

**FINAL Minutes**

**Public Scoping Meeting  
Fairfield, Montana**

**Gibson Dam Hydroelectric Project**

FERC No. 12478

**April 11, 2006**

The meeting was held in the Fairfield City Center building and began at about 7:20 pm. In attendance were:

<b>NAME</b>	<b>REPRESENTING</b>	<b>PHONE</b>
Bob Hardin	GID	406 467 2533
Thom Fischer	GDHC	360-738-9999
Richard Rosenberg	GDHC	360 738 9999
Kim Nguyen	FERC	202 502 6105
Sam Carlson	Teton County	406 590 3062
Arnie Gettel	Teton County	406 466 2151
Matt Cutlip	FERC	503 866 3918
Mike Henry	FERC	503 552 2762
Mike Munoz	USDA Forest Service	406 466 5341
Ron Hecker	USDA Forest Service	406 466 5341
Dan Bennett	Audubon	406 454 5805
Kieth Gebo	MT Wilderness Assoc.	406 788 8913
Quentin Kujala	MFW&P	406 467 2488
Steve Davies	USBR	406 247 7322
Dick Dye	USBR	406 247 7322
Mark Coverdell	GID	406 467 2161
Tim Brunner	GID	406 467 2895
Bill Norris	GID	406 264 5781
Lee Carlbom	GID	406 562 3603
Tom Troy	Building Augusta	406 562 3579
Gene Sentz	Self	406 466 2750
Bill Cunningham	Self	406 466 5699
Fred Davison	Self	406 733 5031
Sonja Lee	Great Falls Tribune	406 791 1471
Roger Beck	GID	406 467 2870

Dave Gulick	GID	406 467 2278
K. A. Christofferson	Self	406 452 2398
Mike Prewitt	Consultant	206-525-3483

GID = Greenfields Irrigation District  
 USBR = US Bureau of Reclamation  
 MFW&P = Montana Department of Fish, Wildlife and Parks  
 FERC = Federal Energy Regulatory Commission  
 GDHC = Gibson Dam Hydroelectric Company. LLC

Mike Prewitt welcomed the attendees and asked for them to identify themselves and the organizations they represented. He then introduced the members of the Gibson Dam Hydro team, including Bob Hardin, Thom Fischer and Dick Rosenberg. He noted that three representatives from FERC were present.

Mike said that GDHC was a limited liability corporation (LLC) comprised of Tollhouse Energy of Bellingham, WA and GID of Fairfield MT, in a 50-50 partnership.

He said that the Scoping meeting is required by the FERC, which regulates licensing and operations of non-federal hydroelectric projects in the US. Mike added that the meeting was held under FERC auspices to fulfill that agency's needs under the National Environmental Policy Act (NEPA). He said that NEPA required FERC to conduct Scoping to determine issues to be addressed in an Environmental Assessment (EA) to document effects of the proposed project on the human environment.

Mike asked attendees to sign the mailing list and added that the meeting was being recorded.

He said that GDHC would prepare a draft summary of the meeting, which would be sent to the meeting attendees for initial comment, after which the summary would be finalized and sent to the Project mailing list.

Mike then described Scoping Document I, which had been initially prepared in October 2005, and revised prior to the current meeting. He said that interested parties could comment on the SDI and the proceedings of the meeting within 30 days of the meeting.

There was some discussion about submission of comments. Matt Cutlip of FERC said that an original and 8 copies of written comments were to be sent to the FERC Secretary in Washington D.C. and wrote the mailing address on the flip chart. He

added that comments could be submitted via e-filing and gave the FERC website address as a source of information on e-filing.

Mike said that this requirement differed from his past experience and that he hoped it would not be burdensome for attendees to submit comments in this way.

Mike described the site visit to the Project, which had been conducted earlier that day.

Mike added that the Project licensing was being done using the Alternative Licensing Procedure (ALP), also known as the collaborative process. He described how, under this process, GDHC and the Stakeholders (described as agencies, tribes, the public and Non-Governmental Organizations (NGO's)) would interact to settle Project issues prior to submission of the final license application.

He said that there would be a Preliminary Draft EA (PDEA) and Final EA prepared by GDHC prior to the license application. He said that at least one more EA would be prepared by the FERC prior to licensing.

