



**UNITED STATES
NUCLEAR REGULATORY COMMISSION**
WASHINGTON, D.C. 20555-0001

December 7, 2022

Justin Hawkins, Director SMR Licensing
Holtec International
1 Holtec Boulevard
Camden, NJ 08104

SUBJECT: SMR, LLC REVISED PREAPPLICATION MATERIALS (PROJECT NO. 99902049) – REVISED WHITE PAPER ON THE SMR-160 INSTRUMENTATION AND CONTROLS SYSTEM ARCHITECTURE

Dear Mr. Hawkins:

On September 19 and October 3, 2022, SMR, LLC, A Holtec International Company, (SMR, applicant) submitted meeting materials for a public meeting to discuss the SMR-160 instrumentation and controls (I&C) system architecture.^{1,2} The meeting materials included a White Paper on the topic.^{3,4}

On October 4, 2022, the U.S. Nuclear Regulatory Commission (NRC) staff conducted a public meeting to discuss the I&C White Paper and issued a meeting summary.⁵ Following the meeting, SMR submitted Revision 1 of HI-2220583, "SMR-160 I&C Architecture White Paper."^{6,7}

The Enclosures 1, 2, and 3, to this letter contain proprietary information. When separated from Enclosures 1, 2, and 3, this document is DECONTROLLED.

- ¹ Letter from J. Hawkins to US NRC, "SMR, LLC Preapplication Meeting Materials for September 19, 2022 (Project No. 99902049)," dated September 19, 2022. (Agencywide Documents Access and Management System (ADAMS) Accession No. ML22262A103, Package ML22262A102).
- ² Letter from J. Hawkins to US NRC, "SMR, LLC Preapplication Meeting Materials for October 3, 2022 (Project No. 99902049)," dated October 3, 2022. (ML22276A061, Package ML22276A060).
- ³ SMR, LLC, "HI-2220583, Rev. 0, SMR-160 I&C Architecture White Paper," dated September 19, 2022. (ML22262A106 (Proprietary), Package ML22262A102).
- ⁴ SMR, LLC, "HI-2220583, Rev. 0, SMR-160 I&C Architecture White Paper," dated October 3, 2022. (ML22276A063 (Non-proprietary), ML22276A062 (Proprietary), Package ML22276A060).
- ⁵ US NRC, "U.S. Nuclear Regulatory Commission Summary of the October 4, 2022, Preapplication Public Meeting with SMR, LLC, regarding Instrumentation and Control Architecture," dated November 2, 2022. (ML22263A014).
- ⁶ Letter from J. Hawkins to US NRC, "SMR, LLC Revised Preapplication Materials (Project No. 99902049)," dated October 14, 2022. (ML22287A009, Package ML22287A008).
- ⁷ SMR, LLC, "HI-2220583, Rev. 1, SMR-160 I&C Architecture White Paper," dated October 14, 2022. (ML22287A012 (Non-proprietary), ML22287A011 (Proprietary), Package ML22287A008).

J. Hawkins

2

The NRC staff has completed its review and assessment of the subject white paper and has: (1) researched the topic provided in the white paper, (2) conducted a public meeting to provide appropriate feedback to SMR (Holtec), and (3) has not identified major deficiencies for this stage of the preapplication process associated with the topic. The enclosures of this letter provide the NRC staff's detailed observations for SMR (Holtec) to consider.

Upon dispatch of this letter to SMR (Holtec), the staff considers the subject white paper closed. If you have questions regarding this matter, please contact Carolyn Lauron at (301) 415-2736 or Carolyn.Lauron@nrc.gov.

Sincerely,

/RA/

Michael I. Dudek, Chief
New Reactor Licensing Branch
Division of New and Renewed Licenses
Office of Nuclear Reactor Regulation

Docket No. 99902049

Enclosures:

1. NRC Feedback – I&C Assessment
2. NRC Feedback – Electrical Assessment
3. NRC Feedback – Technical Specifications Assessment

cc: Brian Smith
Bernie Thomson
Holtec ListServ

J. Hawkins

SUBJECT: SMR, LLC REVISED PREAPPLICATION MATERIALS (PROJECT NO. 99902049)
– REVISED WHITE PAPER ON THE SMR-160 INSTRUMENTATION AND
CONTROLS SYSTEM ARCHITECTURE. DATED: DECEMBER 7, 2022

DISTRIBUTION:

- PUBLIC
- MDudek, NRR
- GCranston, NRR
- CLauron, NRR
- JGlisan, NRR
- SGreen, NRR
- MWaters, NRR
- CCheung, NRR
- RStattel, NRR
- JAshcraft, NRR
- EKleeh, NRR
- SRay, NRR
- WMorton, NRR
- AFoli, NRR
- VCusumano, NRR
- RElliott, NRR
- RidsNrrDnrl Resource
- RidsNrrDnrlNrlb Resource
- RidsNrrDex Resource
- RidsNrrDss Resource
- RidsEdoMailCenter Resource
- RidsAcrsMailCenter Resource
- RidsOgcMailCenter Resource

ADAMS Accession No.:

Package: ML22325A335

Letter: ML22325A343

Enclosure 1: ML22325A346 (Proprietary)

Enclosure 2: ML22325A345 (Proprietary)

Enclosure 3: ML22325A344 (Proprietary)

***via email**

OFFICE	NRR/DNRL/NRLB	NRR/DNRL/NRLB	NRR/DEX/EICB	NRR/DSS/STSB
NAME	CLauron	SGreen	MWaters*	VCusumano*
DATE	11/22/2022	11/23/2022	12/2/2022	12/1/2022
OFFICE	NRR/DEX/EEEB	NRR/DNRL/NRLB	NRR/DNRL/NRLB	
NAME	AFoli (for WMorton)*	CLauron	MDudek	
DATE	12/2/2022	12/6/2022	12/7/2022	

OFFICIAL RECORD COPY