

NRC/USEC American Centrifuge Plant Kick-Off Meeting

NRC Headquarters
Rockville, Maryland
April 15, 2004

Attachment 2



Introduction

Ronald F. Green
Senior Vice President

AGENDA

- **Introduction** **Ron Green**
- **American Centrifuge Program Overview** **Dan Stout**
- **Preview of License Application** **Pete Miner**
- **Conclusion/Next Steps** **Pete Miner**



American Centrifuge Program Overview

Daniel P. Stout
Director,
American Centrifuge Program

Centrifuge Program Approach

Demonstration

- \$150 million over ~ 5 years
- Supported by CRADA

Commercial Plant

- Up to \$1.5 billion
- Initial capacity of 3.5 million SWU replaces higher cost production
- Modularity supports future expansion

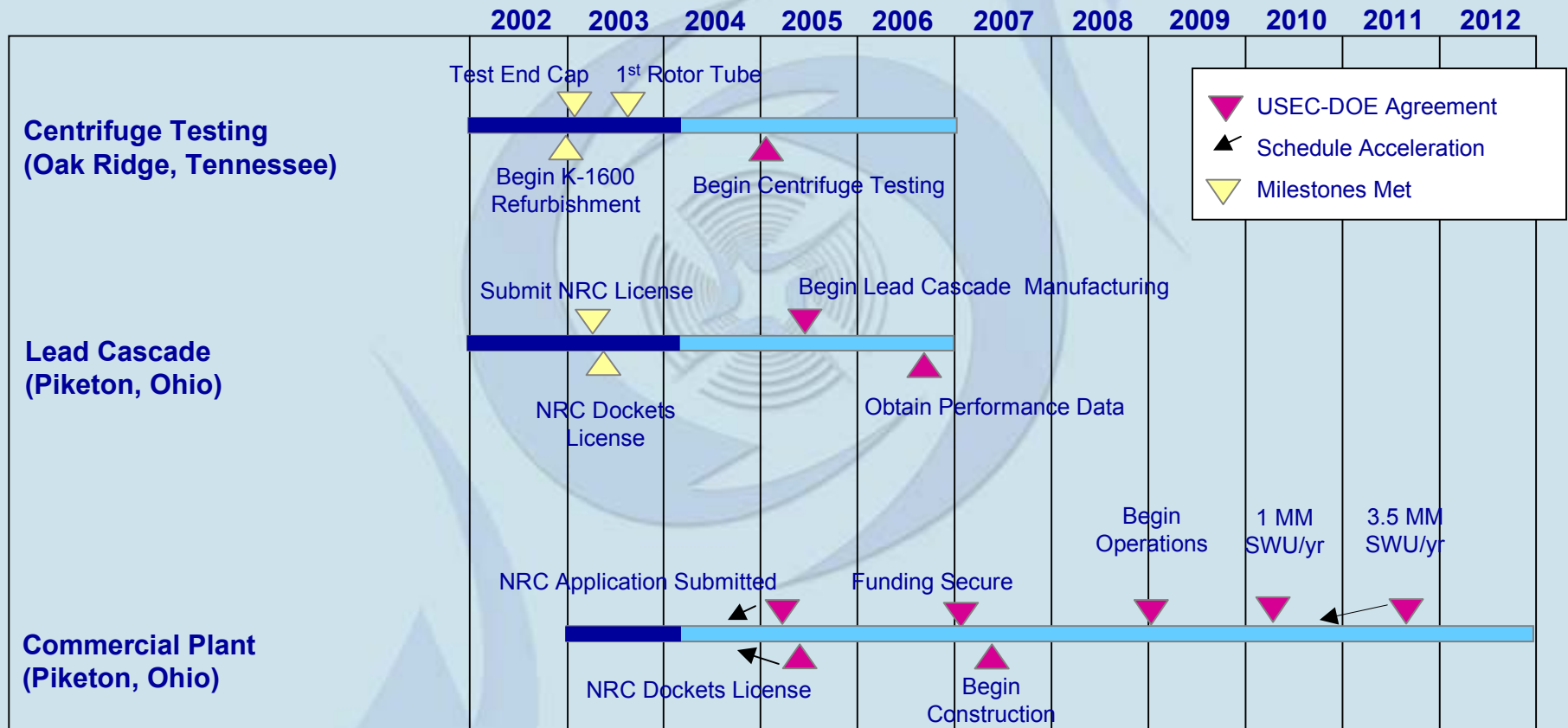
Demonstration Facility (Lead Cascade)

- Basic building block of a commercial plant (CP)
- Multi-machine cascade configuration
- NRC license improves CP regulatory predictability