Mike described the current schedule. He said that the draft application for license was due in the fall of 2006 followed by a 90-day comment period. After reviewing comments, GDHC would revise the PDEA into the Final EA which would be part of the final license application. He said that the final application was due at FERC in April, 2007.

Question: When will the license likely be issued? Kim answered that they shoot for two years after the application is received. Thom said he was hoping for six months.

Mike said that there would be notifications in the federal register as to progress on the license application review and need for agency terms and conditions. He said that GDHC would try to keep participants informed through email, and suggested that all parties check the Project website periodically.

Question. Is an EA the "ceiling" of the NEPA process at FERC? Why not an EIS?

Mike said that most FERC projects are addressed via an EA, under the understanding that the ALP process would promote settlement of issues and reduction of impacts.

Question: Is this the only meeting?

Mike said yes, this meeting plus the Initial Consultation Meeting held in April of 2005.

Question: Would you be willing to hold more meetings?

Thom said that more meetings could be held if there appeared to be a need for more communication.

Question: What is the public benefit of this Project?

Thom responded that there was a benefit from having renewable energy.

Question: Will it bring us power locally?

Thom said that the President and Congress say we need to get away from foreign oil. He said that that would be difficult in the transportation sector, but that in the generation sector, hydro can help by replacing fossil fuel generation. He said that 21 states have passed legislation to reduce dependency on foreign oil. He added that it was smart for utilities to invest in hydro because it will continue to produce energy at predictable cost and because the cost is not expected to rise. He said that this Project would obviate the need for 3 million gallons of diesel and an equivalent amount of coal-fired generation.

Further, Thom said that GDHC was working with Sun River Electric Cooperative to demonstrate how this project would strengthen their electrical system and lower voltage swings.

Question: What are the financial benefits for GID and Tollhouse?

Thom. We're not building a new dam, we're putting generators on the existing outlets at Gibson Dam. How much money are we going to make? That's what this study period is about. This Project was licensed before and not built because of the low value of energy. But now the price of electricity is linked with oil and the profits are much better. We don't know exactly how much at this time, but it looks favorable based on the prevailing cost of electricity.

Tim Brunner said that profits could help line canals and lower delivery rates to GID customers.

Question: What's the energy output?

Thom. We started at 10.5 mw and raised it to 15. 15 mw would generate 48 million kilowatt hours (kWh) of electricity in a normal year and 42 million kWh in a drought year.

Question: Have you considered effect of global warming on snowpack?

Thom: We are basing everything on the last six years which represent a pretty extreme drought. Avista just reduced their hydro generation by 10 percent based on predictions for more drought cycles due to climate change.

Thom then described the Project features.

Thom described two general potential powerhouse locations, one parallel to the dam at the dam base, and another location parallel to the stream flow downstream. He said an earlier alternative with a powerhouse perpendicular to the dam near the base of the dam would place the powerhouse at the bottom of a gulch, which carried the greater share of floodwaters during the 1964 flood, and therefore not being considered. The downstream powerhouse location would be shielded from floodwaters to some extent by the topography. He said the powerhouse in either case would be about 60x120 feet.

He said that the upstream alternative near the dam would require a cofferdam to be able to construct the powerhouse in the dry. He said that the downstream alternative could be built entirely in the dry without the need for cofferdams and work in the river itself. He added that the downstream alternative would cost about \$1 million more because of the cost of 8-foot pipe to reach the powerhouse.

There was some discussion about how the power penstocks and jet flow pipes contributed water to the generation facilities. Thom said that the penstocks would only operate when the reservoir level was above their inlet elevation on the dam. He described how the two 6 MW and two 1.5 MW turbines would be used to generate at flows from 50 cfs to 1500 cfs. He said that the project would generate year around, but with decreased output in the winter. He said that peak generation would be during the summer months when both the penstocks and jet pipes could be used.

There was discussion about minimum flows through the turbines. Thom explained that Francis turbines could run efficiently down to about 30% of peak capacity; below that, the efficiency fell off sharply.

He said that for 7 months each year, flow varied between 50 and 200 cfs, during which the small turbine(s) would be running. He said that the larger turbines would run for about 4 to 5 months each year.

