HLW META-SYSTEM END-TO-END TEST 2 RESULTS

OVERVIEW & HIGHLIGHTS

Presented to: HLW Senior Management Team

APRIL 21, 2005

Presentation Purpose

- Provide context for the End to End Test 2
- Describe current and follow up activities
- Share initial findings and observations
- Provide an overview of the test report
- Characterize next steps
- Prepare for the Operational Readiness Review (ORR)

HLW Program Context

Provide support for the "DOE Certifies" programmatic milestone: Summer 2005

That may cause disputes and contentions to arise, which generally produce increased volumes of documents being submitted into the Agency

Requiring the Agency to have the ability to capture, index, distribute, store, and retrieve (process) potentially large volumes of submitted - complex documents over compressed timeframes
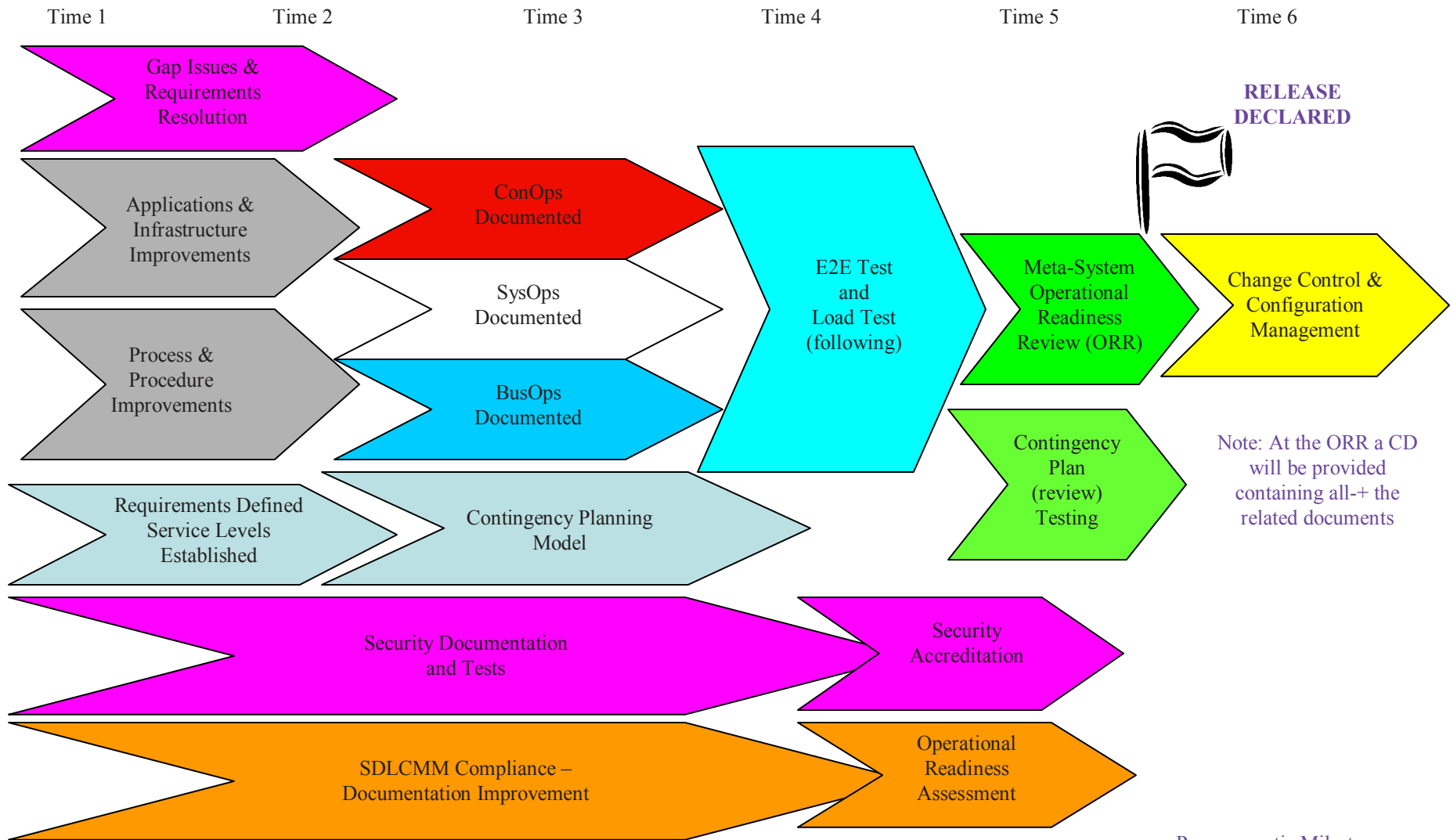
As *provided through process, information, technology, and organization improvements including*: EIE being able to handle the estimated volume and capacity; EIE being totally reliable; the PDR Help Desk being fully engaged; and the DPC, SECY, and Systems support processes being 'fully' functional.

