

Preliminary Design Effort I&C System Upgrade Early Works

Executive Summary

Through a Preliminary Design Effort (PDE), Westinghouse collaborates with the Utility and, as appropriate, the Architectural Engineering (AE) firm to develop the documentation needed for the 30% design milestones. This early collaboration forms alignment between the involved parties, reduces project risk and supports smoother project execution.

Preliminary Design Effort

- **Early Collaboration & Teamwork**
- **Project Risk Identification & Reduction**
- **Coordinated Project Execution Schedule**
- **Ensures Smooth Project Execution**

Preliminary Design Effort Overview

- **System Upgrade Procurement Specification**
Collaborative effort between the Utility, Westinghouse and, as appropriate, the AE to define the requirements of the replacement system. Special focus on the interfaces and functional improvements to reduce future contract change notices
- **Agreement on the as-is system state**
Confirmation of the as-is state of the system through the use of a utility provided Input/Output (IO) List, a collaborative site walkdown and 3-dimensional scan to ensure there are no unexpected findings during project execution.
- **High Level Architecture & Cabinet Layout**
Development of an initial high-level system architecture and cabinet layout representing the future state of the system to be upgraded in support of the 30% design requirements.
- **Project Execution Schedule**
Development of an initial Project Schedule based on the results of the agreed upon architecture and scope to ensure alignment with Westinghouse, the Utility and, as appropriate, the AE.
- **Power, Weight & Heat Load Calculations**
Development of the initial power, weight & heat load documentation in support of the 30% design requirements.
- **Licensing Strategy Agreement**
Westinghouse, through its decades of licensing experience and expertise, provides support in, analyzing the current licensing requirements applied to the replacement system configuration.
- **Control Room Modernization Planning**
Early planning for the operator interfaces, alarm rationalizations, HMI and control room modernization to support digital modernization programs and fleet
- **Field Mounted Equipment Specification**
As required, the development of a Field Mounted Equipment Specification is included to support the Procurement Specification

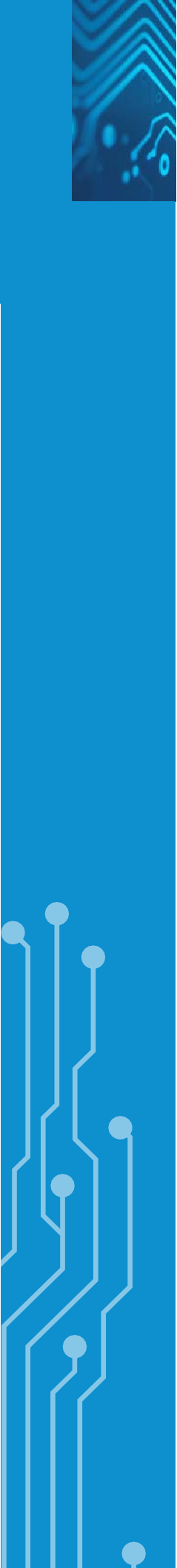
Westinghouse Electric Company LLC

2026 All Rights Reserved

1000 Westinghouse Drive Cranberry Township, PA 16066

www.westinghousenuclear.com





Preliminary Design Effort I&C System Upgrade Early Works

PDE Typical Deliverables

- Finalized I/O List
- High Level System Architecture & Cabinet Layout
- Preliminary Power/Weight/Heat Load Calculations
- Project Execution Schedule
- System Upgrade Procurement Specification
- Licensing Impacts Analysis

Why Westinghouse

- Largest global deployment of safety platforms
- Comprehensive lifecycle management commitment
- Proven global delivery track record across AP1000, APR1400, OPR1000 and multiple upgrade programs
- Single accountable partner for architecture, licensing, deployment, and long-term modernization

Learn more about Westinghouse I&C products and services at:

<https://westinghousenuclear.com/operating-plants/instrumentation-controls-systems/>

Westinghouse Electric Company LLC

2026 All Rights Reserved

1000 Westinghouse Drive Cranberry Township, PA 16066

www.westinghousenuclear.com

