

MARYLAND DEPARTMENT OF THE ENVIRONMENT

1800 Washington Boulevard • Baltimore MD 21230 410-537-3000 • 1-800-633-6101

Martin O'Malley Governor Robert M. Summers, Ph.D. Secretary

Anthony G. Brown Lieutenant Governor

June 17, 2011

CERTIFIED MAIL - 7008 1830 0002 9396 6633 Return Receipt Requested

BROOKFIELD POWER PINEY & DEEP CREEK LLC C/O GLENN NEIPORT, SUPERINTENDENT 2000 RIVER ROAD CLARION, PA 16124

RE:

State Water Appropriation

Permit No. GA1992S009(08)

Revision 08

Dear Mr. Neiport:

Enclosed is your revised State Water Appropriation Permit. This permit reflects the Department's careful consideration of the various beneficial uses at Deep Creek Lake with the goal of balancing the needs of the stakeholders. Brookfield's participation in the stakeholder process and its commitment to complying with the permit is appreciated.

As you know, semi-annual Water Withdrawal Reports are required by this permit. Forms for making these reports will be mailed to you in June and December of each year.

If you have any questions, please contact this office at (410)537-3590.

Sincerely,

JOHN GRACE

Water Supply Program

CC: GARRETT COUNTY HEALTH DEPARTMENT

RANDY GARLETTS, BROOKFIELD POWER PINEY & DEEP CREEK LLC

STATE OF MARYLAND DEPARTMENT OF THE ENVIRONMENT WATER MANAGEMENT ADMINISTRATION

WATER APPROPRIATION AND USE PERMIT

PERMIT NUMBER: GA1992S009(08)

EFFECTIVE DATE:

JUNE 1, 2011

EXPIRATION DATE:

APRIL 1, 2019

FIRST APPROPRIATION: JANUARY 1, 1925

BROOKFIELD POWER PINEY & DEEP CREEK LLC



HEREINAFTER REFERRED TO AS THE "PERMITTEE", IS AUTHORIZED BY THE WATER MANAGEMENT ADMINISTRATION, HEREINAFTER REFERRED TO AS THE "ADMINISTRATION" PURSUANT TO THE PROVISIONS OF TITLE 5 OF THE ENVIRONMENT ARTICLE, ANNOTATED CODE OF MARYLAND (2007 REPLACEMENT VOLUME) AS AMENDED, TO APPROPRIATE AND USE WATERS OF THE STATE SUBJECT TO THE FOLLOWING CONDITIONS:

- ALLOCATION THE WATER WITHDRAWAL GRANTED BY THIS PERMIT IS 1. LIMITED TO: A DAILY AVERAGE OF 94,000,000 GALLONS ON A YEARLY BASIS AND A MAXIMUM DAILY WITHDRAWAL OF 420,000,000 GALLONS.
- 2. USE - THE WATER IS TO BE USED FOR HYDROELECTRIC GENERATION, TEMPERATURE ENHANCEMENT, WHITEWATER BOATING ENHANCEMENT, AND MAINTENANCE OF MINIMUM FLOWS IN THE YOUGHIOGHENY RIVER.
- 3. SOURCE - THE WATER SHALL BE TAKEN FROM DEEP CREEK LAKE.
- LOCATION THE POINT(S) OF WITHDRAWAL SHALL BE LOCATED AT THE EXISTING INTAKE STRUCTURE AT THE DEEP CREEK LAKE DAM, THREE MILES WEST OF THAYERVILLE, GARRETT COUNTY, MARYLAND.

