Appendix H

Embarkment Stability Analyses
Material Properties

Soil A
Wt: 120
Cohesion: 0
Phi: 30
Unit Wt. Above WT: 115
Phi-B: 0
Anisotropic Fn: 0

Soil B
Wt: 115
Cohesion: 0
Phi: 28
Unit Wt. Above WT: 110
Phi-B: 0
Anisotropic Fn: 0

Soil C
Wt: 130
Cohesion: 0
Phi: 33
Unit Wt. Above WT: 125
Phi-B: 0
Anisotropic Fn: 0

Title: Brown Bridge Dam Stability Analysis
Comments: Steady State Seepage at Normal Pool Elevation
Name: Station 8+60 steady state normal pool-jdw.gsz
Date: 8/14/2008
Factor of Safety: 1.0
Method: Morgenstern-Price
Material Properties

Soil A
Wt: 120
Cohesion: 0
Phi: 30
Unit Wt. Above WT: 115

Soil B
Wt: 115
Cohesion: 0
Phi: 28
Unit Wt. Above WT: 110

Soil C
Wt: 130
Cohesion: 0
Phi: 33
Unit Wt. Above WT: 125

Seismic Coefficients:
Horizontal: 0.05
Vertical: 0.05

Title: Brown Bridge Dam Stability Analysis
Comments: Steady State Seepage at Normal Pool Elevation w/Seismic
Name: Station 8+60 steady state normal pool seismic.gz
Date: 8/14/2008
Factor of Safety: 0.9
Method: Morgenstern-Price
Material Properties

Soil A
Wt: 120
Cohesion: 0
Phi: 30
Unit Wt. Above WT: 115

Soil B
Wt: 115
Cohesion: 0
Phi: 28
Unit Wt. Above WT: 110

Soil C
Wt: 130
Cohesion: 0
Phi: 33
Unit Wt. Above WT: 125

Title: Brown Bridge Dam Stability Analysis
Comments: Steady State Seepage at Surcharge Pool Elevation
Name: Station 8+60 steady state surcharge pool-jdw.gsz
Date: 8/14/2008

Factor of Safety: 0.8
Method: Morgenstern-Price
Material Properties

Soil A
Wt: 120
Cohesion: 0
Phi: 30
Unit Wt. Above WT: 115

Soil B
Wt: 115
Cohesion: 0
Phi: 28
Unit Wt. Above WT: 110

Soil C
Wt: 130
Cohesion: 0
Phi: 33
Unit Wt. Above WT: 125

Title: Brown Bridge Dam Stability Analysis
Comments: Steady State Seepage after Rapid Drawdown
Name: Station 8160 steady rapid drawdown pool-jdw.gsz
Date: 8/14/2008

Factor of Safety: 1.5
Method: Morgenstern-Price
Appendix I

Operational Scenario Sketches
SECTION THROUGH POWERHOUSE
BROWN BRIDGE DAM

DEPICIENG POSSIBLE DRAWDOWN SCENARIOS