



Meeting Notes

Project: Loup River Hydroelectric Project FERC Project No. 1256	
Subject: Agency Orientation Meeting	
Meeting Date: May 7, 2008, 10:00 am – 2:00 pm	Meeting Location: Wunderlichs, Columbus, NE
Notes by: HDR	

Attendees:

Loup Public Power District (District)	Jim Frear Tom Kumpf, Board Member Neal Suess Ron Ziola
HDR	Emily Buss Pat Engelbert Dennis Grennan Bill Sigler Shannon Snow George Waldow Stephanie White
US Fish and Wildlife Service (USFWS)	John Cochnar Robert Harms Mike LeValley Jeff Runge Martha Tacha Greg Wingfield
US Geological Survey (USGS)	Phil Soenksen
National Park Service (NPS)	Randy Thoreson Mark Weekley
Nebraska Game and Parks Commission (NGPC)	Frank Albrecht Jeff Schuckman Kristal Stoner Gene Zuerlein
Nebraska Department of Natural Resources (DNR)	Mike Thompson
Nebraska Department of Environmental Quality (NDEQ)	John Bender
Lower Loup Natural Resources District (NRD) and Nebraska Natural Resources Commission (NRC)	Dick Hadenfeldt
Central Platte Natural Resource District (NRD)	Mark Czaplewski
City of Genoa	Lacie Andreasen
City of Columbus	Joe Mangiamelli

Meeting Agenda:

- I. Welcome and Introductions
- II. The History of Loup Power District
- III. Loup Hydro Facilities and Operations (Neal)
- IV. FERC Licensing Process (George/Neal)
- V. The Role of the Agencies (Neal)
- VI. Next Steps

Discussion:

Topic	Detail	Interested Agency
Loup Power District History Book	<ul style="list-style-type: none"> ▶ Includes information about park sites and available recreation through the Loup Power District offices. 	NPS
Water Right	<ul style="list-style-type: none"> ▶ The District has a water right to divert up to 3,500 cubic feet per second (cfs) from the Loup River for power generation purposes. 	USFWS
Irrigation	<ul style="list-style-type: none"> ▶ The District has 40 irrigation customers and 78 irrigation diversion points with water rights to water in the canal ▶ Irrigator rights, approved by the State, are junior water rights to the District's but are given preference for agricultural use as priority users of water ▶ District is compensated for acre-feet pumped by irrigators through a subordination arrangement ▶ Most irrigators are west of Lake Babcock; only four irrigators are located below the Columbus Powerhouse. 	USFWS
Water Capacity	<ul style="list-style-type: none"> ▶ There are no plans to increase the hydraulic capacity of the canal. ▶ Both the power canal and the Monroe Powerhouse are designed for a hydraulic flow capacity of 3,500 cfs. 	USFWS
NPPD Partnership	<ul style="list-style-type: none"> ▶ All energy produced at the two powerhouses (Monroe and Columbus) is sold directly to NPPD as a portion of their overall power portfolio. ▶ All power the District distributes is purchased back from NPPD ▶ The District has a negotiated contract with NPPD; price of energy fluctuates yearly, based on average cost of NPPD generation. ▶ Because generation is based on flow availability, the District is not always able to meet NPPD's needs/requests. 	NDEQ, NGPC, USFWS
Sluice Gates	<ul style="list-style-type: none"> ▶ Used to periodically flush sand and debris away from intake gates. ▶ Original settling basin sluice pipe was an open flume but has now been filled with sand and abandoned. ▶ Gate operation is based on water conditions and sand or debris accumulation; there is no defined schedule of operation. ▶ Operation moves a large amount of sand. 	USFWS, NDEQ, NGPC
Sand Management	<ul style="list-style-type: none"> ▶ There are sand management areas on the north and south side of the settling basin. ▶ One to two million tons of sand are dredged from the settling basin per year. ▶ Water flows from dredge on the north side are conveyed through a series of ditches and discharged back into the Loup River upstream of the diversion 	NGPC

