

DeSabra-Centerville Forum

Date / Time:	April 11, 2017/ 1300-1600	Chair:	Mike Schonherr
Location:	Oxford Suites, Chico	Facilitator:	Mike Schonherr
Attendees:	See below	Recorder:	Chanel Funakoshi
Purpose:	This forum is intended solely for the purpose of parties genuinely interested in seeking ownership of the DeSabra-Centerville Project to engage with PG&E.		
Desired Outcomes:	<ol style="list-style-type: none"> 1. Provide high-level overview of the Project 2. Provide responses to specific questions about the Project & the FERC process 3. Discuss next steps 		

Company/Agency	Attendee Name
Eagle Creek Renewable Energy	William H. Pickrell
Eagle Creek Renewable Energy	Dan Parker
Eagle Creek Renewable Energy	Steve Bennett
South Feather Water and Power Agency	Rath Moseley
South Feather Water and Power Agency	Dan Leon
Paradise Irrigation District	Andrew McClure
Tollhouse Energy	Thom Fisher
Tollhouse Energy	Adam Cleveland
Tollhouse Energy	Roland Bailey
Butte Creek Improvement Company	Geoff Fricker
Butte Creek Improvement Company	Allen Harthorn
Butte County Water Department	Vicki Newlin
Butte County	Kevin Taggart
Butte County	Brian Ring
Environmental Sciences Agency	Eric Ginnery
Retired CPUC	John Bohn
PG&E	Mike Schonherr
PG&E	Jim Gill
PG&E	Janet Walther
PG&E	Tom Beene
PG&E	Kyle Ingvoldsen
PG&E	Chanel Funakoshi
PG&E	Dan Blair

Meeting Summary

Background

PG&E decision

- **Changing Energy Markets:** Power values have declined significantly over the course of relicensing, and particularly over the last few years due to declining gas prices and an overabundance of renewable generation in the state.
- **Declining Loads:** PG&E customer demand for electricity in California continues to decline due to the expansion of rooftop solar programs, community choice aggregation, and energy conservation programs.
- **Project Economics:** The current cost of production exceeds the cost of alternative sources of renewable power on the open market and is exacerbated by expected increasingly costly and complex conditions for continued operation of the Project and the significant costs associated with protracted relicensing proceedings.
- Based on the key drivers, PG&E concluded the Project no longer meets our customer's needs. Accordingly, PG&E withdrew its FERC License application and is seeking to divest the asset.

FERC Order

- PG&E withdrew its license application to provide an opportunity for a new owner to negotiate their own license conditions. FERC disallowed PG&E's withdrawal application which effectively gives PG&E the opportunity to "test the market" to see if there is interest in taking over PG&E's existing license and final license application or interest only in a new license.
- Is there an expectation or legal commitment to accept PG&E's existing license application as-is?
 - There is no legal requirement for someone to take over PG&E's existing license.
 - We understand and expect the agencies and other stakeholders would strongly prefer to maximize the utilization

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- of relicensing work completed to date.
- Is there a cost estimate for decommissioning?
 - PG&E has completed internal analyses of the project which include conceptual estimates of the cost of decommissioning. PG&E doesn't generally share these estimates, and certainly not at this point in the process, as it is important for others to come to their own conclusions about all potential costs of acquiring and operating the Project.
- Why does the Federal Power Act apply to this project? What's the threshold to exempt a project from acquiring a FERC license?
 - The FERC license covers the entire DeSabra Project which is approximately ~26 MWs
 - Any questions about license exemptions should be directed to the FERC
- What are the approximate MWs for the project?
 - ~26 MW; ~20 MW operating (Centerville PH is currently out of service)
- What's the background/current status on Kilarc-Cow?
 - PG&E submitted an application to surrender its project license in 2009
 - The process is currently with the State Water Resources Control Board; PG&E is waiting to be issued the 401 Certification in order to proceed with decommissioning
 - No other third parties submitted interest to take over the project by FERC's set deadline, so FERC ordered PG&E to decommission the project
- Can you clarify FERC's 60-day timeline – is 60 days enough time to complete a transaction?
 - The 60-day deadline was established by the FERC as the period during which interested parties could submit a Statement of Interest to acquire the DeSabra-Centerville Project from PG&E. There is no expectation that a transaction could or would be completed during this time. Should viable Statements of Interest be received by the FERC, we expect they would likely extend this period and allow PG&E to continue to explore a sale/transfer of the project with the current license
 - This is a unique FERC action; the relevant regulations are not definitive about the steps to be followed in this circumstance.

Project Overview

- There are two distinct watersheds: West Branch of the Feather River (WBFR) and Butte Creek
- Lime Saddle & Coal Canyon are hydrologically related to DeSabra-Centerville; these two powerhouses are not part of the FERC license
- The Hendricks canal diverts water from West Branch of Feather River to Butte Creek
 - There are lined and unlined portions of the canal
 - ~10 mile canal system
 - Current flows of approximately 120 cfs in the canal
- PG&E tends to keep canals at lower levels and not run at capacity
- There are two small storage reservoirs (Philbrook and Round Valley) and one forebay
 - Philbrook Reservoir – 5,000 acre-ft
 - Round Valley Reservoir – 1,200 acre-ft
 - DeSabra Forebay – capacity of 150 acre-ft
- Flumes – various parts of the system are constructed of steel or wood
- Spill gates are remotely operated
- Centerville Powerhouse was last operated in 2011
 - However, PG&E continues to run water to Butte Creek for salmon habitat
- We supplement cold water during the summer months from water stored at Philbrook to lower Butte Creek for the salmon habitat
- PG&E takes annual outages for routine maintenance generally between Feb-April (Miocene Canal) and April-May (Hendricks Canal)
- Typically have an annual operations planning meeting with agencies (e.g. NMFS, Dept. of California Fish & Wildlife, NOAA, SWCB, USFS, internal PG&E biology team) to coordinate flow releases
- Butte canal is more susceptible to landslides
- What is physical access like to get to the canals?
 - There is a lot of walking for maintenance crews
 - PG&E typically helicopters in material for repairs
 - There are 6 alarm sites on each of the canals (SCADA) to indicate high or low levels; operators utilize remotely operated gates to respond to SCADA alerts
- There is a need to manage public access/ public safety
- Is the project located on any federal lands?
 - Yes, Forest service and BLM
 - The majority of Philbrook and all of Round Valley are Forest service land
 - It's also important to note that much of the FERC Project, particularly the water conveyances, are located on private properties via operating easements. Toadtown Powerhouse is located on private property as well.
- There is a spill channel at Philbrook that we recently upgraded

