



OC-80 Pre-Application Intro Meeting

Organicore Nuclear, Inc. | Project No. 99902184 | Public Meeting – Open Portion

October 9, 2026 | U.S. Nuclear Regulatory Commission

Agenda

- Introductions
- OrganiCore Overview
- OC-80 Overview

Closed session: proprietary details and licensing information

Introductions

OrganiCore Nuclear, Inc. Overview

Company profile

- Developing the OC-80, an 80 MWe advanced SMR:
 - Light-water moderated and organically cooled reactor concept
- Why OCN has been in stealth mode:
 - The OC-80 is **the only organically cooled reactor concept in development**
- Coming out of "stealth":
 - This NRC public meeting and OCN website
- Targeted customers for the OC-80:
 - Utilities

OC-80 Overview

OC-80 Design Goals

Low-pressure, organically cooled, light-water moderated advanced SMR designed for safety and deliberately maintaining familiar nuclear technology to reduce execution risk.

- **Low-Pressure and Low-Temperature Operations:** enables significantly lower stored energy and simplified primary-system equipment than conventional light-water reactors.
- **Inherently Safe, Simplified Operations:** designed with robust passive responses and reduced reliance on complex operator actions during normal and off-normal conditions.
- **High Technology Readiness:** leverages the existing commercially available fuel and well-established nuclear supply chains with mature licensing basis.

Technology Maturity & Safety Case

- **Built on Proven Technology:** leverages established light-water moderation and mature, well-understood technologies with extensive operating experience to reduce risk.
- **Operational Experience:** leverages decades of mature industrial operational experience.
- **Modern Risk-Informed Safety Case:** aligns with 10 CFR Part 53 to demonstrate safety through risk-informed, performance-based principles and defense-in-depth.
- **Low-Consequence Design:** low coolant activation and limited radioactive release potential supports the intent of inherently lower consequences of 10 CFR Part 57

More detail in the proprietary session.

OrganiCore Footprint: 80 MWe Power Block



End of public session materials