

Appalachian Power Company
Kick Off Agency Meeting
September 30, 2009
9:00 am
Charleston, WV

Attendees:

In Person:

Mike Hreben, Kleinschmidt Associates
Kerry Bledsoe, WVDNR
Bruce Harvey, HRC, Inc.
Alan Gaulke, AEPSC/Appalachian
Bill Green, S&ME
Lyle Bennett, WVDEP
Liz Parcell, Appalachian
Shane Boring, Kleinschmidt Associates
Teresa Rogers, Appalachian
Zack Brown (Regional Biologist), WVDNR

On Phone:

Kim Carter, FERC
Brandi Sangunett, FERC
Jennifer Adams, FERC
Janet Hutzel, FERC
Allan Creamer, FERC

Notes:

Introduction

- Teresa Rogers provided introduction of study purpose and steps completed to date
- Initial Study Plan, Revised Study Plan submitted to FERC
- Study Plan Determination issued by FERC
- Water quality study was started prior to the FERC study plan determination
- Purpose of meeting is to get agencies together with the consulting firms conducting the studies
- Kleinschmidt and its subconsultants (S&ME and Harvey Research and Consulting) are conducting all studies with the exception of Water Quality which is being conducted by Normandeau Associates.
- Mike Hreben, Kleinschmidt's Project Manager provided the following information:
 - Introduction of study implementation and Kleinschmidt Associates relevant experience.
 - An overview of the two Projects (three developments). Licenses expire January 31, 2014. All three developments are on existing USACE locks and dams. USACE controls the flow – run of river projects.

- An overview of the process plan and schedule including milestones accomplished to date and future tasks.
- A brief discussion of license application efforts required– particularly Exhibit E.

Cultural Resources Study

- Bill Green the lead researcher for the Cultural Resources Study discussed S&ME, their Cultural Resources Division accomplishments and representative projects. He also provided overview of Cultural Resources Study (goals, methods and deliverables). Purpose of study is to review and investigate archaeological resources and NRHP review and effects of projects on these resources. Potentially develop an HPMP, as well.
- Bill Green and Bruce Harvey along with Appalachian staff will be meeting with the SHPO later today to review study plan.
- Janet Hutzel (FERC) – Eastern Band of Cherokee Indians and USACE are interested in Cultural Resources Study, please include them in correspondence. After contact SHPO, will you contact the tribes? Response from Bill Green and Bruce Harvey was yes. FERC staff can review draft HPMP's if necessary.
- Bruce Harvey mentioned that they will coordinate with the USACE to have a primary point of contact for site visits, etc.

Fish Entrainment/Impingement Study

- Shane Boring (Kleinschmidt) discussed the Fish Entrainment study (goals, methods and deliverables). Shane mentioned that he will be coordinating with agencies on species of interest and any available data on fish species in the Kanawha River. He will consult with Appalachian staff regarding any documented evidence of fish entrainment or fish kills at the 3 developments. He will also be coordinating with on-site staff to conduct intake velocity measurements.
- Zack Brown confirmed that there is regional fish data available.
- Mike Hreben mentioned that one of the units is being replaced at the Marmet facility. Would like to conduct the velocity measurements once the unit is installed. They are targeting the spring for field measurements of flow velocities.
- Mike Hreben clarified that we are investigating both entrainment rates and turbine mortality rates. The mortality rate estimates will be made by species and life stage (size based) and look to the agencies for clarification of species of interest.
- Alan Gaulke questioned how important it is to have data sorted by species and size. Entrainment tends to be dominated by small fish (young of the year fish) and is greatly influenced by year class strength, which in turn is largely controlled by environmental conditions. Mike Hreben responded that we can look at frequency length distribution at comparable facilities.
- Kerry Bledsoe confirmed that those kinds of questions are answered with a netting study, and voiced concerns regarding how this will be accomplished with a desktop study. Mike Hreben responded that it would not be practical to independently evaluate every single species but guilds could be evaluated. Kerry Bledsoe stated that he does not consider this a scientific study. However, WVDNR has already signed off on it but won't be comfortable with it until they see the results.

- Kerry Bledsoe clarified that WVDNR will be concerned with all species, however, it was acceptable to lump species into guilds such as suckers. Kerry did not want walleye, paddlefish, catfish, and shovelnose sturgeon lumped with other species.
- Mike Hreben clarified that the analyses they propose conducting is scientific but not empirical. Regardless, the results would provide an estimate of entrainment and entrainment mortality. He further cautioned that entrainment study results, whether desktop or empirical, do not directly translate to fishery impacts.
- Alan Gaulke stated that water intakes of similar configuration can provide valuable information on representation of fish sizes, frequencies and species that would be entrained. Kanawha River Plant recently completed a 316(b) study for the cooling water intake that could provide some useful information.
- Kerry Bledsoe is concerned that the Kanawha River Plant data might not be representative if the intake velocities are different and the configurations are different. Alan Gaulke responded that using Kanawha River projects, whether they are hydro or not, would provide a good indication of species distribution and frequencies.
- Kerry Bledsoe will provide the list of species in the Kanawha River that would likely occur and are of concern for impingement and entrainment.
- Mike Hreben clarified that the purpose of this meeting is to clarify agency concerns early and incorporate them into the study plan implementation.
- Kerry Bledsoe questions references for turbine blade strike probability. Mike Hreben responded that the equation comes from Frankie, *et al.* most recently.
- Allan Creamer (FERC) wasn't in the room for the discussion of fish entrainment study. Wanted a review of the issues raised by the agencies. Mike Hreben responded that we would coordinate with WVDNR for data from other facilities and species of concern. Kerry Bledsoe's initial response was all species in the river. Mike Hreben clarified that we would lump some species into guilds. Alan Gaulke had brought up availability of 316(b) entrainment and impingement study data from the Kanawha River Plant for the Kanawha River hydro projects entrainment mortality analyses.
- Alan Creamer asked about issues with the type of study. Mike Hreben and Kerry Bledsoe clarified that WVDNR would be more comfortable with a netting study but have signed off on the desktop study. Kerry Bledsoe is unaware of any literature evaluating the efficacy of desktop entrainment studies so he has concerns about the results. Not sure how the fishery will be evaluated without quantitative sampling. Alan Creamer indicated that desktop entrainment studies are used quite often and provide good information. Entrainment studies provide numbers of fish but does not answer the question of the impact to the fishery overall, which would require multi-year studies which are not feasible in the relicensing timeframe. After the desktop study is done, we can revisit for the second year of studies if warranted.
- Kerry Bledsoe indicated that other states have accepted desk top assessments of fish entrainment mortality, he just wanted to indicate his concern with the methodology.