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- FIGHT OF ENTRY THE PERMITTEE SHALL ALLOW AUTHORIZED REPRESENTATIVES OF THE ADMINISTRATION ACCESS TO THE PERMITTEE'S FACILITY TO CONDUCT INSPECTIONS AND EVALUATIONS NECESSARY TO ASSURE COMPLIANCE WITH THE CONDITIONS OF THIS PERMIT. THE PERMITTEE SHALL PROVIDE SUCH ASSISTANCE AS MAY BE NECESSARY TO EFFECTIVELY AND SAFELY CONDUCT SUCH INSPECTIONS AND EVALUATIONS.
- 6. PERMIT REVIEW THE PERMITTEE WILL BE QUERIED EVERY THREE YEARS (TRIENNIAL REVIEW) REGARDING WATER USE UNDER THE TERMS AND CONDITIONS OF THIS PERMIT. FAILURE TO RETURN THE TRIENNIAL REVIEW QUERY WILL RESULT IN SUSPENSION OR REVOCATION OF THIS PERMIT.
- 7. PERMIT RENEWAL THIS PERMIT WILL EXPIRE ON THE DATE INDICATED ON THE FIRST PAGE OF THIS PERMIT. IN ORDER TO RENEW THE PERMIT THE PERMITTEE SHALL FILE A RENEWAL APPLICATION WITH THE ADMINISTRATION NO LATER THAN 45 DAYS PRIOR TO THE EXPIRATION.
- 8. PERMIT SUSPENSION OR REVOCATION THIS PERMIT MAY BE SUSPENDED OR REVOKED BY THE ADMINISTRATION UPON VIOLATION OF THE CONDITIONS OF THIS PERMIT, OR UPON VIOLATION OF ANY REGULATION PROMULGATED PURSUANT TO TITLE 5 OF THE ENVIRONMENT ARTICLE, ANNOTATED CODE OF MARYLAND (1996 REPLACEMENT VOLUME) AS AMENDED.
- 9. CHANGE OF OPERATIONS ANY ANTICIPATED CHANGE IN APPROPRIATION WHICH MAY RESULT IN A NEW OR DIFFERENT USE, QUANTITY, SOURCE, OR PLACE OF USE OF WATER SHALL BE REPORTED TO THE ADMINISTRATION BY THE PERMITTEE BY SUBMISSION OF A NEW APPLICATION.
- 10. ADDITIONAL PERMIT CONDITIONS THE ADMINISTRATION MAY AT ANYTIME (INCLUDING TRIENNIAL PERMIT REVIEW OR WHEN A CHANGE APPLICATION IS SUBMITTED) REVISE ANY CONDITION OF THIS PERMIT OR ADD ADDITIONAL CONDITIONS CONCERNING THE CHARACTER, AMOUNT, MEANS AND MANNER OF THE APPROPRIATION OR USE, WHICH MAY BE NECESSARY TO PROPERLY PROTECT, CONTROL AND MANAGE THE WATER RESOURCES OF THE STATE. CONDITION REVISIONS AND ADDITIONS WILL BE ACCOMPLISHED BY ISSUANCE OF A REVISED PERMIT.
- 11. NON-TRANSFERRABLE THIS PERMIT IS NON-TRANSFERRABLE. A NEW OWNER MAY ACQUIRE AUTHORIZATION TO CONTINUE THIS APPROPRIATION BY FILING A NEW APPLICATION WITH THE ADMINISTRATION. AUTHORIZATION WILL BE ACCOMPLISHED BY ISSUANCE OF A NEW PERMIT.

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- 12. FLOW MEASUREMENT THE PERMITTEE SHALL MEASURE ALL WATER USED UNDER THIS PERMIT BY A METHOD WHICH SHALL BE APPROVED BY THE ADMINISTRATION. THE PERMITTEE SHALL MAINTAIN A DAILY LOG, SUBJECT TO INSPECTION BY AN AUTHORIZED REPRESENTATIVE OF THE ADMINISTRATION.
- 13. WITHDRAWAL REPORTS THE PERMITTEE SHALL SUBMIT TO THE ADMINISTRATION, SEMI-ANNUALLY (JULY-DECEMBER, NO LATER THAN JANUARY 31 AND JANUARY-JUNE, NO LATER THAN JULY 31), WATER USE RECORDS. THESE RECORDS SHALL SHOW THE TOTAL QUANTITY OF WATER RELEASED EACH MONTH UNDER THIS PERMIT.
- 14. RULE BAND AND OPERATION PROTOCOLS THE PERMITTEE SHALL OPERATE THE DEEP CREEK HYDROELECTRIC PROJECT (PROJECT) ACCORDING TO THE PROJECT OPERATING RULES SPECIFIED THROUGHOUT THIS PERMIT SUCH THAT WATER ELEVATIONS IN DEEP CREEK LAKE ARE MAINTAINED WITHIN THE OPERATING RULE BAND EXCEPT THAT EXCURSIONS OF UP TO 0.3 FEET ABOVE THE OPERATING RULE BAND LASTING NOT MORE THAN 21 DAYS ARE ALLOWED FROM MAY THROUGH OCTOBER, AND EXCEPT IN THE EVENT OF UNUSUAL OR EMERGENCY CONDITIONS AS DEFINED BELOW. THE UPPER AND LOWER RULE BANDS ARE THE HIGHEST AND LOWEST DESIRABLE RESERVOIR LEVELS AT THE END OF EACH MONTH. THE UPPER AND LOWER END OF EACH MONTH ARE DEFINED IN THE FOLLOWING TABLE. WHEN LAKE LEVELS ARE ABOVE THE UPPER RULE BAND, THE PERMITTEE MAY RELEASE WATER AS NEEDED TO DRAW DOWN THE LAKE TO A LEVEL WITHIN THE RULE BAND. ELEVATIONS ARE GIVEN IN FEET ABOVE MEAN SEA LEVEL.