Thom then described the transmission line alternatives. He said that GDHC had Evaluated three routes: 1) along the Sun River Canyon road; 2) across the Wildlife Management Area; and 3) cross-country to the north of the Sun River Canyon Road. Thom said that GDHC had found that the transmission line route had become the biggest issue in the licensing. He said the issue was mainly the visual impacts on views of the Rocky Mountain front.

Thom showed graphic of the Sun River canyon with existing distribution line. He said that it would be possible to bury about 5 miles of t-line at 34 kV because of capacitance. If the line was to carry 69 kV, he said only a mile and half could be buried.

Thom said that the initial thought was to bury the t-line within the bounds of Sun River Canyon, then install a transformer to raise voltage to 69 kV and run the line along the Sun River Canyon road on poles. He said that that plan was opposed because of aesthetics of the transmission towers along the road outside the canyon.

He said that GDHC had evaluated going across the Wildlife Management Area (WMA) where the line would not be visible from the main roads. He said certain amounts could be buried in the WMA. He added that there were two or three places in Sun River Canyon at which the line was “obnoxious”, and proposed to bury both the Project and existing power lines in canyon to create a visual benefit.

Thom said he didn’t have a final opinion on which t-line route to use. He said that GDHC was seeking input from agencies and the public on the various route alternatives.

Thom said that, during the site visit earlier that day, the group had looked at a line route down the Beaver Creek road which would join an existing road to the south of Sun River. He said the group had concluded that visual impacts of that route would also be high.

Question: Why can’t you bury the line all the way?

Dick. When capacitance approaches the nameplate capacity of the generator, voltage can run away, called self-excitation. Dick discussed capacitance and inductance, use of aluminum and copper wire, voltage losses associated with various diameters, etc.

Question: Can you go to less than 34 kV?

Dick: No, at lower voltages, losses go way up.

Dick added that costs of the transmission component of the project had doubled during the initial evaluation due to routing, burial, and the price of copper.

Dick said that the power poles would still be wood in the canyon, not big metal structures.

Thom described the 69 kV poles near Augusta and said they would be the same design.

The meeting topic then turned to issues.

Mike asked the attendees to refer to their Scoping Documents and guided them to the section on issues.

He said that an issue is something that is likely to be affected by project construction or long-term operation. He said that issues were broken down into specific categories such as fisheries, wildlife, water quality, etc.

Mike said that GDHC had asked during initial consultation which studies would be necessary and said that, for each issue, he would discuss studies.

The first resource category was Fisheries.

Mike said that Sun River instream flow had been raised as an issue during initial consultation. Mike said that the proposal was clearly and strictly defined as no change in the flow regime, and that there was no need for studies to define impacts related to flow.

The next fisheries issue was reservoir level. Mike said that the level probably won't change because of operation of the proposed project and that no studies would be done on effects of reservoir level.

The next issue was fish entrainment. Mike said that, with the Project, some of the water would be drawn into the penstocks, which are not in use now. He said that GDHC was working with MDFWP on the issue, and would use existing information to predict whether fish might be entrained when the penstocks were in use.

The next issue was water release temperature. Mike said that this could be an issue, also because of the use of the penstocks to draw water from a level higher in the water column, which could be different temperature than water at the bottom.

He said that he would discuss the temperature studies in the Water Quality resource section.

The next issue was ramping rates. Mike said that this was a generic issue because many hydro projects follow daily load swings and raise and lower flows rapidly during the day. He said that the Project would not change the existing release regime, and that this concern would not be an issue.

Mike then discussed baseline studies for fisheries. He said that MDFWP had been studying both Sun River and Gibson Reservoir extensively and that the fisheries baseline is adequate the way it is now.

The next resource category was Water Use and Quality.

Mike said that Water Use referred to water rights, stream flow, reservoir level and how water was stored and released. He said that water quality referred to water temperature, dissolved oxygen, dissolved gasses, sediment, etc.

He said that water quality studies would be conducted, including continuous temperature monitoring in both the Sun River and Gibson Reservoir. He added that GDHC would measure other water quality parameters according to the water quality study plan, which had been approved by agencies during initial consultation.

