



Combined License Application Review STP Units 3 and 4

**Safety Panel 3
November 19, 2015**

Panelists

- **Tom Tai – Senior Project Manager**
- **Dr. Henry Jones – Senior Hydrologist**
- **Richard McIntyre – Senior Reactor Operations Engineer**

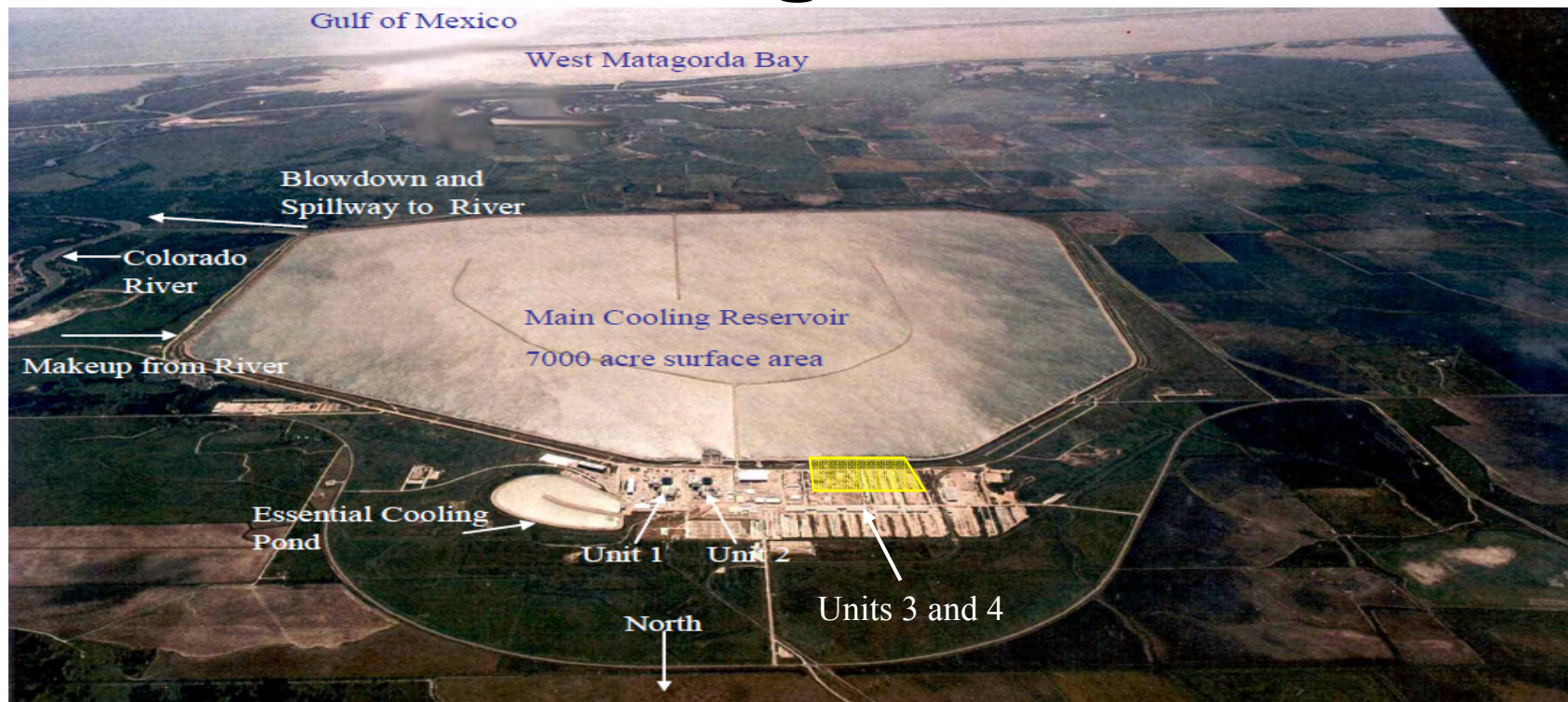
South Texas Project Site



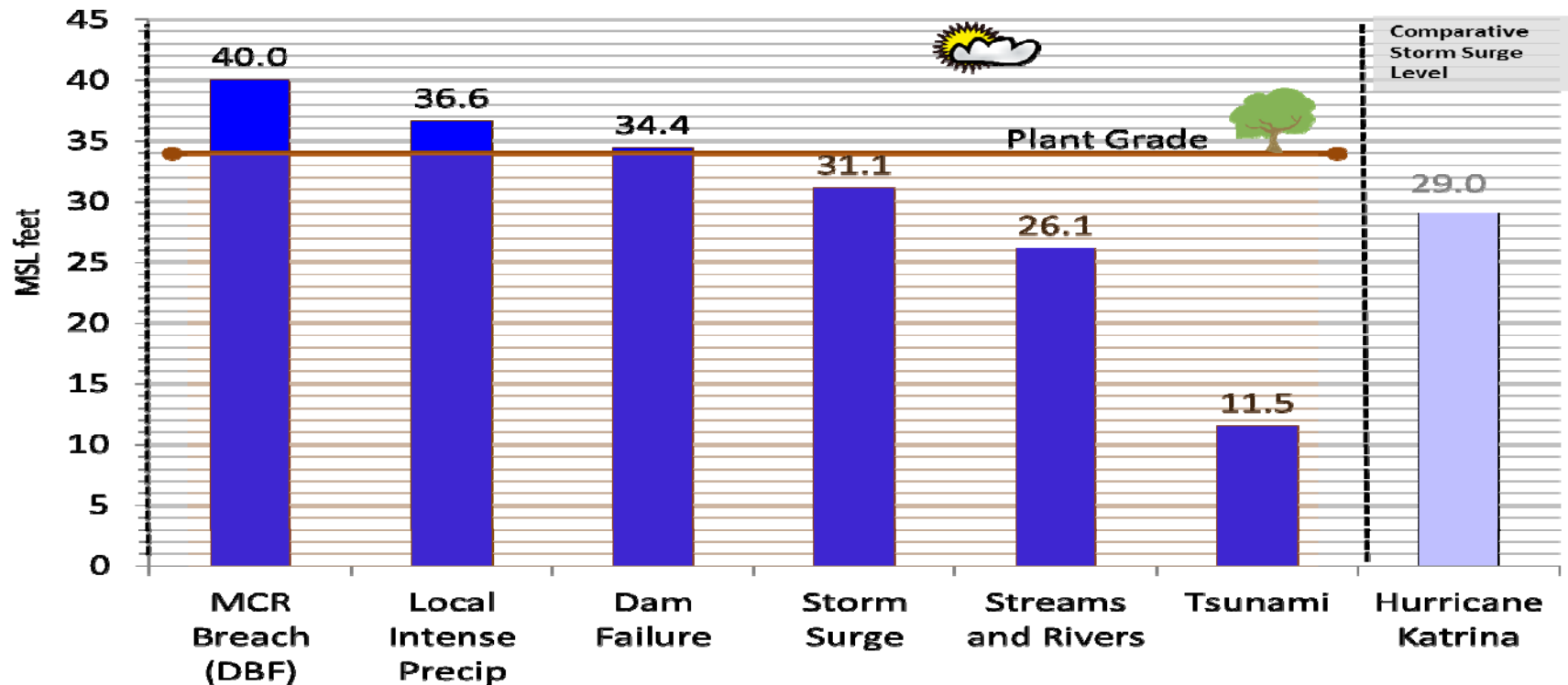
Design Basis Flood (DBF)

- **Staff considered and evaluated various flooding mechanisms**
- **A breach of the Main Cooling Reservoir (MCR) was determined to be the controlling event**
- **The MCR breach is an improbable, postulated worst-case event**

MCR Aerial View – Looking South



Water Levels and STP Plant Grade



Flooding Protection

- **All safety-related facilities are watertight below 40 ft MSL**
- **Watertight doors/hatches normally closed with administrative controls**
- **Ventilation openings above 40 ft MSL**

Non-Concurrence

- **Three primary areas of non-concurrence assertions**
 - **MCR breach**
 - **Hurricane storm surge**
 - **Maximum groundwater level**

Independent Assessments

- **Six independent experts agreed with staff conclusions on MCR breach and storm surge**
- **ACRS agreed with staff conclusions on all three non-concurrence issues**

Alternate Vendor Qualification Background

- **Applicant awarded the engineering, procurement, and construction contract to Toshiba as the alternate vendor to GE Hitachi**
- **Applicant submitted a Due Diligence Report on Toshiba's qualification assessment**

Inspection

- **Staff conducted a vendor inspection for selected portions of its program for compliance with App. B to Part 50 and with Part 21**

Inspection

- **Technical areas examined:**
 - **Toshiba's implementation plans for the Initial Test Program**
 - **Toshiba's implementation of the design control process**

Due Diligence Report

- **Applicant's assessment of Toshiba's capability**
 - **Design documents required for licensing**
 - **Design basis documents**
 - **Ongoing technical development**
 - **Development and implementation of supply chain**
- **Staff conducted review, audit, and inspection activities**

Conclusions

- **Toshiba's programs are consistent with the requirements of Appendix B to Part 50 and Part 21**
- **Toshiba had both the technical ability and access to technical documentation necessary to provide the certified ABWR design for STP Units 3 and 4**

Questions?