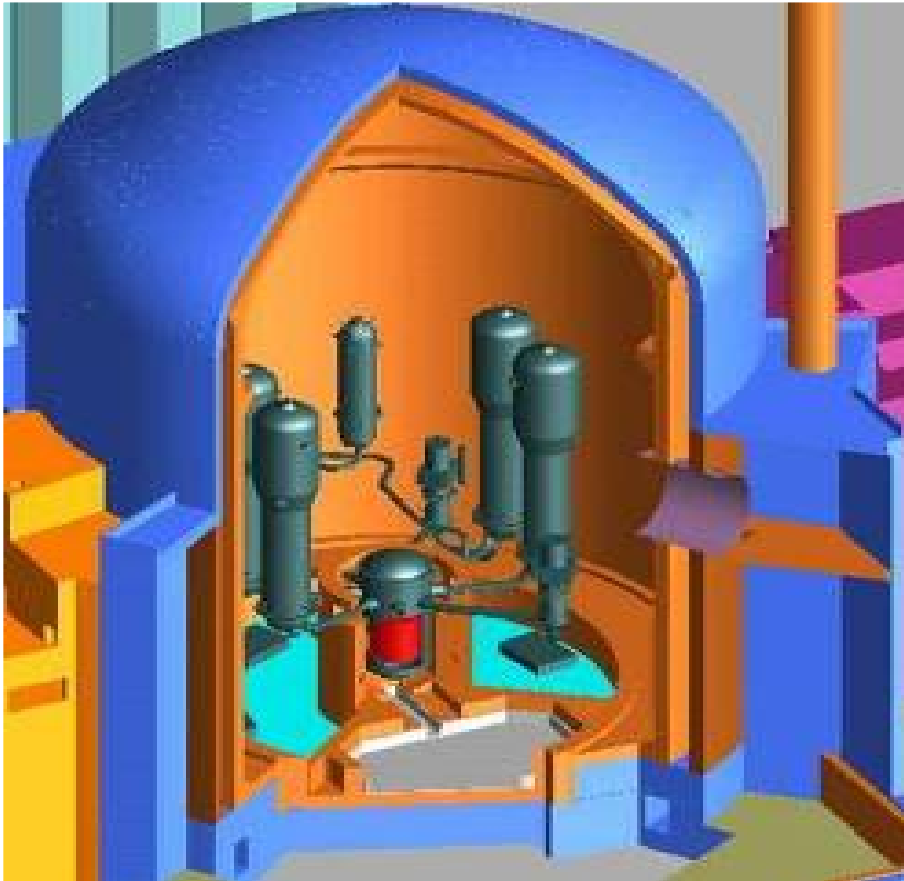


RIC 2007

New Reactor Applications: Status and Plans

John Price
UniStar Nuclear
March 13, 2007

EVOLUTIONARY POWER REACTOR (EPR)



- **1600 MW PWR**
- **Robust Secure Design:**
 - Double-walled containment protects against external hazards
 - Four independent safety trains in separate buildings
- **Greater Design Margins**
 - Increased plant and public safety
 - Lower operating cost (\$/MWh)
 - Low thermal discharge to environment
- **Proven nuclear power technology**
- **Highly standardized**

UniStar Nuclear Formed September 2005

- A new and unique business model
- Partnership between Constellation Energy and AREVA that creates an innovative business framework of future joint development ventures (Project Companies) to own and operate U.S. EPRs
- Objective: Deploy a fleet of at least four identical U.S. EPRs through project companies
- Future joint ventures would license, construct, own and operate nuclear power plants as part of a standardized fleet
- A “one-stop shop” approach with AREVA (Design), BWXT (Fabrication), Bechtel (construction) and a single operating company formed by the partners (operator)

Provides low-risk path for success to design, certify, license, develop, construct, own, operate and maintain the U.S. EPR

UniStar Nuclear Objectives and Principles

- **Objectives:**
 - Enhance U. S. energy security
 - Ensure the highest level of reactor safety, security, and reliability
 - Construct and operate the most efficient fleet in North America
 - **Principles:**
 - Standardization, Standardization, Standardization
 - Rapid Decision Making
-

