Detailed Article: Key Differences Between ANSI/IIAR 7-2025 and ANSI/IIAR 7-2019
The 2025 revision of IIAR 7 brings meaningful updates to how operating procedures for ammonia refrigeration systems are developed and maintained. Below is a breakdown of the most significant changes, with examples relevant to engineers and technicians.

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1. Expanded and Updated Definitions
What Changed:
The 2025 edition introduces new terms and refines existing ones to better reflect industry practices.
Examples:

- **New:** "Trained startup technician" – a role now distinguished from general operators.
- **Refined:** "Emergency operating procedures" now emphasize time-sensitive conditions and risk mitigation.

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2. New Section: Operating Limits (Section 4.2)
What Changed:
IIAR 7-2025 introduces a requirement to document:

- Normal operating conditions
- Consequences of deviations
- Steps to correct deviations

Why It Matters:
This aligns with OSHA PSM and EPA RMP expectations and improves system safety and troubleshooting.

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3. Clarified Scope and Applicability
What Changed:

- **2019:** Scope excluded commissioning and decommissioning.
- **2025:** Now also excludes maintenance (moved to IIAR 6-2025) and allows for use of equivalent international standards outside the U.S.

Example:
Section 1.2.5 allows flexibility for global facilities using nationally recognized standards.

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4. Appendix Enhancements
What Changed:

- **Appendix D:** Now includes example operating procedure templates.
- **Appendix C:** Expanded guidance on equipment-specific considerations.
- **Appendix E:** More detailed discussion on system-wide procedures for complex systems.

Example:
Appendix D includes a full startup procedure for a compressor, including valve positions, PPE, and alarm checks.

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5. Improved Structure and Clarity
What Changed:

- Consolidated and reorganized procedure elements in Chapter 6.
- Clearer task flows and step-by-step instructions in example procedures.

Example:
The compressor startup procedure now includes 17+ detailed steps, from verifying oil levels to checking microprocessor settings.

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6. Regulatory Alignment and Safety Emphasis
What Changed:

- Greater emphasis on compliance with OSHA 1910.119 and EPA 40 CFR Part 68.
- References to IIAR's Critical Task Guidance and ARM Program.

Example:
Appendix A.1.2.5 outlines additional items required for PSM/RMP-covered facilities, such as safety system functions and chemical hazard properties.

Conclusion
IIAR 7-2025 is more than a routine update—it's a strategic enhancement that improves clarity, safety, and global applicability. Engineers and technicians should review the new appendices and ensure their site-specific procedures align with the updated requirements.

If you would like to have a further discussion or conference call meeting on the differences, please email a request to tony_lundell@iiar.org.