These capabilities were bundled together as a functionally operating system – the HLW Meta-System Release 1, on a schedule to permit conducting the HLW Meta-System End-to-End Test 2.

Purpose for the E2E Test 2

- Evaluate NRC's preparedness for managing HLW information in:
  - Process
  - Technology
  - Information, and
  - Organizational interfaces
- Exercise, from "end-to-end", the organization's HLW processes, procedures, functions
- Validate how HLW systems will receive, process, analyze, and respond to submitters' documents
- Simulate activities anticipated to surround the HLW Licensing Proceeding
- Validate modifications/improvements having been made to HLW process and technology components
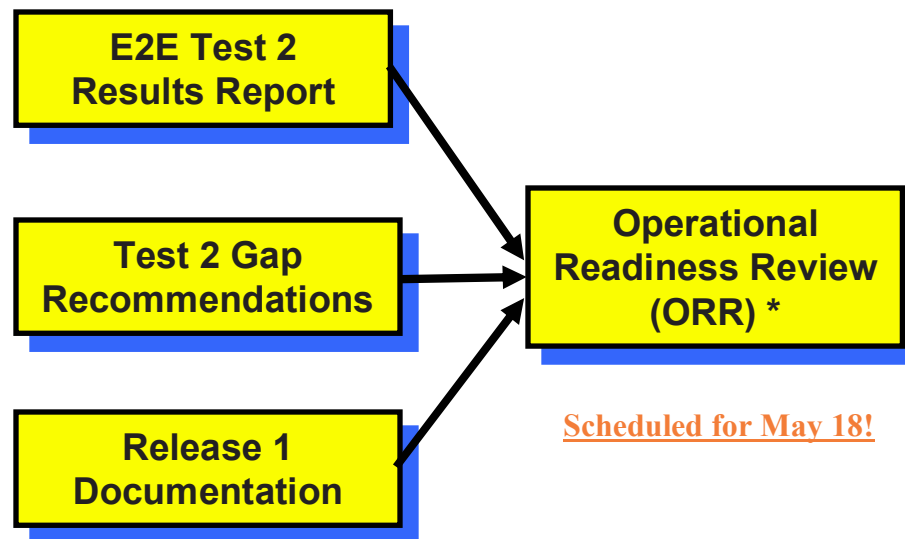
ACHIEVING HLW META-SYSTEM READINESS

Time 1 Time 2 Time 3 Time 4 Time 5 Time 6

Gap Issues & Requirements Resolution

RELEASE DECLARED

Applications & Infrastructure Improvements

ConOps Documented

SysOps Documented

E2E Test and Load Test (following)

Meta-System Operational Readiness Review (ORR)

Change Control & Configuration Management

Process & Procedure Improvements

BusOps Documented

Contingency Plan (review) Testing

Requirements Defined Service Levels Established

Contingency Planning Model

Note: At the ORR a CD will be provided containing all-+ the related documents

Security Documentation and Tests

Security Accreditation

SDLCMM Compliance – Documentation Improvement

Operational Readiness Assessment

Programmatic Milestone

April 21, 2005

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HLW META-SYSTEM END-TO-END TEST 2 NEXT STEPS OVERVIEW:
- Addressing the remaining testing activities

