



PROJECT STATUS REPORT FORM

Project Number: PGT-06-06	Task Force: Power Generation and Transmission						
Title of Project: Hydroelectric Generation Best Practices							
Lead Partner Country: United States							
Participating Partner Countries and Organizations: all							
Project Location (Country, State/Province, City): Jocassee, South Carolina, United States							
Project Manager Information <table style="width: 100%; border: none;"> <tr> <td style="width: 50%; padding: 2px 0;">Name:</td> <td style="width: 50%; padding: 2px 0;">Phone:</td> </tr> <tr> <td style="padding: 2px 0;">Organization: Duke Energy</td> <td style="padding: 2px 0;">Fax:</td> </tr> <tr> <td style="padding: 2px 0;">Address:</td> <td style="padding: 2px 0;">Email:</td> </tr> </table>		Name:	Phone:	Organization: Duke Energy	Fax:	Address:	Email:
Name:	Phone:						
Organization: Duke Energy	Fax:						
Address:	Email:						
Project Start Date: 2007	Date of Project Status Update: October 2009						
Actions Since Last Update:							
Deliverables Since Last Update:							
Date Completed:							
Milestones Reached:							
Next Steps:							
Proposed Project End Date:	Project Already Complete: <input type="checkbox"/> Yes <input type="checkbox"/> No						



Other Information:

Objectives

Duke Energy will invite Partner countries to participate in an information sharing session concerning processes for improving hydro efficiency and capacity and will conduct an associated site visit at Jocassee Hydroelectric Pump Storage Facility (4 unit, 610 MW), which is in the process of being upgraded. Also, Duke Energy will provide background discuss actions a utility can undertake to improve hydro efficiency and capacity for conventional hydroelectric facilities. The following is a list of topics to be covered:

- Turbine runner replacement.
- Wicket gate, operating mechanism, and bearing refurbishments.
- Generator stator rewinds.
- Generator rotor rewinds.
- Monitoring and control upgrades including electronic governor.
- Breaker and switch gear replacements.
- Lube oil and auxiliary system replacements.
- Generator air filtration and powerhouse ventilation systems.
- Head gate, trash rack, and drain valve refurbishments.

Duke Energy will also discuss items such as outage planning, equipment procurement and delivery processes and project execution. Pumped storage interface with the grid will be a topic of discussion.

Milestones

Host Site Visit 4th Quarter 2006 or 1st half 2007 (approximately 3–4 day visit):

- Day 1 — Meet at Duke Energy Headquarters in Charlotte, North Carolina in AM:
 - meet hydroelectric engineering staff and discuss process of evaluation of upgrades.
 - overview of HydroVision program and replacement / refurbishment activities undertaken.
- Day 2 — Travel to Jocassee Pumped Storage Station in AM:
 - meet staff and host engineer.
 - safety training and equipment briefing.
 - overview of plant and surrounding operations.
 - discuss of outage planning, equipment procurement activities and overall project execution.
 - review of project implementation utilizing a site tour.
- Day 3 — Travel back to Charlotte, North Carolina:
 - debrief on visit
 - discuss hydroelectric interfaces with grid operation .
 - discuss follow-up actions/information sharing opportunities.
- Day 4 — Potential visit to conventional hydro facilities in the Charlotte vicinity.