PROJECT OPERATING RULE BAND

MONTH	UPPER BAND ELEVATIONS	LOWER BAND ELEVATIONS
JANUARY FEBRUARY MARCH APRIL MAY JUNE JULY AUGUST SEPTEMBER	2457.9 2457.9 2459.5 2461.0 2461.0 2461.0 2461.0 2460.0	2455.0 2456.0 2458.0 2459.6 2460.0 2460.0 2459.0 2459.0 2459.0
OCTOBER NOVEMBER DECEMBER	2458.0 2457.9 2457.9	2456.0 2455.0 2455.0

(A) A SYSTEM EMERGENCY, DEFINED AS MAXIMUM EMERGENCY GENERATION UNDER THE PENNSYLVANIA-NEW JERSEY-MARYLAND INTERCONNECTION (PJM) HIERARCHY OF EMERGENCY ORDERS, OR EMERGENCY LOADING OF SPINNING RESERVE CAPACITY, OR EMERGENCY CONTROL OF TRANSMISSION FACILITY LOADING;

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14. RULE BAND AND OPERATION PROTOCOLS CONT'D

- (B) A SITE EMERGENCY SUCH AS FAILURE OR PROBABLE FAILURE OF THE DAM THAT REQUIRES MAXIMUM RELEASE FOR RAPID DRAWDOWN OF THE RESERVOIR;
- (C) A SITE EMERGENCY OR OTHER FORCED (UNSCHEDULED) OUTAGE REQUIRING SHUTDOWN OF THE INTAKE, POWER TUNNEL, PENSTOCKS, OR GENERATING UNITS, RESULTING IN THE INABILITY TO GENERATE OR TO OPERATE THE PROPOSED MINIMUM RELEASE BYPASS;
- (D) MAINTENANCE OF THE DAM OR REPAIR OF LAKE SHORELINE EROSION WHICH REQUIRES LOWERING OF LAKE LEVEL BELOW THE LOWER RULE BAND TO ALLOW ACCESS OR TO CONTROL INFLOW;
- (E) ACTUAL OR FORECAST EXTRAORDINARILY HIGH RUNOFF OR RAINFALL WHICH REQUIRES UNLIMITED GENERATION IN ORDER TO KEEP THE LAKE LEVEL FROM AVOID SPILLING OVER THE TOP OF THE DAM SPILLWAY.

THE DURATION AND TIMING OF PLANNED OUTAGES SHALL BE APPROVED IN ADVANCE BY THE ADMINISTRATION. IN PROPOSING PLANNED OUTAGES, THE PERMITTEE SHALL DETAIL REASONS WHY THE OUTAGE IS NECESSARY AS WELL AS HOW THE OUTAGE WILL IMPACT THE FISHERY AND WHITEWATER RECREATION IN THE YOUGHIOGHENY RIVER. TO THE EXTENT POSSIBLE, PLANNED OUTAGES SHALL NOT OCCUR DURING MID-APRIL THROUGH MID-OCTOBER.