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┌─────────────────┐
│   E2E Test 2    │ ──────┐
│  Results Report │        \
└─────────────────┘         \
                             \
┌─────────────────┐           ▶ ┌──────────────────┐
│   Test 2 Gap    │ ──────────▶ │   Operational    │
│ Recommendations │           ▶ │ Readiness Review │
└─────────────────┘          /  │     (ORR) *      │
                            /   └──────────────────┘
┌─────────────────┐        /
│   Release 1     │ ──────┘
│  Documentation  │
└─────────────────┘
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HLW Meta-System Tested and declared 'operable' for this release
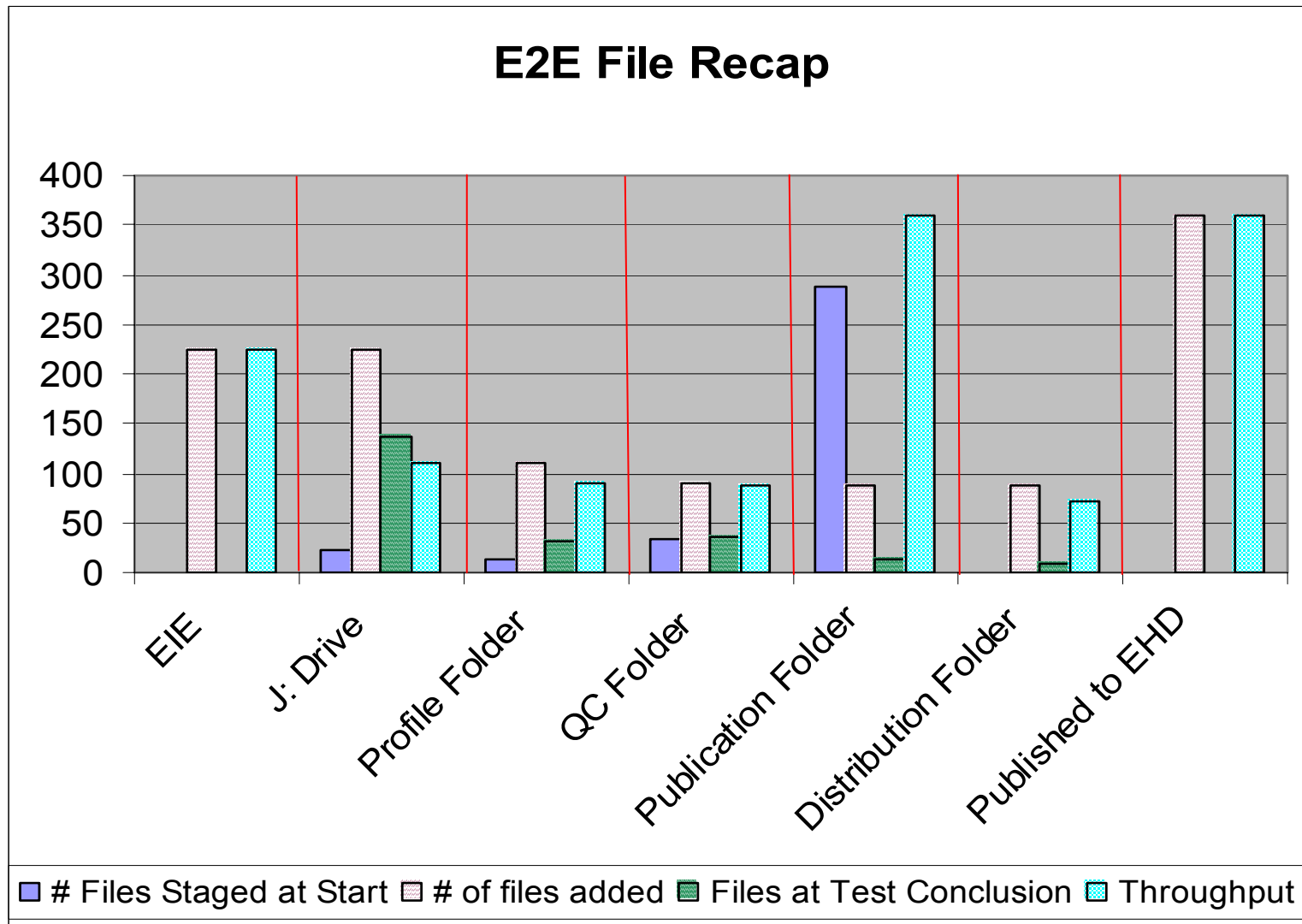
Scheduled for May 18!

* All release and test documents completed and signed off by stakeholders

E2E Test 2 Overview

- Employed a true integrated test environment
- Established external - remote parties
- Staged documents – so everything went into motion at once
- Expanded volumes across all nodes
- Included broad mix of file types and sizes
- Used various transmission methods simultaneously

E2E Test 2 Statistics

- ## Test Activities
  - 5 submitters
  - 5 participants
  - 4 observers
  - 6 processors

- ## Gap Issues & Requirements
  - 132 Gaps were declared as needed for the release
  - 66 Gaps evaluated as part of the E2E Test 2 process
  - 40 potential new Gaps were discovered

- ## Test Process
  - 225 files submitted
  - 109 files pre-flighted by DPC
  - 91 files entered into Test ADAMS
  - 18 files rejected
  - 116 files remain on J: drive
  - 24 files published (end-to-end: submittal to EHD)
  - Work content per document processed = 23.8 minutes

