



## Schoharie County Board Of Supervisors

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### **Schoharie County Relicensing Committee (SCRC) Comments to NYPA Initial Study Report (ISR) Blenheim-Gilboa Pumped Storage Project (FERC Project Number: 2685-026)**

**April 7, 2016**

The Schoharie County Relicensing Committee (SCRC) requests the following comments / recommendations be considered for inclusion / modification to the NYPA ISR(s).

Secretary Kimberly D. Bose  
Federal Energy Regulatory Commission  
888 First St., N.E.  
Washington, DC 20426  
FERC Docket #P-2685-026

Dear Secretary Bose,

#### **1. Effects of Project Operations on Downstream Flooding:**

Enclosed is a response to the New York Power Authority (NYPA) Initial Study Report, Section 2.5, pages 27-33, entitled "" being prepared by NYPA as a component of their license application. This paper is being submitted on behalf of the Schoharie County Board of Supervisors, the legislative body of the host county of the Blenheim/Gilboa Pumped Storage Project #2685.

Response to Section 2.5.2 STUDY OBJECTIVES. The Applicant (NYPA) is urged to take into consideration the following actions performed by the New York City Department of Environmental Protection (NYCDEP) owns and operators of Gilboa Dam and Schoharie Reservoir, located 5 miles upstream of the Blenheim/Gilboa Pumped Storage Project, (B/G). In action to enhance the Factor of Safety (FOS) quotient for the 1,324' long concrete spillway at ~665' long earthen dam, the NYCDEP improved this infrastructure sufficiently to the extent that can safely pass a design flood of 312,000 CFS. This is double the USGS .02 or "500 year" flood at Gilboa, USGS#135101, which is estimated to be 153,000 CFS. The 312,000 CFS design flood represents a doubling of the .02 event and approximates the hypothetical "1,000 year" flood. The drainage basin upstream of USGS gage, #135101 is 314 square miles.

The current design flood for Blenheim/Gilboa is either 165,000 CFS or 174,099 CFS. The reason for uncertainty regarding the actual design flood volume at Blenheim/Gilboa is conflicting data appearing on NYPA documents. The Schoharie County Board of Supervisors strongly urges NYPA to modify their earthen dam impounding the Lower Reservoir at Blenheim/Gilboa so as to be capable of passing a design flood greater than 174,099 CFS. The drainage basin upstream of Blenheim/Gilboa is 356 square miles. This 8% larger than that of the Gilboa Dam and Schoharie Reservoir, yet its design flood is 44% lower than that of the Gilboa Dam.

Two serious deficiencies were noted on Figure 2.5.3.1: entitled "Geographic Scope", they are as follows:

1. The failure to include the 29 miles of the main stem Schoharie Creek and its major tributary, the Batavia Kill, upstream of the Gilboa Dam and Schoharie Reservoir. The Batavia Kill drainage basin is 68.8 square miles in area. It is located in the "High Peaks" of the Catskill Mountains and is a very productive water source. Both the Schoharie and Batavia Kill should be included in the proposed HEC-RAS analysis. To confine the HEC-RAS analysis solely to the area downstream of the Gilboa Dam, is to act as if the only drainage area that impacts Blenheim/Gilboa is the mere 42 square mile basin upstream of the Lower Reservoir and the Gilboa Dam. During the Hurricane Irene induced flood of August 28, 2011 c.6" of rain fell between the Gilboa Dam and Blenheim/Gilboa, in the aforementioned 42 square mile basin. Upstream of Prattsville, NY, in the High Peaks of the Catskills, more than twice that amount of precipitation occurred. This fact calls into question the validity of the site specific probable maximum precipitation estimates prepared for NYPA by RJ Associates in 2009. Any estimate of the PMP that does not include the TOTAL CATCHMENT of Blenheim/Gilboa is potentially dangerous to lives and property downstream of the "Power Project".
2. By predicating their hydrologic focus solely in Schoharie County, the Applicant has overlooked the presence of three "High Hazard" Schoharie Basin Dams. The dams being referred to are the C.D. Lane, Nauvo Road and Mitchell Hollow Flood Control Structures at the headwaters of the Batavia Kill. These dams are not shown on Figure 2.5.3-1, page 28 of the Initial Study Report. These dams were built in response to two deadly hurricane induced floods that occurred in 1955 and 1960. They were designed to capture runoff from a 1 or "100 year" flood. A copy of the Batavia Kill Stream Management Plan accompanies this submission. \*(please refer to attachment #2) During the hurricane induced flood of August 28, 2011, the emergency auxiliary spillways of the three flood control dams became active, and as they were designed for a 1 flood, or 100 year recurrence interval event, the dams sustained severe structural damage. As the serious breaches occurred in the 3 dams nearly simultaneously, a sudden surge of water passed through the Batavia Kill enroute to Prattsville, the Schoharie Reservoir, Blenheim/Gilboa etc. This sudden surge is recorded in the 120,000 CFS peak flow at USGS gage #13500 Prattsville. The .02 or "500 year" flood estimate for this site is 99,100 CFS. To put in perspective, the largest measured discharge in the