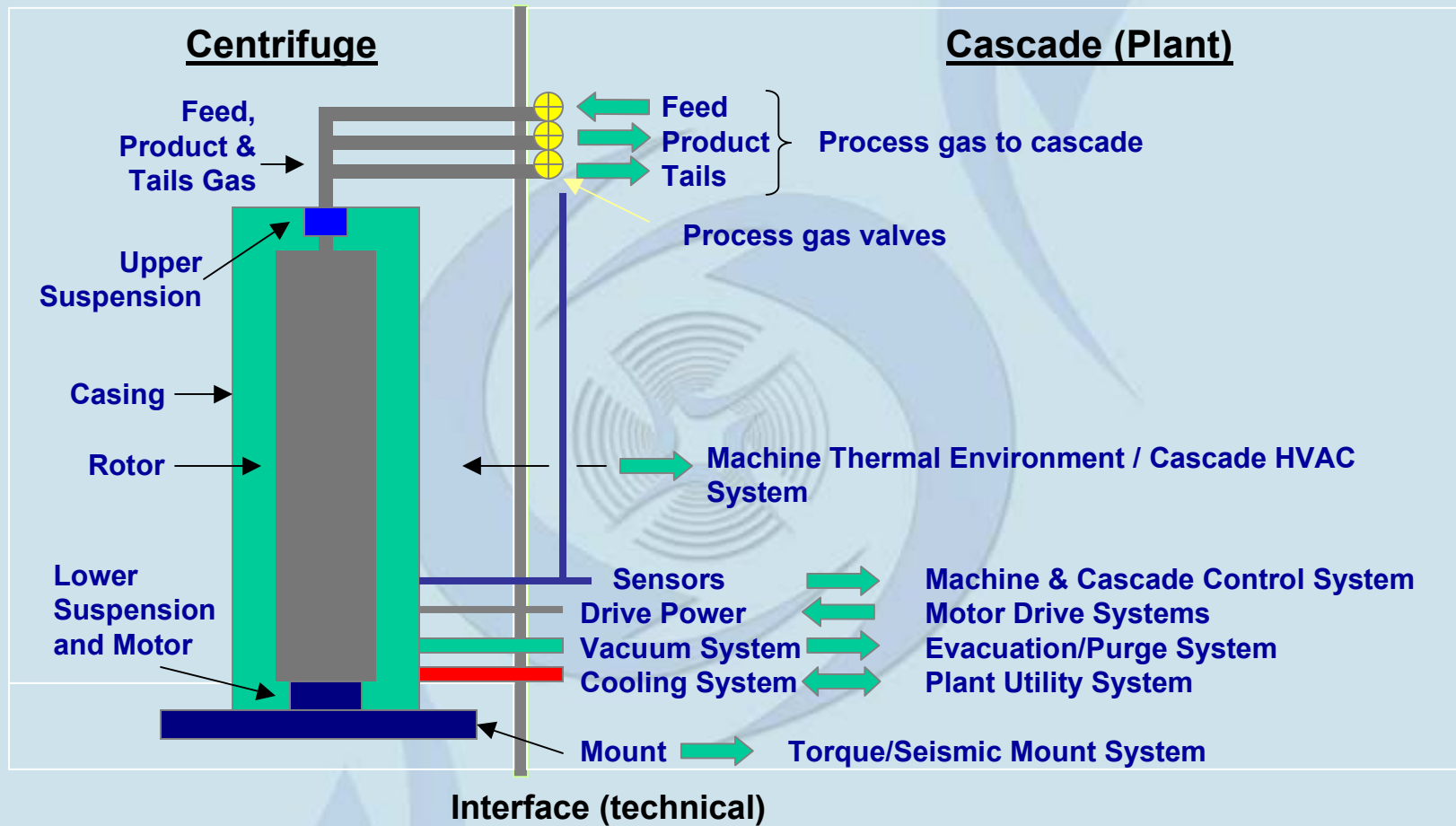
Centrifuge Testing

- Centrifuge engineering and manufacturing (CTC facility)
- Component and centrifuge testing (K-1600)
- Provides initial centrifuge performance, reliability and cost data

Schedule



Centrifuge and Cascade (Plant) Interface and Integration



- Oak Ridge
- CM Contractor

Integration
(Management)

- Piketon
- E/P/CM Contractor

Preview of License Application

**Peter J. Miner
Director,
Regulatory and Security**

License Application Approach

- NRC guidance utilized
 - NUREG-1520: License Application, Chapters 1.0 through 11.0
 - NUREG-1748: Environmental Report
 - NUREG-1513: Integrated Safety Analysis (ISA)
- Application follows standard format and content

