and the Designated Officer regarding this matter. The Commission recognizes that more clarity could be provided in the definition of "site preparation" in the applicable regulatory framework. Nevertheless, the Commission concludes that the work performed by NexGen was site preparation and construction work. Notably, NexGen performed the work with the goal of assessing whether the site is suitable for shaft construction, and NexGen preserved the drill holes for future use. As a result, NexGen committed the violation as stated in the Notice of Violation.
- 98. Based on all the evidence, the Commission adjusted the amount of the penalty for the violation in accordance with the AMPs Regulations. The penalty amount was determined by following the calculation equation and factor values described in REGDOC-3.5.2. In accordance with subsection 65.14(4) of the NSCA, NexGen is liable to pay the corrected administrative monetary penalty. NexGen is to submit payment for 2024-AMP-06 in the amount of \$11,920. Payment is due within 30 days of the date of this determination.

- 99. Before closing, it's worth noting that the Commission finds this situation regrettable. This proceeding has made it clear that there is a communication issue between NexGen and CNSC staff. The Commission expects licence applicants to be forthcoming and to work with CNSC staff in a productive way. Applicants should be clear about their intentions and CNSC staff should be clear about the regulatory requirements and expectations for applicants. Where there are questions or uncertainties, applicants should seek clarification from CNSC staff. The Commission encourages NexGen and CNSC staff to establish a process to explicitly document all their exchanges and interactions, including meetings and site visits, and encourages further dialogue to ensure that there are no misunderstandings for future licensing processes.
- 100. The Commission emphasizes that NexGen should not undertake any additional work at its Rook I site without first communicating with CNSC staff. While CNSC staff cannot authorize any activities that would be subject to a licence under the NSCA, the Commission expects NexGen to seek advice and direction from CNSC staff, and clearly communicate its intentions for any future work at the Rook I site. NexGen must have a clear understanding of what is and is not acceptable between now and the upcoming hearing on the Rook I environmental assessment and licence application.
- 101. In accordance with subsection 65.14(5) of the NSCA, this determination is final and binding, subject to judicial review under the *Federal Courts Act*.⁴²

May 16, 2025

Date

Pierre F. Tremblay Presiding Member Canadian Nuclear Safety Commission

⁴² R.S.C., 1985, c. F-7.