- 15. LAKE LEVEL MONITORING AND REPORTING THE PERMITTEE SHALL MEASURE AND RECORD THE WATER ELEVATIONS IN THE DEEP CREEK LAKE AT APPROXIMATELY THE SAME TIME EACH DAY. THE PERMITTEE SHALL REPORT THE RESULTS OF WATER-LEVEL MONITORING TO THE ADMINISTRATION ON AN ANNUAL BASIS, AND SHALL MAINTAIN A DAILY LOG OF MEASUREMENTS, SUBJECT TO INSPECTION BY THE ADMINISTRATION.
- 16. TEMPERATURE ENHANCEMENT IN THE YOUGHIOGHENY RIVER THE PERMITTEE SHALL IMPLEMENT A PLAN APPROVED BY THE ADMINISTRATION FOR USING PROJECT OPERATION, OR A COMBINATION OF MINIMUM FLOW RELEASES AND PROJECT OPERATION, TO MAINTAIN WATER TEMPERATURES LESS THAN 25 DEGREES C IN THE YOUGHIOGHENY RIVER BETWEEN THE PROJECT TAILRACE AND SANG RUN, DURING THE MONTHS OF JUNE, JULY, AND AUGUST. THE PLAN MUST INCLUDE A TRIGGERING MECHANISM AND REAL-TIME MONITORING OF RIVER TEMPERATURE. THE PLAN MUST INCLUDE A PROTOCOL FOR PREDICTING TEMPERATURE RELEASES ON THE MORNING OF THE RELEASE, AS EARLY AS THREE HOURS IN ADVANCE. THE PERMITTEE SHALL REPORT TO THE ADMINISTRATION ALL OCCURRENCES OF WATER TEMPERATURES EQUALING

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16. TEMPERATURE ENHANCEMENT IN THE YOUGHIOGHENY RIVER CONT'D

OR EXCEEDING 25 DEGREES C WITHIN 30 DAYS OF THE DATE OF OCCURRENCE, INCLUDING PROPOSED MEASURES OR CHANGES TO THE PLAN TO PRECLUDE FUTURE INCIDENTS WHERE WATER TEMPERATURE EQUALS OR EXCEEDS 25 DEGREES C. THE PERMITTEE SHALL INCLUDE THE RESULTS OF TEMPERATURE MONITORING IN AN ANNUAL REPORT. THE PERMITTEE SHALL, IN CONSULTATION WITH THE ADMINISTRATION, CONTINUE TO REFINE OR REVISE THE PLAN WITH THE OBJECTIVE OF MAINTAINING WATER TEMPERATURES IN THE RIVER BETWEEN THE PROJECT TAILRACE AND SANG RUN BELOW 25 DEGREES C AT ALL TIMES DURING THE MONTHS OF JUNE, JULY AND AUGUST.

MINIMUM FLOW RELEASES - THE PERMITTEE SHALL MAINTAIN AND 17. OPERATE A BYPASS SYSTEM AT THE PROJECT TO MAINTAIN A MINIMUM FLOW OF 40 CFS IN THE YOUGHIOGHENY RIVER DOWNSTREAM OF THE PROJECT TAILRACE. THE MINIMUM FLOW SHALL BE MAINTAINED AT ALL TIMES BELOW THE TAILRACE. A REDUCTION IN THE MINIMUM FLOW BELOW 40 CFS MAY BE REQUESTED OF THE ADMINISTRATION WHEN RESERVOIR LEVELS ARE ONE FOOT OR MORE BELOW THE LOWER RULE THE PERMITTEE SHALL ESTIMATE FLOW IN THE YOUGHIOGHENY RIVER IMMEDIATELY BELOW THE TAILRACE AT APPROXIMATELY THE SAME TIME EACH DAY. MEASUREMENTS TAKEN BY THE PERMITTEE IN MARCH 2011 INDICATE THAT 20.7 CFS FLOWED IN THE TAILRACE WHEN THE BYPASS SYSTEM WAS CLOSED, BOTH PENSTOCKS WERE OPEN, WICKET GATES WERE CLOSED AND NO POWER GENERATION WAS OCCURRING. THE PERMITTEE SHALL USE THE BEST AVAILABLE ESTIMATE OF CURRENT LEAKAGE THROUGH THE WICKET GATES TO DETERMINE THE QUANTITY OF BYPASS FLOW NEEDED TO MEET THE 40 CFS FLOW IN THE YOUGHIOGHENY RIVER BELOW THE TAILRACE. A REPORT OF FLOW ESTIMATES AND THE OCCURRENCE OF BYPASS RELEASES SHALL BE SUBMITTED TO THE ADMINISTRATION IN AN ANNUAL REPORT, AND A DAILY LOG OF SUCH RELEASES SHALL BE MAINTAINED, SUBJECT TO INSPECTION BY AN AUTHORIZED REPRESENTATIVE OF THE ADMINISTRATION.