	structure.	
Bypass Reach	<ul style="list-style-type: none"> ▶ There are control gates adjacent to the diversion structure which allow flows to be bypassed back into the Loup River channel. ▶ River overtops the low weir or wall when there is sufficient flow. 	NPS
Power Canal	<ul style="list-style-type: none"> ▶ Canal gradient is approximately 1 foot per mile ▶ The canal can only hold 3,500 cubic feet per second (cfs) – the system is running at capacity when the canal bank is full ▶ There are several siphons along the canal that convey natural drainage from the north side of the canal to the south side of the canal; they include Beaver Creek siphon, Looking Glass Creek siphon, Dry/Cherry Creek siphon, and the Oconee siphon. 	USFWS, NGPC
Monroe Powerhouse	<ul style="list-style-type: none"> ▶ Monroe Powerhouse is operated in a run-of-river manner and has no water storage capabilities. ▶ Most of the time, all units are available to run near capacity but there is often insufficient water to do so. The system runs at full capacity only a few days per year. 	NPS
Lake Storage	<ul style="list-style-type: none"> ▶ Lake Babcock and Lake North are used to manage the flow going into the Columbus Powerhouse. ▶ Generally, the water level rises at night and then lowers during the day when the Columbus facility runs to cover NPPD's peak. ▶ Lake North is significantly deeper than Lake Babcock; can not be totally drained. 	USFWS
Silt at Lake Babcock	<ul style="list-style-type: none"> ▶ The District has considered dredging the lake but it is not economically prudent. ▶ District flushes sediment out of the lake through the Columbus Powerhouse to keep the original flow channel open. ▶ Alternative methods to reclaim some of the storage capacity are currently being evaluated. 	NGPC
Columbus Powerhouse	<ul style="list-style-type: none"> ▶ Columbus Powerhouse is a peaking facility operated by the District but dispatched by NPPD according to their system requirements. ▶ The units are generally run to cover NPPD peak load or conditions when NPPD generation facilities go off-line. NPPD has a double peak in winter and there is a very late night peak in the summer due to irrigation. ▶ NPPD's needs mandate daily generation activity. ▶ Any two of the three units at the Columbus Powerhouse can accommodate the 3,500 cfs canal design. When all three units are used at capacity, the 5,000 cfs intake canal design flow is utilized. ▶ If the entire plant went off line, lake water levels are maintained to contain the flow, once diversion is stopped at the headgates. ▶ Vertical trash rack bars are several inches apart and 	NGPC, USGS, NDEQ, USFWS

	are not intended as a screen to exclude fish.	
Fish	<ul style="list-style-type: none"> ▶ Fish are present in the canal; the state record Flathead catfish was taken from the canal. ▶ There are no fish protection screens at the powerhouses. 	USGS
Endangered Species	<ul style="list-style-type: none"> ▶ Section 7 of the Endangered Species Act will be considered in the relicensing process. ▶ FERC will initiate informal consultation 60 days following filing of the NOI/PAD. 	USFWS
Drought Concerns	<ul style="list-style-type: none"> ▶ The Loup River is classified as one of the most consistent flowing rivers in the US. During recent droughts, summer Loup River flows were near normal. 	USGS

Action Items:

Who	Task	Date Assigned
LPD	Determine issuance process for 401 Water Quality Certification associated with the FERC public process.	5/7/08
LPD	Distribute agency contact information.	5/7/08
All Agencies	Provide list of NGOs that may be interested in the Project to the District.	5/7/08

Next Meeting:

What: Agency Follow-up Meeting
When: Wednesday, June 25, 2008: 10:00 a.m. – 2:00 p.m. Lunch will be provided
Where: Wunderlichs, 304 E. Highway 30, Columbus, NE 68601
RSVP: On or before Friday, June 20, 2008 to Emily Buss, emily.buss@hdrinc.com or 763-278-5904

The purpose of the meeting is to introduce, discuss and compare the hydropower related issues and concerns identified by the participating agencies. Our objectives for this meeting are to talk through and reach a mutual understanding of the basis or rationale for each issue or concern.