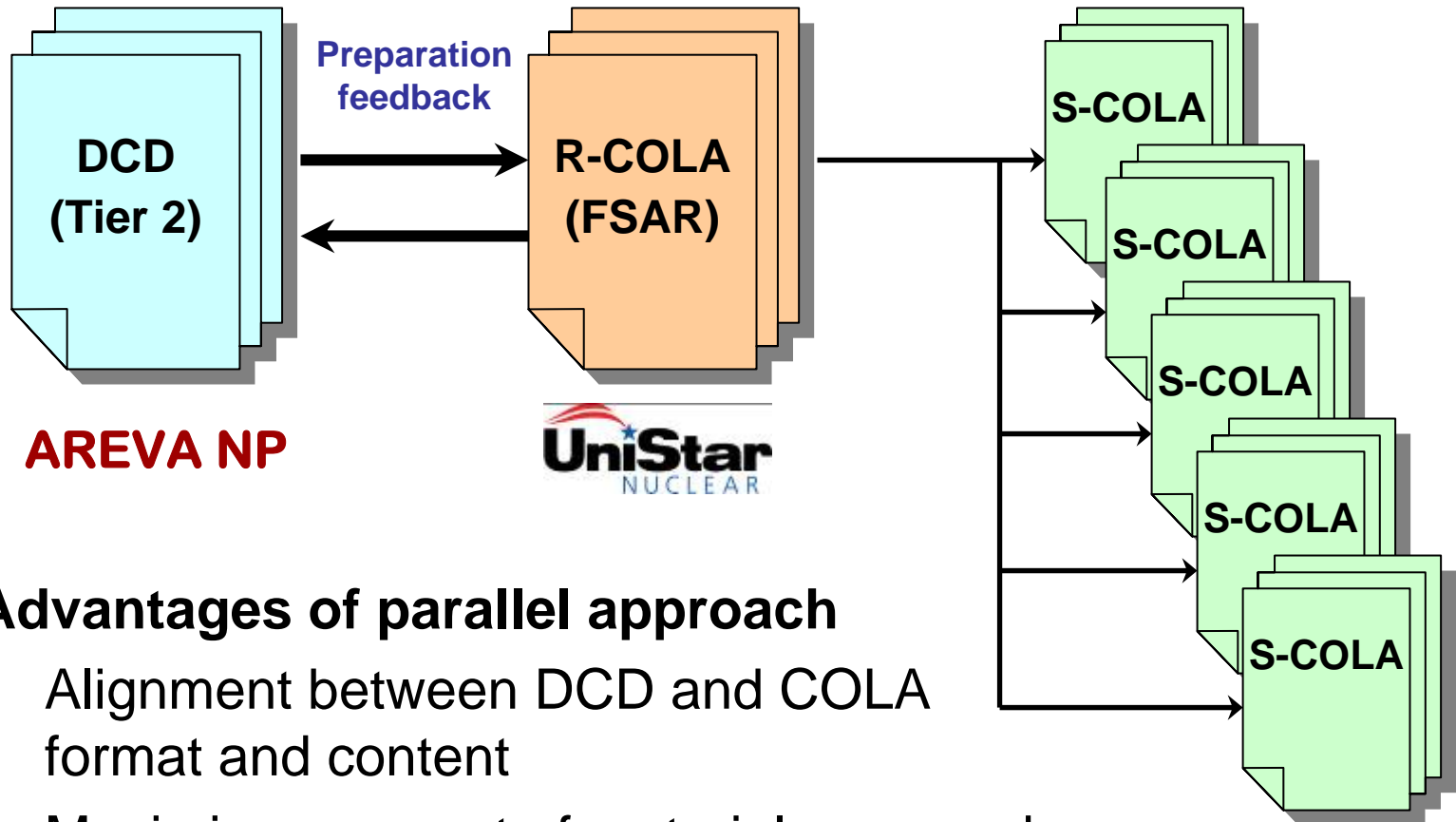
LICENSING COLA STRATEGY

- **NRC's design-centered approach**
 - Addresses technical issues through a “reference case” that will be replicated by other EPR COLAs
- **Early submittal of DCD/COLA topical reports**
 - 20+ reports submitted/planned to be submitted
- **Parallel NRC DCD/COLA review**
 - DCD and COLA prepared and reviewed concurrently

***Licensing Objective:
 A predictable, timely schedule supporting new
 nuclear generation in 2015 timeframe.***

PARALLEL DCD/COLA REVIEW APPROACH

S-COLA references R-COLA (~80% same)



Advantages of parallel approach

- Alignment between DCD and COLA format and content
- Maximizes amount of material approved generically as part of certified design
- Efficient use of NRC review resources