THE PERMITTEE SHALL PROVIDE A CONTINUOUS FLOW OF AT LEAST 9 CFS IN THE TAILRACE (WICKET GATE LOSS) DURING THE MONTHS OF JUNE, JULY, AUGUST, AND SEPTEMBER EVEN WHEN THERE IS NO MINIMUM BYPASS FLOW AS REQUIRED BY THIS CONDITION.

THE PERMITTEE SHALL MEASURE FLOW IN THE TAILRACE, FOLLOWING METHODS OF THE UNITED STATES GEOLOGICAL SURVEY (USGS), DURING THE MONTHS OF JUNE, AUGUST, AND OCTOBER 2011. FLOW SHALL BE MEASURED WHEN NO POWER GENERATION IS OCCURRING, THE WICKET GATES ARE CLOSED, THE BYPASS FLOW VALVE IS CLOSED, WITH ONE PENSTOCK VALVE OPEN, AND THEN WITH BOTH PENSTOCK VALVES ARE OPEN.

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17. MINIMUM FLOW RELEASES CONT'D

THE PERMITTEE SHALL REPORT THE RESULTS OF THE MEASUREMENTS TO THE ADMINISTRATION WITHIN TWO WEEKS OF THE MEASUREMENTS WITH ALL SUPPORTING RAW DATA AND CALCULATIONS, AND DOCUMENTATION OF VELOCITY METER USED AND VALVE POSITIONS.

BY DECEMBER 31, 2011 THE PERMITTEE SHALL SUBMIT A PLAN TO THE ADMINISTRATION FOR REVIEW AND APPROVAL OUTLINING BOTH NEAR TERM AND LONGER TERM MEASURES THAT THE PERMITTEE WILL TAKE TO MINIMIZE THE ADVERSE IMPACTS OF WICKET GATE LOSSES ON LAKE LEVELS WHILE MAINTAINING A REQUIRED MINIMUM DISCHARGE OF 9 CFS IN THE TAILRACE.

18. DISSOLVED OXYGEN MITIGATION - THE PERMITTEE SHALL MAINTAIN AND OPERATE A TAILRACE WEIR DESIGNED TO INCREASE DISSOLVED OXYGEN LEVELS IN ALL PROJECT DISCHARGES ABOVE MARYLAND WATER QUALITY STANDARDS AS OUTLINED IN COMAR 26.08.02 (5 PPM MINIMUM, 6 PPM DAILY AVERAGE). THE PERMITTEE SHALL MONITOR DISSOLVED OXYGEN LEVELS OF PROJECT DISCHARGES BY A METHOD APPROVED BY THE ADMINISTRATION DURING JUNE 1 TO OCTOBER 1. THE RESULTS OF DISSOLVED OXYGEN MONITORING SHALL BE SUBMITTED TO THE ADMINISTRATION IN AN ANNUAL REPORT. THE PERMITTEE SHALL MAINTAIN A LOG OF MEASUREMENTS, SUBJECT TO INSPECTION BY AN AUTHORIZED REPRESENTATIVE OF THE ADMINISTRATION.

19. RELEASES FOR WHITEWATER RECREATION

A) WHITEWATER RELEASES. THERE ARE TWO TYPES OF SCHEDULED WHITEWATER RELEASES (WWR); STANDARD AND SPECIAL RELEASES. ALL WWR ARE SUBJECT TO THE RULE BAND AND OPERATION REQUIREMENTS IN CONDITION 14, THE TEMPERATURE ENHANCEMENT RELEASE (TER) REQUIREMENTS IN CONDITION 16 AND THE PARAMETERS DEFINED BELOW IN PARAGRAPH B. THE INTENT OF WWR IS TO ENHANCE RECREATIONAL WHITEWATER ENJOYMENT FROM THE PROJECT TAILRACE TO FRIENDSVILLE.

