Clinton Power Station
Extended Power Uprate
Licensing Plan

May 9, 2001

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Clinton Power Station EPU

Agenda

◆ Opening Comments	Rod Krich
◆ Project Overview	Dale Spencer
◆ Engineering Summary	Bob Kerestes
◆ Summary and Conclusions	Dale Spencer
◆ Wrap Up	Rod Krich

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Opening Comments

- Kick-off Meeting
- Provides Licensing Approach and Schedule
- Key Technical Issues

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Project Overview

- Objective to obtain Operating License for 120%
  - NSSS analyses support increase of 120% of Original Licensed Thermal Power (OLTP)
  - BOP Modifications required
- No Reactor Pressure Increase
- Implementation over 2 Operating Cycles
  - 7% increase post C1R08 (4/02)
  - Remainder post C1R09 (11/03)

Exelon Power Uprate Experience

- Completed - LaSalle, Limerick, Peach Bottom
- Implementation in Progress - Byron, Braidwood
- Awaiting License Approval - Dresden, Quad Cities
- Broad Range of Experience
  - Engineering
  - Modifications
  - Startup Testing
- Application of Lessons Learned

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Project Overview

- Project Team formed September 2000
  - EPU - cost effective means of increasing generating capacity
- Goal - to produce additional MW for summer 2002 and beyond
  - License/Technical Specification Change Request Submittal in June 2001
  - Request approval in March 2002

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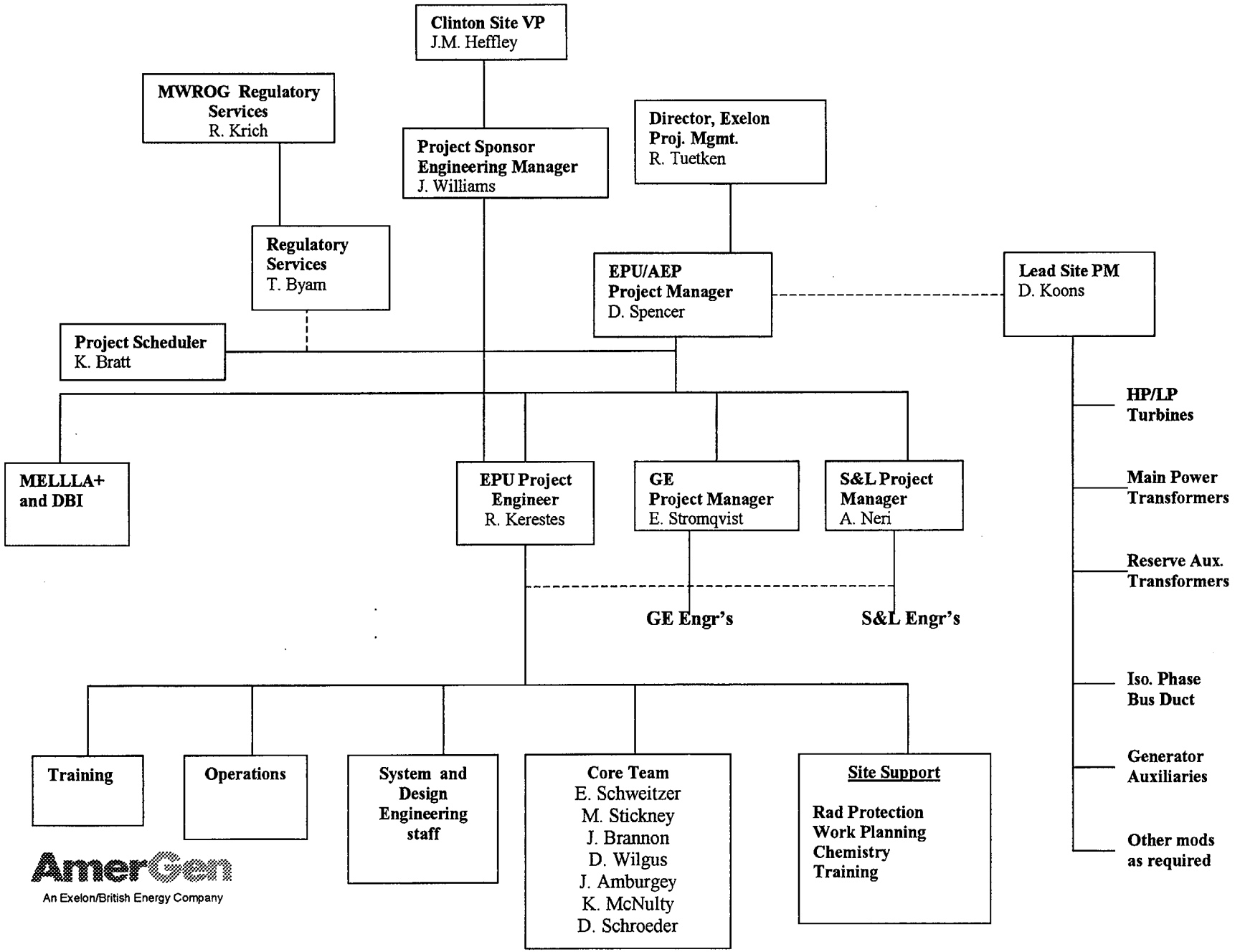
Project Overview