E2E File Recap

Legend: # Files Staged at Start, # of files added, Files at Test Conclusion, Throughput

Categories: EIE, J: Drive, Profile Folder, QC Folder, Publication Folder, Distribution Folder, Published to EHD

Testing Outcomes/Accomplishments - Overview

- Test approach supported meeting test objectives and verification of results – using cause/effect
- Successfully tested across all Meta-System components under simultaneous load – creating continuous process and motion
- Focused on specific system and process pressure points – yet maintained system functionality
- Identified opportunities to refine pre-hearing adjudicatory document processes and identified opportunities for business process improvements
- Assessed "resolved" gaps to validate their inclusion in this release
- Acquired data to enable the OIS to better predict workload and potentially adjust DPC contract parameters
- Provided basis for more discrete "work content" analysis within the DPC

Initial Test Findings - Overview

- The HLW Meta-System can function in support of the stated program milestone
- The Integrated Test Environment is now in place
- The Meta-System functions as an integrated system
- EIE user interface and support processes need improvement
- While newly introduced document processing steps did speed processing, testing results identified the need to further streamline document processing steps
- The ADAMS profiling screen needs to be simplified
- EHD help functions need improvement for help desk staff and end users
- Questions remain regarding the handling of incoming submittals that do not conform to the criteria in the Guidance for Submission of Electronic Docket
- The DDMS indexing format is not aligned with the ADAMS profile
- Additional investigation is needed to determine how to best support and help participants with the submittal and retrieval of documents
- There is too much reliance on single points-of-contact regarding operational support staff

Target Recommendations

for senior management – CCB to consider as patches to this release, or modifications to the next release of the HLW Meta-System

- Test Environment
  - Finish the build-out of the Test Environment
  - Add the Convera interfaces
- EIE
  - Improve and document certificate management processes
  - Resolve issues identified with the HLW Submittal Form
  - Resolve issues identified related to managing withdrawals, etc.
  - Update EIE Help Files
- DPC
  - Consider accelerating adoption and implementation of new DPC "pre-hearing" processing instructions/duties

Target Recommendations (cont.)

for senior management – CCB to consider as patches to this release, or modifications to the next release of the HLW Meta-System

- ## ADAMS
  - Redesign/streamline ADAMS Profile Screens
- ## EHD
  - Establish an automated publication schedule for (PWP) HLW-EHD
  - Improve the EHD Help function
- ## SECY
  - Assess and refine business process for handling physical submittals

Target Recommendations (cont.)

for senior management – CCB to consider as patches to this release, or modifications to the next release of the HLW Meta-System

- ## DDMS
  - – Resolve alignment of index and ADAMS profile screen

- ## Training
  - – Revisit how the PDR can become successful in a Help Desk capacity

- ## General Findings
  - – Reduce reliance on single individuals (EIE Certificate Process; EIE contractor; PWP/EHD process; etc.)

Results Report Overview

Results Report Overview (cont.)