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19. RELEASES FOR WHITEWATER RECREATION CONT'D

I) STANDARD WWR. WITH THE EXCEPTION OF THE SPECIAL WWR CONDITIONS IN PARAGRAPH II) BELOW, STANDARD WWR WILL OCCUR ON SUNDAYS, MONDAYS, FRIDAYS, AND SATURDAYS BETWEEN APRIL 15TH AND OCTOBER 15TH IN ACCORDANCE WITH THE FOLLOWING TABLE AND MAY BE MODIFIED BY ITEMS II) AND III) BELOW.

MONTH APRIL	SUNDAY NONE	MONDAY NONE	FRIDAY ALL FRIDAYS AFTER APRIL 14TH (1000 HR TO 1300 HR)	<u>SATURDAY</u> NONE
MAY	NONE	1ST TWO MONDAYS (1000 HR TO 1300 HR)	1ST THREE FRIDAYS (1000 HR TO 1300 HR)	1ST SATURDAY (1000 HR TO 1300 HR)
MEMORIAL DAY WEEKEND	ODD NUMBERED YEARS (1000 HR TO 1300 HR)	ODD NUMBERED YEARS (1000 HR TO 1300 HR)	EVEN NUMBERED YEARS (1000 HR TO 1300 HR)	EVEN NUMBERED YEARS (1000 HR TO 1300 HR)
JUNE	NONE	EVERY MONDAY (1100 HR TO 1400 HR)	EVERY FRIDAY (1100 HR TO 1400 HR)	LAST TWO SATURDAYS (1100 HR TO 1400 HR)
JULY	NONE	EVERY MONDAY (1100 HR TO 1400 HR)	EVERY FRIDAY (1100 HR TO 1400 HR)	EVERY SATURDAY (1100 HR TO 1400 HR) (see also Special WWR below)
AUGUST	NONE	EVERY MONDAY (1100 HR TO 1400 HR)	EVERY FRIDAY (1100 HR TO 1400 HR)	EVERY SATURDAY (1100 HR TO 1400 HR)
SEPTEMBER	NONE	EVERY MONDAY (1000 HR TO 1300 HR)	EVERY FRIDAY (1000 HR TO 1300 HR)	FIRST TWO SATURDAYS (1000 HR TO 1300 HR)
OCTOBER	NONE	ALL MONDAYS BEFORE OCTOBER 16TH (1000 HR TO 1300 HR)	ALL FRIDAYS BEFORE OCTOBER 16TH (1000 HR TO 1300 HR)	FIRST SATURDAY (1000 HR TO 1300 HR)

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19. RELEASES FOR WHITEWATER RECREATION CONT'D

- II) SPECIAL WWR. SPECIAL WWR MUST BE REQUESTED IN WRITING TO THE ADMINISTRATION NO LATER THAN 30 CALENDAR DAYS BEFORE THE SPECIAL WWR AND WILL, AT A MINIMUM, INCLUDE:
 - + ANNUAL TEAM FRIENDSVILLE UPPER YOUGH RACE WWR.
 THE FOURTH SATURDAY WWR IN JULY WILL BE AN
 EXTENDED SIX (6) HOUR CONTINUOUS RELEASE
 BETWEEN 1100 HOURS AND 1700 HOURS TO
 ACCOMMODATE THE ANNUAL TEAM FRIENDSVILLE UPPER
 YOUGH RACE. THE ANNUAL TEAM FRIENDSVILLE
 UPPER YOUGH RACE WWR IS CONTINGENT ON THE LAKE
 LEVEL ELEVATION BEING HIGHER THAN THE ONE (1)
 FOOT BELOW THE LOWER RULE BAND ON THE DAY OF
 THE WWR.
 - + GAULEY WEEK WWR. GAULEY WEEK RELEASES INCLUDE CONTINUOUS THREE (3) HOUR RELEASES FROM 1000 HOURS TO 1300 HOURS ON TUESDAY, WEDNESDAY, AND THURSDAY OF THE WEEK BEFORE THE GAULEY FESTIVAL WEEKEND IN SUMMERSVILLE, WEST VIRGINIA. THE GAULEY FESTIVAL WEEKEND IS TYPICALLY SCHEDULED DURING THE SECOND HALF OF SEPTEMBER. EACH DAY OF THE GAULEY WEEK WWR IS CONTINGENT ON THE LAKE LEVEL ELEVATION BEING HIGHER THAN THE LOWER RULE BAND.
- III) SYNCHRONIZATION OF WWR WITH TER. ON SCHEDULED WWR DAYS THE PERMITTEE IS NOT REQUIRED TO RUN THE TER PROTOCOL, UNLESS THE WWR WOULD NOT OCCUR DUE TO LOW LAKE LEVELS.
- B) FROM APRIL 15TH THROUGH OCTOBER 15TH, THE FOLLOWING ADDITIONAL OPERATING RULES WILL ALSO BE IN EFFECT:
 - I) THE PERMITTEE SHALL NOT OPERATE THE PROJECT FOR HYDROELECTRIC GENERATION BEFORE 1300 HOURS WHEN NATURAL FLOWS AS MEASURED AT FRIENDSVILLE USGS GAGE 03076500 (FRIENDSVILLE) ARE BETWEEN 1300 AND 2500 CFS UNLESS AN UNUSUAL OR EMERGENCY CONDITION EXISTS, OR LAKE EXCEEDS THE UPPER RULE BAND.