Hudson River at USGS gage #133574 is 120,000 CFS. The drainage basin for this gage is, 4,606 square miles. The gage at Prattsville measures the discharge of a 237 square mile basin. The failure of NYPA to include such a productive catchment within its analysis of downstream flooding is perplexing. Flood routing and HEC-RAS analysis of the upper reaches of the Schoharie Creek and Schoharie Reservoir should be conducted by the Applicant.

CC: Regional Director FERC  
New York Regional Office  
19 West 34<sup>th</sup> Street  
Suite 400  
New York, NY 10001-3006

## **2. Historic Structures Survey and Phase 1A Archaeological Survey / Study:**

A. The SCRC maintains the scope and Area of Project Affect (APE) remains overly restrictive to the NYPA BG property only. This study should also include structures / archaeological sites that could be impacted by BG operations downstream in the event of a NYPA dam failure or any other such related event / operation(s), including tainter gate failure(s), etc. on the Schoharie Valley and beyond. Such structures and sites are located primarily in the established flood plain which could be expanded with the inclusion of a 1,000 year flood event as mentioned in the Effect of Project Operations on Downstream Flooding comments. The SCRC requests that the Historic Structures Survey / Archaeological Survey / Study be expanded to include the areas downstream in the Schoharie Valley impacted by such a 1,000 year flood event and / or NYPA BG facility dam(s) failure.

## **3. Fish Entrainment / Protection Assessment Study:**

A. The SCRC offers no further comment relative to the Fish Entrainment / Protection study.

## **4. Socio-Economics and the Effect of the Tax-Exempt Status of the Facility on the local and neighboring communities:**

A. The SCRC does not feel the effect(s) of the facility operations should be expanded to include the entire State of New York. Instead, the Area of Potential Effect (APE), and in this case potentially negative socio-economic effects, should be restricted to the host communities, neighboring communities and County of Schoharie where the BG project is sited. NYPA should not expand this APE in order to homogenize any negative effects in this case where in other studies has strictly limited the APE. The methodology should remain consistent and not be manipulated in this case to take advantage of a greater scope / area of potential benefit while limiting the area of potential negative impact where NYPA may see it to their advantage to do so.

Accordingly, the SCRC requests the socioeconomic effects of the tax-exempt status of the NYPA BG facility and related NYPA operations be limited to Schoharie County and the local, neighboring and host communities.

**B.** The SCRC requests that an accurate and complete tax / value assessment of the BG Facility be conducted in order to establish an accurate baseline of the project's value in order to calculate the effect of its tax-exempt effect(s). This seems like an obvious requirement the study should address and include.