CONCURRENT DCD AND COLA PREPARATION AND NRC REVIEW

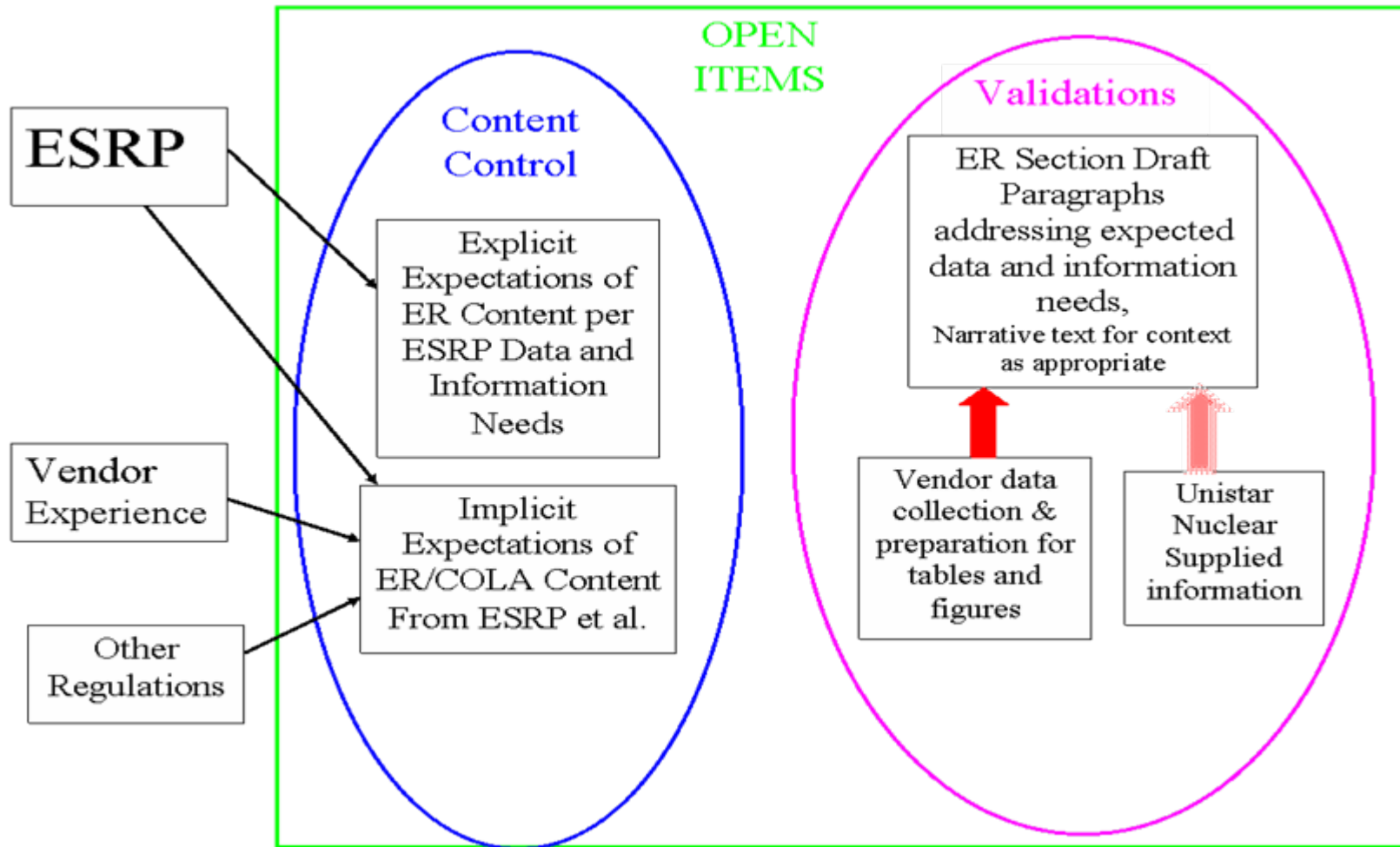
- Provides unique advantages
 - A higher level of integration between the COLA and DCD texts can be achieved – easier to review
 - Minimizes COL information items
 - Substantial NRC staff interaction (35+ meetings held or being planned)
 - Presents unique logistical requirements
 - Need to ensure that changes to DCD are properly and timely reflected in COLA and vice versa, as necessary
 - Objective is to provide the conditions needed for the NRC to conduct an effective and efficient review of the “Reference” COLA
-

DCD and COLA Status

- Design Certification: 55% complete
- COLA: 19% complete
- **Already proceeding towards construction**
 - Long Lead Materials
 - Already ordered first set of forgings
 - Second & Third set in 2007
 - Accelerating Pre-Construction Activities
 - Incorporating Lessons Learned from Okiliuoto-3 and Flamanville-3
 - “Refueling Outage” mindset in reviewing & compressing schedule

Accelerating early phases leads to timely project execution.

COLA DEVELOPMENT PROCESS



MAJOR SCHEDULE MILESTONES

July 31, 2006	Submittal of QA Plan
Aug. 3, 2006	Announcement of Heavy Forgings Procurement
Aug. 8, 2006	Site Core Borings Complete
Dec. 1, 2006	Submittal of Security Plan
Dec. 1, 2006	Submittal of Emergency Plan

MAJOR SCHEDULE EXPECTATIONS

2 nd Q 2007	Submittal Environmental Report
4 th Q 2007	Submittal of DCD
2 nd Q 2008	Submittal of R-COLA
TBD	Submittal of S-COLAs