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19. RELEASES FOR WHITEWATER RECREATION CONT'D

- II) WHEN NATURAL FLOWS AS MEASURED AT FRIENDSVILLE ARE GREATER THAN 600, BUT LESS THAN 1300 CFS, AND LAKE ELEVATION IS WITHIN THE RULE BANDS SPECIFIED IN CONDITION 14, POWERHOUSE DISCHARGE SHALL BE NO GREATER THAN THE MAXIMUM DISCHARGE OF ONE TURBINE FOR THE FIRST THREE (3) HOURS OF SCHEDULED GENERATION.
- III) DURING WEEKS THAT CONTAIN A SATURDAY RELEASE, THE PERMITTEE SHALL MAKE RELEASES ON SATURDAYS WHEN THE LAKE LEVEL IS HIGHER THAN ELEVATION THAT IS ONE FOOT BELOW THE LOWER RULE BAND, AND ON SUNDAYS, MONDAYS AND FRIDAYS WHEN THE LAKE LEVEL IS ABOVE THE LOWER RULE BAND.
- IV) DURING WEEKS THAT DO NOT CONTAIN A SATURDAY RELEASE, THE PERMITTEE SHALL MAKE RELEASES ON FRIDAYS WHEN THE LAKE LEVEL IS HIGHER THAN AN ELEVATION THAT IS ONE FOOT BELOW THE LOWER RULE BAND, AND ON SUNDAYS AND MONDAYS WHEN THE LAKE LEVEL IS ABOVE THE LOWER RULE BAND.
- V) THE PERMITTEE MAY VARY POWERHOUSE DISCHARGE DURING ANY WWR IN ACCORDANCE WITH EITHER OF THE FOLLOWING TWO APPROACHES EXCEPT DURING THE ANNUAL TEAM FRIENDSVILLE UPPER YOUGH RACE WWR.
 - (1) 3RD HOUR REGULATION APPROACH
 - HHEN NATURAL FLOW AS MEASURED AT FRIENDSVILLE IS LESS THAN 600 CFS, POWERHOUSE DISCHARGE MAY VARY BETWEEN 320 CFS AND MAXIMUM DISCHARGE OF TWO TURBINES DURING THE THIRD HOUR OF ANY WWR SO LONG AS POWERHOUSE DISCHARGE DURING THE FIRST TWO HOURS OF THE WWR IS HELD CONSTANT AT MAXIMUM DISCHARGE OF TWO TURBINES.
 - HOUR OF ANY WWR SO LONG AS POWER HOURS OF THE WWR IS HELD CONSTANT AT MAXIMUM DISCHARGE DISCHARGE DISCHARGE OF ONE TURBINE DURING THE THIRD HOUR OF ANY WWR SO LONG AS POWER HOUSE DISCHARGE DURING THE FIRST TWO HOURS OF THE WWR IS HELD CONSTANT AT MAXIMUM DISCHARGE OF ONE TURBINE.

