APPENDIX K
REMAINING USABLE STORAGE
Appendix K

Remaining Usable Storage

Figure K-1 Duke and USACE Remaining Usable Storage – NAA / A1
Current Water Withdrawals with Historical Hydrology (1939–2011)

Usable Storage Based on the Following Assumptions

USACE - Guide Curve - Minimum Pool
Includes Russell Storage
Duke Energy
Full Pool - Critical Elevation
Includes Bad Creek Storage
Bad Creek Critical Elevation = 2,150 ft AMSL
Jocassee Critical Elevation = 1,086 ft AMSL*
Keowee Critical Elevation = 778 ft AMSL*

* Critical Elevations do not include allowable pumping volume

Appendix K-1
Figure K-2 Duke and USACE Remaining Usable Storage – A2
Current Water Withdrawals with Historical Hydrology (1939–2011)

Appendix K-2
Figure K-3 Duke and USACE Remaining Usable Storage – A3
Current Water Withdrawals with Historical Hydrology (1939–2011)

Usable Storage Based on the Following Assumptions
- USACE:
  - Guide Curve - Minimum Pool
  - Includes Russell Storage
- Duke Energy:
  - Full Pool - Critical Elevation
  - Includes Bad Creek Storage
  - Bad Creek Critical Elevation = 2,150 ft AMSL
  - Jocassee Critical Elevation = 1,080 ft AMSL
  - Keowee Critical Elevation = 790 ft AMSL
Figure K-4 Duke and USACE Remaining Usable Storage – A4
Current Water Withdrawals with Historical Hydrology (1939–2011)

Usable Storage Based on the Following Assumptions
- USACE - Guide Curve - Minimum Pool
  Includes Russell Storage
- Duke Energy
  Full Pool - Critical Elevation
  Includes Bad Creek Storage
  Bad Creek Critical Elevation = 2,150 ft AMSL
  Jocassee Critical Elevation = 1,080 ft AMSL
  Keowee Critical Elevation = 790 ft AMSL
Figure K-5 Duke and USACE Remaining Usable Storage – NAA / A1
Future Water Withdrawals with Climate Change Hydrology (1939–2011)

Usable Storage Based on the Following Assumptions

USACE -
  Guide Curve - Minimum Pool
  Includes Russell Storage

Duke Energy
  Full Pool - Critical Elevation
  Includes Bad Creek Storage
  Bad Creek Critical Elevation = 2,150 ft AMSL
  Jocassee Critical Elevation = 1,086 ft AMSL*
  Keowee Critical Elevation = 778 ft AMSL*

* Critical Elevations do not include allowable pumping volume

Appendix K-5
Figure K-6 Duke and USACE Remaining Usable Storage – A2
Future Water Withdrawals with Climate Change Hydrology (1939–2011)

Appendix K-6
Figure K-7 Duke and USACE Remaining Usable Storage – A3
Future Water Withdrawals with Climate Change Hydrology (1939–2011)

Usable Storage Based on the Following Assumptions
USACE -
  Guide Curve - Minimum Pool
  Includes Russell Storage
Duke Energy
  Full Pool - Critical Elevation
  Includes Bad Creek Storage
  Bad Creek Critical Elevation = 2,150 ft AMSL
  Jocassee Critical Elevation = 1,080 ft AMSL
  Keowee Critical Elevation = 790 ft AMSL

Appendix K-7
Figure K-8 Duke and USACE Remaining Usable Storage – A4
Future Water Withdrawals with Climate Change Hydrology (1939–2011)

Usable Storage Based on the Following Assumptions

USACE -
  Guide Curve - Minimum Pool
  Includes Russell Storage

Duke Energy
  Full Pool - Critical Elevation
  Includes Bad Creek Storage
  Bad Creek Critical Elevation = 2,150 ft AMSL
  Jocassee Critical Elevation = 1,080 ft AMSL
  Keowee Critical Elevation = 790 ft AMSL

Appendix K-8
Figure K-9 Duke and USACE Remaining Usable Storage with JST Lake Flow Release of 3,800 cfs – NAA / A1
Current Water Withdrawals with Historical Hydrology (1939–2011)
Figure K-10 Duke and USACE Remaining Usable Storage with JST Lake Flow Release of 3,800 cfs – A2
Current Water Withdrawals with Historical Hydrology (1939–2011)

Appendix K-10
Figure K-11 Duke and USACE Remaining Usable Storage with JST Lake Flow Release of 3,800 cfs – A3
Current Water Withdrawals with Historical Hydrology (1939–2011)

Appendix K-11
Appendix K-12 Duke and USACE Remaining Usable Storage with JST Lake Flow Release of 3,800 cfs – A4
Current Water Withdrawals with Historical Hydrology (1939–2011)
Figure K-13 Duke and USACE Remaining Usable Storage with JST Lake Flow Release of 3,800 cfs – NAA / A1
Future Water Withdrawals with Climate Change Hydrology (1939–2011)

Usable Storage Based on the Following Assumptions

USACE -
Guide Curve - Minimum Pool
Includes Russell Storage

Duke Energy
Full Pool - Critical Elevation
Includes Bad Creek Storage
Bad Creek Critical Elevation = 2,150 ft AMSL
Jocassee Critical Elevation = 1,086 ft AMSL*
Keowee Critical Elevation = 778 ft AMSL*

* Critical Elevations do not include allowable pumping volume

Appendix K-13
Figure K-14 Duke and USACE Remaining Usable Storage with JST Lake Flow Release of 3,800 cfs – A2
Future Water Withdrawals with Climate Change Hydrology (1939–2011)

Percent Remaining Usable Storage

Usable Storage Based on the Following Assumptions

USACE -
Guide Curve - Minimum Pool
Includes Russell Storage
Duke Energy
Full Pool - Critical Elevation
Includes Bad Creek Storage
Bad Creek Critical Elevation = 2,150 ft AMSL
Jocassee Critical Elevation = 1,086 ft AMSL*
Keowee Critical Elevation = 778 ft AMSL*

* Critical Elevations do not include allowable pumping volume
Figure K-15 Duke and USACE Remaining Usable Storage with JST Lake Flow Release of 3,800 cfs – A3
Future Water Withdrawals with Climate Change Hydrology (1939–2011)
Figure K-16 Duke and USACE Remaining Usable Storage with JST Lake Flow Release of 3,800 cfs – A4
Future Water Withdrawals with Climate Change Hydrology (1939–2011)

Usable Storage Based on the Following Assumptions

- USACE - Guide Curve - Minimum Pool
  Includes Russell Storage
- Duke Energy
  Full Pool - Critical Elevation
  Includes Bad Creek Storage
  Bad Creek Critical Elevation = 2,150 ft AMSL
  Jocassee Critical Elevation = 1,080 ft AMSL
  Keowee Critical Elevation = 790 ft AMSL