Transmission Line Corridor Study -

- Mike Hreben filled in for Nick Morgan (Kleinschmidt) who is conducting the Transmission Corridor Study.
- The first step of the study will be to clarify the study area – where the transmission line ends and the distribution begins.

- The study will identify wetlands, RTE species (Virginia spirea, running buffalo clover, bat hibernacula, etc). Will use GIS to georeference identified resources. Literature review of historic species, sensitivities and habitat needs. Largely survey work involving a field crew surveying corridor.
- Kim Carter (FERC) does not need to be there for identification of transmission line.
- Kerry Bledsoe questioned whether the study area was identified in study plan, etc. Mike Hreben stated that there needs to be clarification on the distinction. Teresa Rogers clarified that we need to follow FERC's definition – line to substation is not necessarily the distinction.
- Kerry Bledsoe stated that WV does not have state endangered species but has species of special concern and would like those included.
- Alan Gaulke questioned whether WV has database of where Indiana bats have been sighted and known to be roosting. Alan Gaulke clarified that bat study has not been proposed (mist nets, etc). Mike Hreben clarified that bat habitats will be noted during the survey work.
- Jennifer Adams (FERC) – Virginia spirea was included because FERC referenced USFWS and WV websites for distribution information. Made determination based on those in the absence of letters from USFWS stating what species are likely to occur. Regarding bats, study plan determination explains that WVDNR and literature review should be conducted to identify potential bat habitat near the project boundary. If something is found, might determine that a second study season might be necessary.
- Kerry Bledsoe indicated that WVDNR conducts bat surveys fairly routinely. Kerry Bledsoe will provide that data to us.
- Jennifer Adams (FERC) suggested referring to the gray literature and universities for data.

Recreation Study -

- Kelly Maloney (Kleinschmidt) provided an overview of study goals and objectives – overview of regional and project recreation opportunities and use, visitor preferences and characteristics, angler creel data (harvest, catch, etc.).
- Kelly Maloney provided overview of the three recreation sites – tailwater angling facilities at each development. Winfield has its own parking area, London and Marmet use parking areas that are also used by Appalachian staff. Sites generally consist of a stairway and catwalk to tailrace angling piers. Expect that use is predominantly, if not entirely, anglers.
- Kelly Maloney and Teresa Rogers provided update on the closure of tail water fishing access London. Previous access was available via small roadside parking facility and pedestrian bridge to the site. Pedestrian bridge was deemed unsafe and closed. Informal access was available from the development road but this road traverses CSX lands. Appalachian officially closed the recreation site until formal easement could be obtained for access across this road. Appalachian is working on resolving this issue and is hopeful that this site will be reopened in April 2010.
- Kelly Maloney discussed methodology – vehicle traffic counters, vehicle spot counts, angler counts, exit surveys, and literature review.

- Kelly Maloney discussed slight modifications from original study plan. Vehicle counters will be deployed at Winfield only as this site has a separate parking facility. Not feasible at London and Marmet because access is shared by project staff.
- Vehicle spot counts by clerk will be increased from 20 days/season to be conducted in conjunction with the angler survey – 5 weekdays and 5 weekend days/month. Counts will be conducted 4 times per day. Will be used to develop use estimates at London and Marmet and as a spot check for Winfield.
- Visitors and creel surveys collect same information regarding user characteristics and preferences so they will be combined with a screener question (Did you fish at this site today?) to start creel survey.
- Zack Brown indicated that there is a significant walleye fishery in the winter. Would like the survey extended to the winter season. Mike Hreben indicated that we could evaluate that in the fall. Kelly Maloney suggested keeping traffic counter deployed at Winfield year round to provide an estimate of winter use; however, creel data would not be collected. Zack Brown is interested in creel data in the winter.

Water Quality Study

- Teresa Rogers provided update of Water Quality Study. Normandeau met with agencies to determine appropriate monitoring sites. Normandeau has been sending the data out to the agencies periodically. There have been very minor equipment issues but the study seems to be going smoothly.

Wrap Up

- Initial Study Report for all studies is due June 25, 2010.
- Initial Study Plan Meeting will be week of July 12 2010.