

Gorge 2nd Tunnel

Appendix M: Listing of Hydraulic Model Analyses

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LIST OF MODEL RUNS

Model Case Runs

1. G1T configuration with 80% gate limit on Unit 24. Runner performance based on Unit 24 prior to 2006 upgrade to obtain hydraulic baseline to 1993 field testing. (File: G4LREJO6)
2. G1T configuration with 100% gate limit on Unit 24. Runner performance based on Unit 24 prior to 2006 upgrade to obtain hydraulic baseline to 1993 field testing. (File: G4LREJO7)
3. G1T and G2T Configuration Link 1. All four units with current runner performance. Final runner upgrade in 2006 (Unit 24). (File: G4LREJA)
4. G1T and G2T Configuration Link 2. All four units with current runner performance. Final runner upgrade in 2006 (Unit 24). (File: G4LREJB)
5. G1T and G2T Configuration Link 3. All four units with current runner performance. Final runner upgrade in 2006 (Unit 24). (File: G4LREJC)
6. G1T and G2T Configuration Link 4. All four units with current runner performance. Final runner upgrade in 2006 (Unit 24). (File: G4LREJD)
7. G1T Configuration (Existing). Unit 24 – 38 MW load rejection with Unit 21 & 22 at 10 MW. The model was updated for field test conditions (forebay level, tailrace level and servo timing) and compared to the field test results for the load rejection testing from May 12, 2009. A comparison of these results is presented in Table 12 (File:G24LREJ9)
8. G1T Configuration (Existing). Unit 24 – 60 MW load rejection with Unit 21 & 22 at 10 MW. The model was updated for field test conditions (forebay level, tailrace level and servo timing) and compared to the field test results for the load rejection testing from May 12, 2009. A comparison of these results is presented in Table 12 (File:G24LREJ8)
9. Link 1 – Station flows between 1,000 and 7,700 cfs with 14, 16 and 18 foot diameter second tunnels (27 models)
10. Link 2 – Station flows between 1,000 and 7,7000 cfs with 14, 16 and 18 foot diameter second tunnels (27 models)
11. Link 3 – Station flows between 1,000 and 7,700 cfs with 14, 16 and 18 foot diameter second tunnels (27 models)
12. Link 4 – Station flows between 1,000 and 7,700 cfs with 14, 16 and 18 foot diameter second tunnels (27 models)
13. Link 3 – Station flows between 1,000 and 7,700 cfs with 20 and 22 foot diameter second tunnels (18 models)
14. Link 3 – Station flow of 7,440 cfs with 25 foot diameter second tunnel
15. Link 3 – Station flow of 7,700 cfs with 25 foot diameter second tunnel