

Turbine Upgrades

May 21, 2002

Balance the Benefits



Why Upgrade?

- ❑ Improvements in turbine designs
- ❑ Other rehabilitation work
- ❑ Energy legislation - incremental hydro



Key Considerations

- ❑ Economic and environmental feasibility
- ❑ Process options
 - License compliance
 - Relicensing



Feasibility Analysis

- ❑ Increases in efficiency
- ❑ Benefit to cost ratio
- ❑ Potential rec and eco enhancements
- ❑ Little to no change in baseline conditions
- ❑ Resolve some existing relicensing issues



Findings

- ❑ 11 units economically feasible
- ❑ 3 of the 11 appear to meet other criteria
 - Jordan
 - Bouldin
 - Lay



Upgrade Proposal

- ❑ Prepare an amendment application for 3 units prior to November 2002
- ❑ Address other 8 unit upgrades as part of relicense application in 2005



The License Amendment Process

- ❑ Consult with stakeholders
- ❑ Address environmental, operational, recreational effects & prepare draft application
- ❑ File license amendment applications
- ❑ FERC issues public notice of applications
- ❑ FERC issues license amendment order



Schedule

- ❑ June/July -- Stakeholder Consultation
- ❑ August -- Draft amendment applications
- ❑ September - Comment period
- ❑ November - File with Commission
- ❑ 2003 -- FERC Order
- ❑ 2004/05 -- Install unit upgrades