- EPU submittal scheduled for June 18, 2001
  - GE LTR 32424, Generic Guidelines for BWR EPU
  - PUSAR, Similar to LaSalle Dresden, Quad Cities, Duane Arnold
- Related licensing submittals
  - Transition to GE 14 fuel in progress, 1st load completed C1R07 (11/00) - no current licensing action
  - MELLLA+ implementation Cycle 10, expected submittal 4Q01/1Q02

Clinton Power Station
Extended Power Uprate Project



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Project Overview

Asset Enhancement Program includes:

- Extended Power Uprate
  - 120% OLTP
  - No increase in Reactor Dome Pressure
- MELLLA+
  - Planned implementation, Cycle 10, license submittal 4th Q 2001
- Design Basis Initiative
  - EPU Engineering Analyses support improvement of Design Basis Documentation

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Engineering Summary

- All initial system analyses complete
- Final Submittal in preparation
  - License Amendment Request
  - PUSAR
- Target schedule for submittal is June 18, 2001
- Request approval, March 2002

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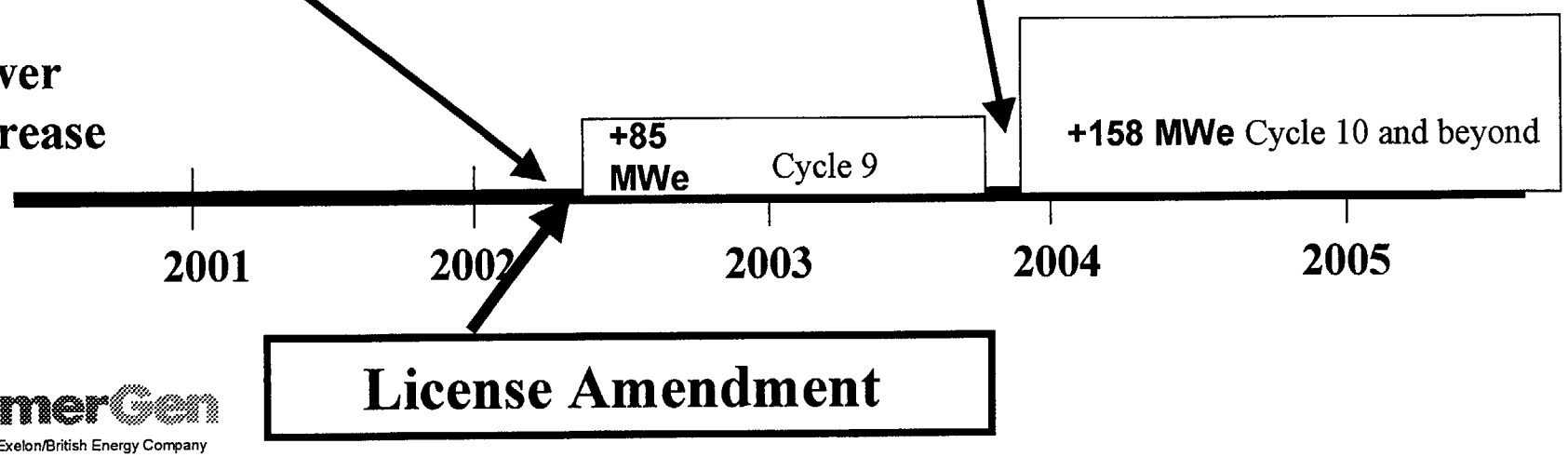
Extended Power Uprate
Engineering Summary

C1R08 Modifications

- **Turbine Replacement**
- **Main Power Transformer replacement**
- **Iso Phase Bus Duct Cooling**
- **Moisture Separator Reheater Upgrade**
- **Continue GE 14 fuel load (started C1R07)**
- **Setpoints**