APPENDIX A – FINDINGS AND RECOMMENDATIONS MATRIX

APPENDIX B – GAP ISSUES AND REQUIREMENTS ADDRESSED IN TEST 2

APPENDIX C – HLW META-SYSTEM TEST SCRIPTS END-TO-END TEST 2 & RESULTS

APPENDIX D – TEST ENVIRONMENT TRACEABILITY RESULTS MATRIX

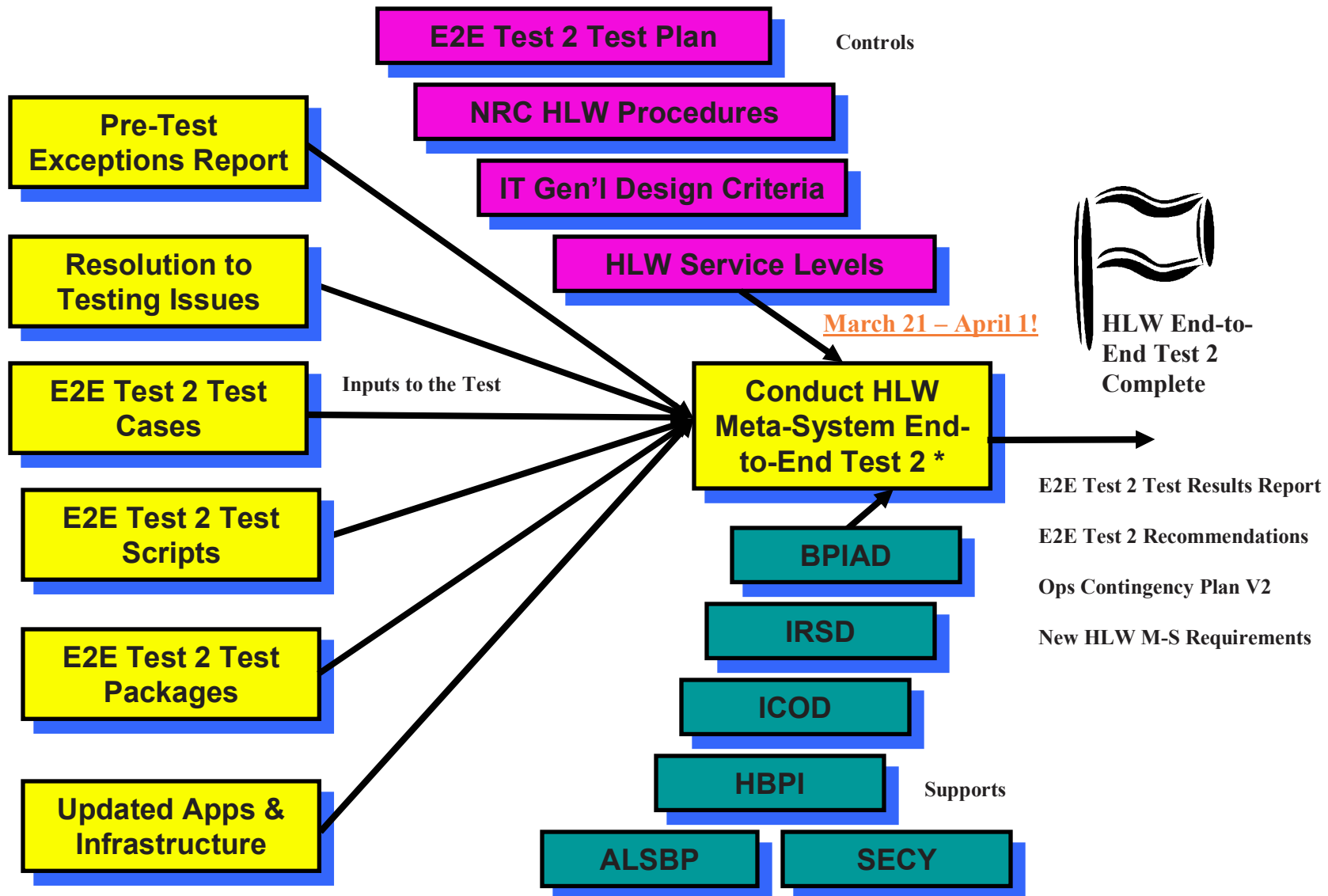**ATTACHMENT 1 – RELATED DOCUMENTATION REFERENCES**

Next Steps

- Perform Operational Readiness Review (ORR) and obtain appropriate sign-off from the HLW Meta-System stakeholders

- Introduce HLW Meta-System Release 1 into formal Configuration Management and Change Control schema

Stakeholders' Roles

- Prepare for the ORR by:
  - Reviewing your Meta-system component(s) and their stated Release 1 capabilities to assess their <u>adequacy</u> to meet the "DOE Certifies" milestone.
  - Reviewing the 'draft' Test 2 Results Report to assure these components and capabilities are <u>sufficient</u> to meet that milestone.
  - Identifying critical deficiencies (if any) that would prevent the Meta-system from meeting its performance requirements.

- Participate in the ORR by:
  - Examining overall Release 1 functionality
  - Determining whether Release 1 is sufficient to meet the milestone
    - **If so, accept the Release**
    - **If not, determine what must be added**

HLW META-SYSTEM END-TO-END TEST 2 EXECUTION OVERVIEW

E2E Test 2 Test Plan

Controls

NRC HLW Procedures

IT Gen'l Design Criteria

Pre-Test Exceptions Report

HLW Service Levels

March 21 – April 1!

HLW End-to-End Test 2 Complete

Resolution to Testing Issues

Inputs to the Test

E2E Test 2 Test Cases

Conduct HLW Meta-System End-to-End Test 2 *

E2E Test 2 Test Results Report

E2E Test 2 Test Scripts

BPIAD

E2E Test 2 Recommendations

Ops Contingency Plan V2

IRSD

New HLW M-S Requirements

E2E Test 2 Test Packages

ICOD

HBPI

Supports

Updated Apps & Infrastructure

ALSBP   **SECY**

* Inherently includes any required re-testing

April 21, 2005

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