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19. RELEASES FOR WHITEWATER RECREATION CONT'D

- (2) ALL HOUR REGULATION APPROACH.
 - + WHEN NATURAL FLOW AS MEASURED AT FRIENDSVILLE IS LESS THAN OR EQUAL TO 300 CFS, POWERHOUSE DISCHARGE WILL BE HELD CONSTANT AT MAXIMUM DISCHARGE OF TWO TURBINES FOR ALL THREE HOURS OF ANY WWR.
 - + WHEN NATURAL FLOW AS MEASURED AT FRIENDSVILLE IS BETWEEN 300 AND 600 CFS, POWERHOUSE DISCHARGE MAY VARY BETWEEN 320 AND MAXIMUM DISCHARGE OF TWO TURBINES DURING ANY PART OF ANY THREE HOUR WWR.
 - + WHEN NATURAL FLOW AS MEASURED AT FRIENDSVILLE IS GREATER THAN 600 CFS BUT LESS THAN 1300 CFS, POWERHOUSE DISCHARGE MAY VARY BETWEEN 220 CFS AND MAXIMUM DISCHARGE OF ONE TURBINE DURING ANY PART OF ANY THREE HOUR WWR.
- 20. ANNOUNCEMENT OF EXPECTED RELEASES ON EACH THURSDAY, THE PERMITTEE SHALL PLACE ON A RECORDED MESSAGE ACCESSIBLE TO THE PUBLIC BY TELEPHONE, A FORECAST OF EXPECTED RELEASES FOR THE FOLLOWING WEEK. EACH MORNING, BETWEEN 0700 AND 0800 HOURS, THE PERMITTEE SHALL PLACE ON THE RECORDED MESSAGE INFORMATION ON THE SCHEDULED RELEASES FOR THE NEXT 48 HOURS.
- 21. ZEBRA MUSSEL MONITORING THE PERMITTEE SHALL IMPLEMENT A ZEBRA MUSSEL (DREISSENA POLYMORPHA) MONITORING PROGRAM APPROVED BY THE ADMINISTRATION. THE RESULTS OF SUCH MONITORING SHALL BE SUBMITTED IN AN ANNUAL REPORT.
- 22. NOTICE OF GENERATION RELEASES AT STRATEGIC LOCATIONS, SELECTED IN CONSULTATION WITH THE ADMINISTRATION AND INCLUDING THE SANG RUN AND HOYES RUN ACCESS AREAS, THE PERMITTEE SHALL PROMINENTLY DISPLAY WARNING NOTICES REGARDING THE HAZARD OF RAPID WATER LEVEL FLUCTUATIONS ASSOCIATED WITH WATER RELEASES FROM DEEP CREEK LAKE.

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- 23. ANNUAL REPORT THE PERMITTEE SHALL SUBMIT AN ANNUAL REPORT TO THE ADMINISTRATION NO LATER THAN JANUARY 31 OF EACH YEAR. THE REPORT SHALL INCLUDE THE FOLLOWING DATA FOR THE PREVIOUS CALENDAR YEAR:
 - A) LAKE LEVEL MONITORING (CONDITION 15);
 - B) TEMPERATURE MONITORING (CONDITION 16);
 - C) MINIMUM FLOW RELEASE MONITORING (CONDITION 17);
 - D) DISSOLVED OXYGEN MONITORING (CONDITION 18);
 - E) RELEASES UNSUITABLE FOR WHITEWATER RECREATION (CONDITION 19);
 - F) ZEBRA MUSSEL MONITORING (CONDITION 21).
- 24. PERMIT SUPERSESSION THIS PERMIT HAS BEEN REVIEWED AND REVISED AND SUPERSEDES THE APPROPRIATION AND USE GRANTED BY THE FOLLOWING PRIOR PERMIT ISSUED TO:

 BROOKFIELD POWER PINEY AND DEEP CREEK LLC ON APRIL 27, 2005 (GA1992S009(07))

BY AUTHORITY OF THE DIRECTOR WATER MANAGEMENT ADMINISTRATION

John W. Grace, Chief

SOURCE PROTECTION AND APPROPRIATION DIV