C1R09 Modifications - preliminary

- **Reserve Auxiliary Transformer replacement**
- **Bus Duct Configuration and Cooling Upgrades**
- **Generator Excitation/Relaying Modifications**
- **Condenser cooling upgrades**
- **Setpoints**
- **GE 14 fuel load complete**
- **MELLLA+**



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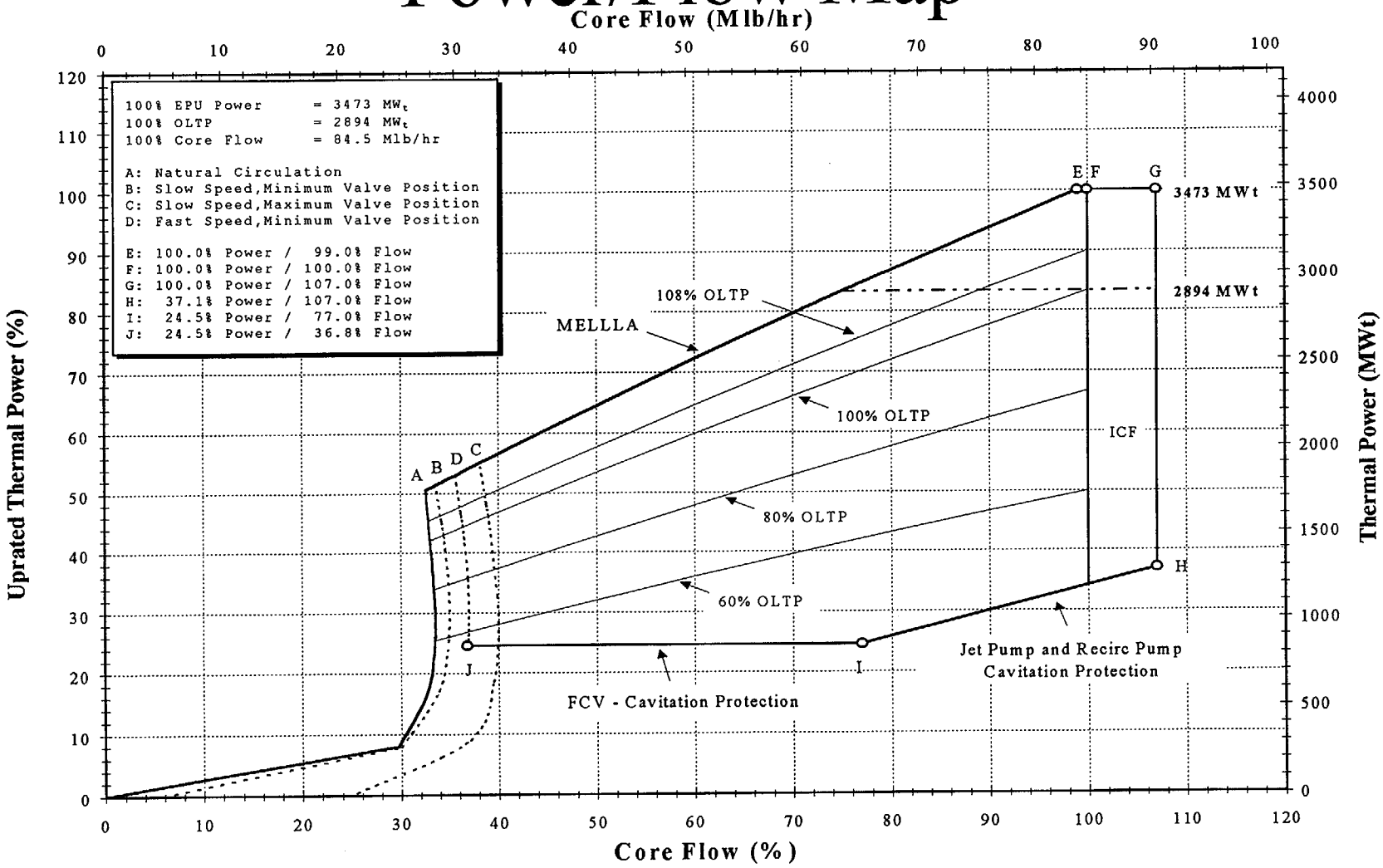
Clinton Power Station EPU Power/Flow Map