License Application Approach

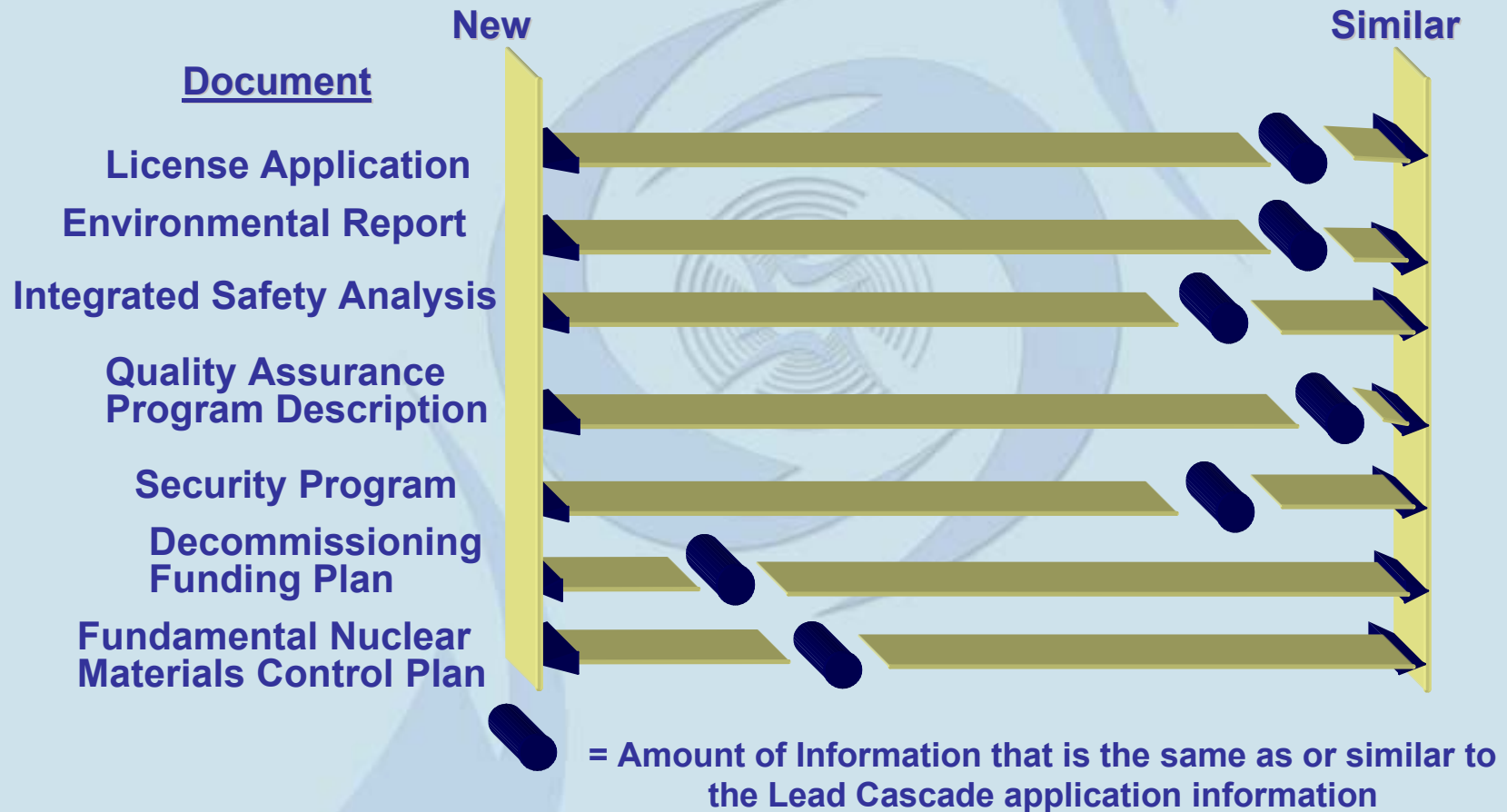
- Builds on success of American Centrifuge Demonstration Facility License Application
 - Lead Cascade application used as foundation
 - For example, Management Measures (Chapter 11) and Quality Assurance Program Description essentially identical
 - Utilized same internal processes for development, review and verification
- Continuity of resources
 - Key USEC personnel
 - Consulting firm support for ISA

License Application Approach

- Reviewers will be familiar with format, content and ISA methodology
 - Looks like a “bigger” American Centrifuge Demonstration Facility application
 - Site is the same
 - Facilities are the same
 - Technology is the same

License Application Approach

ACP License Application builds on success of Lead Cascade application



License Application

- License Application includes:
 - New organizational structure
 - Additional inventory of UF_6
 - Production of 3.5 Million SWU/year
 - Feed, withdrawal (product and tails), and sampling operations
 - Additional nuclear criticality accident scenarios
 - New facility for product and tails withdrawal
 - 30-year operation assumption
- Environmental Report evaluates:
 - Updated environmental data
 - Potential modular expansion up to 7 Million SWU/year operation

License Application

- ISA Summary
 - Contains Export Controlled Information, Proprietary Information and a small classified appendix
 - Redacted ISA Summary will be submitted with License Application
- Additional documents include:
 - Transportation Security Plan
 - Packaging and Transportation Quality Assurance Program Description

Conclusion/Next Steps

- License Application will be submitted in August 2004
- Continue with open, candid, clear communication – no surprises
- Support plan for quarterly status meetings with NRC
 - Establishment of intermediate milestones
- Conduct technical meetings for:
 - ISA
 - Environmental Report
- Plan to meet or exceed due dates for all requests by NRC Staff
- The Lead Cascade licensing experience offers the opportunity to complete the Commercial Plant license review in 24 months