Due to the highly specialized nature and complexity of the NYPA BG Facility / Operations it is necessary to contract a firm whose expertise lies in the evaluation / assessment of energy facilities such as the NYPA BG facility. Clearly the host and neighboring communities do not possess such expertise via the local assessor(s). Further, since the NYPA BG facility has been tax-exempt for some fifty (50) years or so there was no requirement to provide such an assessment on the part of the Town nor County. The expense of such a professional and expert assessment should be borne by NYPA. The firm chosen for such an assessment should be agreeable to NYPA, the host communities and County of Schoharie. Finally, NYPA may choose to provide the Agency's own calculation for assessed value that may be considered by the taxing entities.

**C.** The SCRC requests all inputs to the REMI Model be clearly listed, sourced and identified as an integral part of the study.

The REMI Modeling should also include a comparison of what the host and neighboring communities would receive in tax revenue if the BG facility was taxed as any other corporate entity and benefitted from the same such annual revenue stream.

**D.** The SCRC requests that the omnipresent threat of catastrophic event(s) the upper and lower reservoir dams of the BG facility present should be considered in the study. This threat, as evidenced by the events of August 28/29 of 2011 has a significant economic, social and psychological impact on the residents of Schoharie County and the entire Schoharie Valley.

Residences, farms and businesses located downstream of the NYPA BG facility live under the constant threat of flooding during an extreme weather event which is becoming more and more likely. The additional threat of two (2) dams located at the NYPA BG Facility, one an earthen dam at an elevation in excess of 2,000 feet above sea level demands this type of ongoing threat be considered in any socio-economic impact study. The long-term stress and anxiety the BG Facility places on all inhabitants downstream of the NYPA BG facility cannot be underestimated as to its overall negative impact on the region. An impact not just on property value, health and safety, but also on the psychological aspect of those living and working downstream of the NYPA BG Facility. The threat posed by the NYPA BG facility and its operations may arguably be acute or minor, but nonetheless have existed since the NYPA BG Facility was built in 1969 and will continue to exist into the foreseeable future inclusive of the applicant's request for another fifty (50) year(s) operating license. These threats may be

weather and climate enhanced but they are manmade threats created via NYPA BG facility operation(s), nevertheless.

The same issue(s) of the dams presents itself when considering locating / purchasing a residence, farm or business in the immediate downstream vicinity of the NYPA BG facility. A flood event is one thing, but a catastrophic dam failure represents a completely different scope of event. There is a natural concern and hesitancy to locate in an area subject to this type of threat. This natural concern applies to both residential and commercial applications. These concerns may not have existed prior to construction of the NYPA BG facility. Accordingly, the SCRC requests these impacts be addressed in the Socioeconomic Study.

**E.** The SCRC requests that the impact of distribution of “no cost” or “reduced cost” electrical power to Schoharie County residential and commercial users be included in the Socioeconomic Study.

**F.** The SCRC requests the study also evaluate the REAL and EXISTING impacts the lack of real property value taxation has caused in the host and neighboring communities over the past fifty (50) years. The lack of general community services, modern highway facilities / equipment, cultural and historic funding, subsidized local health care facilities, general County infrastructure(s) improvements, modern Fire Department facility / equipment, child daycare, inability to attract business and residential growth, etc. This is an important consideration when evaluating the effects of the tax-exempt status of NYPA over such a long-term period to the host community.

The study should address what Schoharie County might be and look like today if fifty (50) years of tax revenue, potentially worth millions of dollars, had been realized.

**G.** The NYPA site in the Town of Gilboa has impacted the town and county roads adversely.

Valenti Road and Flat Creek Road leading to Valenti Road, Kingsley Road and other surrounding roads where there are transmission lines and towers have the highest volume of road usage in town. With employees for NYPA traveling to and from work, deliveries and services to the site, these roads require constant maintenance. Additionally, internal NYPA projects utilize heavier equipment and trucks to travel the roads adding to the normal wear and tear expected.

This maintenance consists of plowing, sanding, repairing and brush cutting at a higher frequency to meet the needs of a 24/7 operating facility at a cost to our taxpayers.