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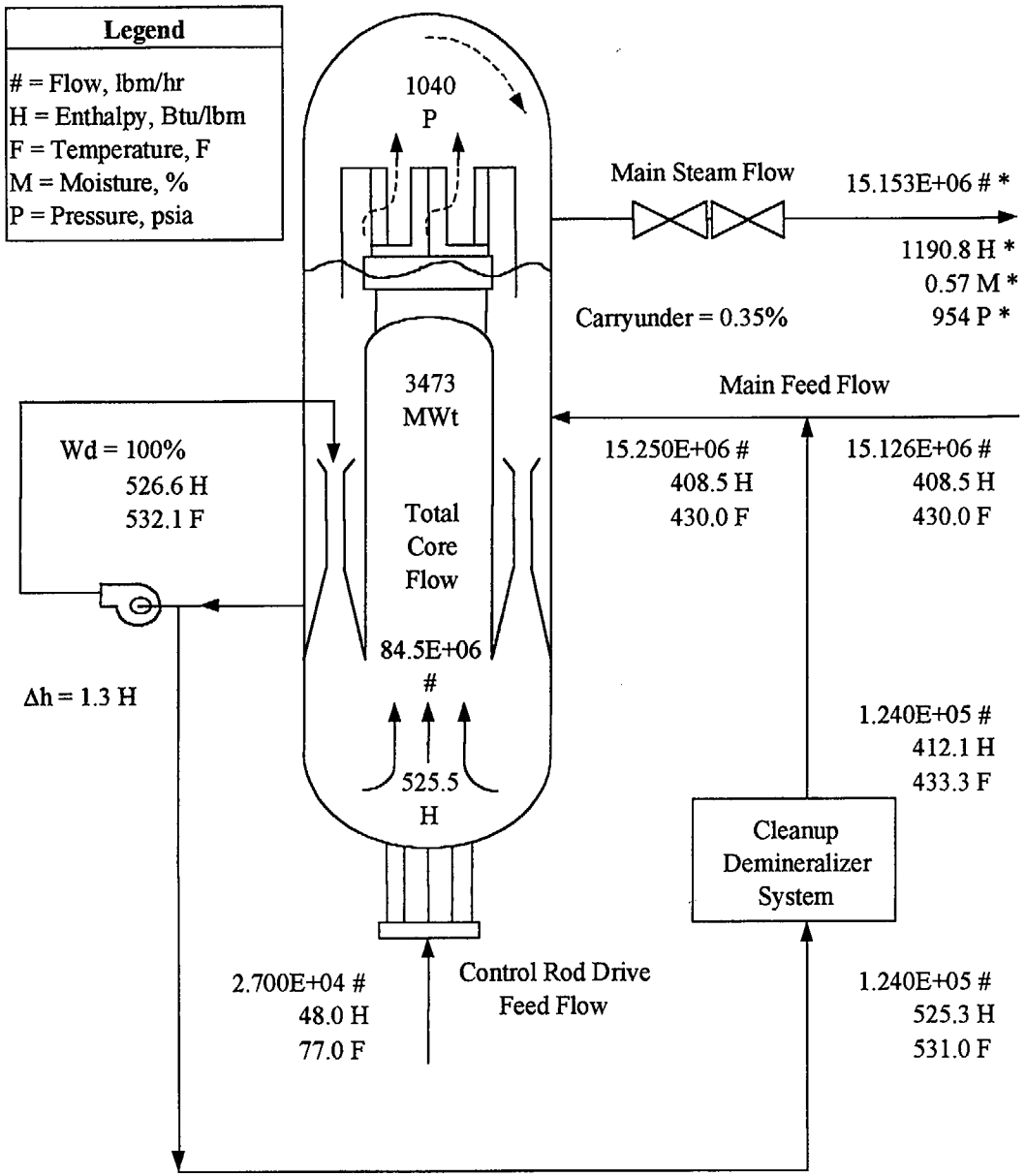

* Conditions at upstream side of TSV

Core Thermal Power	3473.0
Pump Heating	9.1
Cleanup Losses	-4.1
Other System Losses	-1.1
Turbine Cycle Use	3476.9 MWt

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Summary and Conclusions

- EPU is cost effective way to increase generating capability
- Analysis has indicated that NSSS systems are capable of supporting 20% increase in Licensed Thermal Power
- Modifications will be required to BOP components
- Turbine Generator expected to be limiting component
- Approval for MELLLA+ will be requested after submittal of GE LTR
- Use of GE methodology will result in consistent licensing approach
- Exelon experience/lessons learned being utilized to ensure success