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# MISE: Multi-Server Integrated Schedule Environment

**CECOP MISE Presentation** 

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#### Agenda

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- MISE Overview and Benefits
- Development & Technical Details





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# **MISE Overview and Benefits**







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#### THE ISSUE: Program Level Time-Phased Estimates Plagued by Site Plans Out of Alignment

- Differences in schedule development and alignment processes used at design agencies and production agencies create inconsistent schedule plans, thus causing erroneous funding and budget profiles at each site due to resources being inaccurately time-phased.
- Difficulty in understanding cross-site program changes impacts the ability to make critical program decisions.
- Current tools are unable to trace logic between site schedules and require significant manual monthly maintenance to sustain alignment.





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## THE SOLUTION: A Framework for Integrating Program Plans

- MISE is the result of a joint effort between Kansas City National Security Campus (KCNSC FM&T) and Sandia National Laboratories (SNL). It imports and integrates individual Nuclear Security Enterprise site schedules through a stitching process within the existing Oracle Primavera P6 structure.
- The stitching results in an integrated schedule which is based on logic ties at specific agreed-upon integration points. This increases visibility and transparency into each site's schedule enabling continued alignment throughout the life of a program.
- By driving consistent schedule development and alignment processes, increasing visibility to plans, and allowing for logic to be traced across site schedules, we are able to develop an accurate integrated cost and schedule plan for the program.





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#### **Benefits of MISE**

Consistent Understanding of Decision Impacts

Tracking the same level of detail enables consistent understanding of decision impacts across sites Increased Awareness of Impact

Visibility into site schedules increases awareness of downstream program impacts across both sites

#### Improved Cross-Site Communication and Transparency

Enables the ability to track impacts of activities at one site on schedules at other sites, schedulers can communicate more effectively and identify issues to escalate to management Reliable Foundation For Program Management

- An integrated plan supports the effective utilization of program management practices
- Integrated and aligned schedules provide a better basis for analyzing the true impacts from risks and uncertainties facing the program
- Identification of schedule compression opportunities
- An integrated plan allows for better understanding of when and where to allocate management reserve and helps to inform FYNSPs and WDCR/BCRs

Faster Decision Making Achieved Through Greater Confidence in Reporting

A single source of truth allows program managers and staff the ability to focus on critical decisions rather than spending time reconciling inconsistent data





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# **Development & Technical Details**

NSC-614-4694 Dated 07/2022 Unclassified Unlimited Release





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#### **MISE Development Strategy**

Development is organized into two parallel efforts:

- IT Development
- Business Requirements Definition
- Standard Operating Rhythm
- Program Specific Requirements

Sites share responsibilities in MISE:

- Main Architecture
- M&O Support
- Monthly Integration
- End User Architecture
- Schedule Management
- Requirements Definition/Implementation of MISE
- System Governance/Continuous
  Improvement



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#### **MISE Architecture**

1

#### Each site operates in their own P6 server

Scheduling and operational rhythms are unchanged

2

#### Based on a monthly business rhythm, automated software stitches separate schedules together in one P6 environment Direct logic connections are drawn between activities, schedules are now integrated

After approval, schedules are updated at each site

Site schedules reflect impact of integrated analysis





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#### **Integration Details**

- Level of Integration
  - Schedules integrate at agreed-upon milestones based on activity attributes
  - Sites agree on predefined handoffs and direction of handoffs
  - Integrated schedule hand-offs may include NNSA Integrated Master Schedule (NIMS) and Non-NIMS milestones
  - Sites expect discrete logic to drive milestones
- Use of Milestone Alignment Tool (MAT) for complex-wide alignment remains unchanged
- Capability exists on unclassified and classified integration servers
- Allows for possible submission of a single monthly NIMS contribution file to National Nuclear Security Administration (NNSA)





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#### Integration Milestone Alignment Schedule (iMAS)







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#### **MISE Schedule Integration Example**



Handoff milestones have direct logic connections which creates the iMAS



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# Questions?