Another water quality issue was dissolved gasses. Mike explained that when water cascades down a spillway and is driven below the surface of the plunge pool, gasses are supersaturated. He said that fish that encounter this condition often acquire “gas bubble” disease, which may cause death or injury. He said that because there was no long spillway slide on this project, it wasn’t likely that supersaturation would be a problem. He said that the water quality study plan, however, included measurements of dissolved gasses below the dam.

The next issue was water rights. Mike said that this is not an issue under the current proposal because there is to be no change in streamflow regime or water allocations.

Mike added, however, that there is an ongoing effort by the Sun River Watershed Group to evaluate potentials for changes in Gibson Reservoir and irrigation system operations to optimize water use for various uses in the basin. As this planning proceeds, GDHC will react to changes, but not initiate them. Mike said the activities of this group would be documented in the Cumulative Effects section of the EA.

Steve Davies said that, even though flow might not change with the Project, water rights would have to be changed to reflect a different use of the water.

The next resource area was wildlife

The first issue was raptor protection. Mike said that this issue stemmed from occurrences of raptors spanning across conductors on a t-line and being electrocuted. He said that there were standards, which the t-line would have to meet to avoid such impacts.

The next issue was disturbance of wildlife due to construction. He said the canyon was a noted bighorn sheep lambing area and that nearby was a significant elk over-wintering area. He said that no baseline studies were proposed because MDFWP had detailed current data on wildlife distribution and abundance in the area. He said to expect limitations on construction seasons and noise to avoid disturbance.

The next issue was grizzly bear safety. Mike said that the concern was for encounters between bears and the additional number of people in the canyon or nearby during construction. He said that bear safety plans would be written to avoid encounters.

In the resource area of plants, Mike said that GDHC would be conducting sensitive plant studies after the t-line route was selected.

Aesthetics. Mike said that GDHC had spent a lot of time on this resource area, and would continue to work with USFS and others on study plans and analysis techniques.

Cultural resources. Mike said that GDHC was required to deal with the State Historic Preservation Office (SHPO), other agencies and tribes. He said that GDHC would develop a final study plan have it approved, and hire a cultural contractor to do a literature search and field studies this summer.

Matt Cutlip added that FERC had sent a letter to all tribes who may be affected by hydro development, documenting FERC's new Tribal consultation policy.

Mike said that GDHC had received a letter from the Blackfoot Tribe. He said that nothing would be done without a thorough cultural resources survey.

Recreation and land use. Mike said that limits on access of recreationers during construction were the only issue, e.g. if people couldn't get to the dam during construction. Mike said that the FERC license might have restrictions on

construction period or access provisions, but that no field studies would be necessary.

Socioeconomics. Mike said that this issue concerned local and regional workforce effects, how many people the project might employ, baselines on demographics, worker classes and wages. He added that there could be an element an element about power use in local area.

The next resource area was Endangered Species. Mike said that GDHC would have to describe all such species in the EA. He said that agencies have current lists of such species and that GDHC and the USFS would have to develop a Biological Evaluation of species and effects prior to licensing.

The next resource area was developmental resources. Mike said that this area describes impacts on resources such things as irrigation district benefits.

The last resource area was cumulative impacts. Mike said that the EA would have a section describing past, present and reasonable foreseeable actions in the basin. He said that if there were a lot of proposals in the basin, FERC would want to know about it to layer on the project. He said that at present, the only cumulative effects might be the SRWG activities in basin planning.

Mike then asked for public comments.

Question: What's the schedule?

Mike answered that after the thirty-day comment period, GDHC would prepare SD2 about a month later.

Keith Gebo. What if there is a maintenance problem in the WMA during calving season:

Thom: Good question. I don't know the rules and regs of WMA. Unlikely that an underground line would fail, but is likely that overhead would. The overhead line will be robust.

Mike said that the meeting had been recorded and that GDHC would write up draft meeting minutes for review. He said that GDHC would provide a CD or DVD of the meeting on request.

He said that the draft minutes would go to attendees, and, after their comments were incorporated, the final minutes would go to the mailing list, FERC and the Project website.

Mike thanked the attendees for their participation.