**H.** The SCRC thought the presentation on the socio economic study was full of flaws. They realize the study has not been completed, however when Mr. Anthony VanGlad questioned the data entered in to the remi model it wasn't at all accurate to his town (Gilboa) or other towns. One factor was the zip codes, they used 12076 which is most common in Gilboa. They have three others!

The idea was to illustrate employees from NYPA that live in the stakeholder towns. We know people in the other three zip codes that do work for NYPA. It leaves a questions in our minds about how accurate all the data is that is going into the socio economic study. Another question we had was; did they consider the retirees form NYPA in the zip codes? They bring some sort of impact to the towns. We think this study should be looked at in a careful manner with explanation of how numbers and results were determined. Thank you for your efforts!

I. NYPA makes low cost electricity allocations to many entities in New York State, Schoharie County should, as a host community, be at the top of the list for that program. This could be an important factor in socioeconomic development of our area.

J. Schoharie County provides many resources to community emergency services in the county, i.e. training and backup. All emergency services in the rural areas have mutual aid agreements; this should be considered in the study.

K. The 345,000 power lines from BG project although not part of relicensing have a huge negative effect on Schoharie County. The New Scotland, Fraser and Leeds power lines lower property values. If the project was not here we would not suffer the economic loss they impose on us now. The study should include this in the socioeconomic study.

#### **5. Recreational Boating Desktop Feasibility Assessment / Study:**

A. Enclosed is the submission of the Schoharie County Relicensing Committee (SCRC) in regards to the fourth study which addresses Recreation. The Town of Middleburgh which is 3 townships north of and downstream of the Blenheim/Gilboa (B/G) lower reservoir has hosted a canoe and kayak race in April which has been well attended bringing in hundreds of tourists/contestants to our area for the day. The race actually begins in the middle of the Town of Fulton so it affects them as well. This year we are expanding it into a triathlon and are expecting an even greater turnout. The study conducted by B/G states that once past May, there is insufficient flow for recreational boating activities until possibly October and under their current license agreement and current conditions, they are correct. However, they do not take into account a possible change to their license and new operating developments that will occur at the New York City Department of Environmental Protection (NYCDEP) reservoir south and upstream to their facility that are expected to be operational in 2020, just 1 year into B/G's expected new license. If B/G were really serious in conducting a recreational study then why would they have completely left out any mention of how possible operational and structural changes to a major water storage facility may affect their operation? NYCDEP has begun construction of a low level outlet in their reservoir consisting of a gated 9 foot tunnel which would release a maximum flow of ~ 3400 cfs into the Schoharie Creek upstream and south of the B/G lower reservoir. This would be used to help lower the NYCDEP reservoir to provide more storage in the case of an impending weather event to help mitigate flooding and also to provide conservation and possible recreational releases. Each time the

SCRC has met with B/G and asked if they have contacted NYCDEP to discuss renovations and possible operational changes that could affect B/G, they reply that they have not and will need to. It seems a logical conclusion that to perform a complete and concise recreational study involving steam flow that NYCDEP's future operational procedures should be taken into account in B/G's Hydrology Assessment beginning on page 474 of their completed study and is also not mentioned in the following Hydraulic Analysis on page 475.

B/G does mention that they have found that a 1000 cfs flow is needed to provide 1.5 to 2 feet of depth downstream for good paddling to occur with only 5 places out of about 56 being insufficient for paddling and needing portage. This number dropped from 11 places at a flow of 750 cfs but does not indicate what would be needed for no portage which leaves SCRC wondering why wasn't this complete and providing a flow that could be worked with.

B/G states that they have 2378 acre feet of storage for replenishing water due to seepage and evaporation which they cannot touch and properly should not. But if one converts this area into square feet it becomes 103,873,418 sq. ft. or cubic feet for every 1 foot in elevation. Calculation for a 1000 cfs release for a 3 hour event comes out to 10,800,000 cu. ft. (1000cfs x 60 sec. x 60 min. x 3 hrs.). If you take this and divide it by the storage capacity of 1 additional foot you find that this flow only amounts to 0.1039 of the 1 foot increase which is 1.2468 inches. B/G would need to hold back only an additional 1.25 inches of water than they normally do from a late spring or summer storm to provide a recreational event during a summer month and does not even consider the normal flow already being released that comes in from upstream. If the NYCDEP were to release 350 cfs through their new low level outlet, then B/G would only need to add 650 cfs with it to release a 1000cfs flow for 3 hrs. which means they would need 7,020,000 cu. ft.(650cfs x60sec. x60min. x 3hr.) of water or an additional .811 inches of water in their reservoir over what they normally store.

These calculations provide a basis to modify B/G's current license to provide hold back of flow during storm events not only for mitigation purposes but for planned boating recreation as well. B/G further states that there are other boating recreational attractions within a 50 mile radius but why does our area have to suffer when we can clearly show that with a small effort B/G can help bring in an economic stimulus to our area.

Looking ahead to the future, NYCDEP and NYDEC have agreed that a conservation release of 25-40 cfs will be occurring once the low level outlet is complete. NYPA needs to address the effect of this release on the fisheries and recreation impacted in the Schoharie Creek and the valley. NYPA needs to reach out to both NYCDEP and to NYDEC which according to their study, they have not done.

SCRC further wants to point out that B/G's study fails to address other forms of recreation that should be taken in to consideration. There has been no focus on winter activities such as snowmobiling, cross country skiing, snowshoeing, ice skating or a winter festival. It also does not address fair weather activities such as hiking, bicycling, jogging or a cross country trail for a school meet, bird watching, star gazing at the upper reservoir, horseback trail and hunting. B/G in being a good neighbor and part of the community needs to cooperate and coordinate with entities and activities sponsored by Schoharie Long-Term Recovery, the Blenheim Covered Bridge Project, the Rt.30/Rt.145 Scenic Byway Concept, the Schoharie County Beverage Trail, and the Schoharie County Tourism Board. Since the NYPA B/G Visitors Center and Lansing Manor located in the Town of Blenheim are considered tourist destinations and therefore have

an impact on the afore mentioned organizations and should include them in the APE. The study makes no mention of any contact or coordination with these organizations.

The SCRC recommends that the Initial Study Report for Recreation lacks substance in many areas and needs to take a more in depth look at creating releases for recreational creek use and to address the other possible recreational opportunities that were not addressed and to include the local organizations and their projects as part of the APE.

**B.** The SCRC requests the Recreation / User Contact Study cooperate with and include in the study now NYPA might cooperate / coordinate with activities by entities such as Schoharie Long-Term Recovery (SALT), the SCRC and other interested parties that are involved in such projects as the proposed Schoharie Creek Trail, the reconstructed Blenheim Covered Bridge Project, the Rt. 145 / Rt. 30 Scenic Byway Concept, the Schoharie County Tourism Board, The Schoharie County Beverage Trail, etc. These entities / projects are located well within the APE of the NYPA BG facility and the associated NYPA Visitors Center and the historic Lansing Manor located in the Town of Blenheim.

The NYPA BG Visitors Center is considered a tourist destination and therefore has a direct impact on the above mentioned entities / projects / tourism initiatives.

**C.** The SCRC requests the study include detailed analysis of how specific, timed water releases pre-scheduled by NYPA from the BG facility in coordination with Schoharie County and regional agencies, clubs and other such entities might enhance the use of the Schoharie Creek for boating opportunities even in time of low water levels. Further, this analysis should also incorporate the concept of cooperation with New York City DEP in coordination of Gilboa Reservoir potential water releases, when and as may be feasible for recreational uses.

**D.** This study is supposed to look to the future, but the impact of conservation water releases by NYDEP are not taken into account. The discussion between NYDEC and NYDEP now, are agreeing that 25 to 40 CFS conservation release will be done. This study should address the effect of this release on Schoharie Valley (fisheries and recreation) when these releases come about. NYPA needs to talk to NYDEP and NYDEC on this issue as part of this study.

**E.** The drift wood should be removed to make motor boating and water skiing Safro BG used to do this but stopped years ago.