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- There is a spillway from DeSabra reservoir into Butte Creek. The spill channel is not lined and it has been many years since we spilled the reservoir as we operate not to spill
- Cost estimates on operation maintenance of the system?
 - ~\$3 million for the system in PG&E costs
 - It's important to note that we expect others to establish their own cost estimates for O&M of the project, as others may choose to perform work differently or may have very different cost structures than PG&E.
- Where are the "big ticket" maintenance costs?
 - Cleaning out canals, replacing sheets along the flumes
 - We put more effort into maintaining Butte Canal (60%) vs. Hendricks Canal (40%)
- Are emergency repairs included in the \$3M?
 - No, these are additional capital and expense costs
 - In the last storm, we experienced two slides along the road to access Butte Creek
 - In 2016, we experienced a fire that required us to spend \$800K on Lime Saddle flume replacement (~150 ft flume replaced)
- Are there tunnels on the Hendricks?
 - 1 mile tunnel in Stirling city (concrete lined)
 - ~1500 ft tunnel in Lovelock (timber lined)
- Where is the water feeding into Toadtown from?
 - Coming from the WBFR
- Low level outlet in Philbrook? Yes
- How large are maintenance crews?
 - 8 individuals
 - 3 operations staff for canal operations
 - 2 operators for the powerhouse
 - 15-person powerhouse crew for the entire watershed
 - In addition to dedicated staff, PG&E has "matrixed" staff that support the Project, including (but not necessarily limited to):
 - Communications staff covering the entire watershed
 - License compliance coordinator
 - Environmental planners
 - Biologists
 - Engineering & project management support
 - General Construction crews and contractors for larger capital projects
- Why did Centerville shut down?
 - Penstock issue – possibility of rupturing
 - 42" in diameter
 - 30" in diameter
 - Length 2,600 feet
 - 2 units; total 6.5 MW
- Why did Coal canyon shut down?
 - Penstock issue
 - 36-30" in diameter
 - 3,000 feet long
- FERC hasn't ordered PG&E to do anything with Centerville?
 - Not at this time. PG&E was waiting to make final decision on Centerville until we received final license conditions as some of the studies may impact a long term business decision.
- Philbrook is an earthen-filled dam; >10 feet tall
- Is there a need to dredge to remove silt from the reservoirs?
 - Dredging is always an option, however not something PG&E has planned.
- Is there temperature monitoring for Butte Creek water vs. Hendricks water? What is the water temperature in each canal?
 - Yes, Hendricks is colder from May through early August, but this flips during mid to late August.

Water Delivery

Centerville

- WBFR water rights are fully adjudicated through the 1942 Butte County Superior Court judgment to three water users below Hwy 99
- Upper Centerville canal is not used for power generation, however remains in the FERC boundary. We have continued to provide 1.175cfs of water to the users
- Are there any legal obligations to deliver water to the Upper Centerville water users?
 - No, UCC authorized water users are authorized to take water if it's available in the canal. PG&E delivers water to the diversions from Butte Creek when Butte Canal is operating
- Water right is to PG&E for 1.175 cfs with reasonable losses

Miocene

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- ~ 3,500 acre-ft delivered to California Water Services (CWS) per our water delivery contract
- There are 12 PG&E water users that are served downstream of Kunkle reservoir
- PG&E is currently delivering water to CWS directly into Lake Oroville, where it is transported by Butte County to CWS water treatment facilities
- PG&E has the ability to terminate our water contracts, however, we serve CWS who, as the local water agency, has obligations to serve certain customers
- Do we need to get a new water right if the project gets transferred to a new owner?
 - No, water rights would be transferred with the Project.

Key License Compliance

- What is the current instream flow into Butte Creek?
 - Lower Centerville canal – 40 cfs
 - Butte Head Dam – 7-15 cfs depending on water year.
 - Hendricks Head Dam (WBFR) – 7-16 cfs depending on water year.
- How are feeders used?
 - Used more in the summer time, but not utilized heavily
- Is there a temperature requirement at Centerville head dam?
- The Final License application has not been issued by FERC, but the new conditions have been issued by the agencies (except for NMFS)
 - We understand NMFS was 3-6 months away from issuing its Biological Opinion at the time we submitted our Notice of Withdrawal to the FERC.
- In the license conditions, agencies are not in full agreement on water diversions to Butte Creek
- There is also not full agreement between the agencies on what to do with Lower Centerville Canal if we decommission the Centerville project
- Some of the new license conditions include:
 - Implementing a temperature reduction device to keep water cold for salmon habitat
 - PG&E must do a full flow test monitoring for 5-10 years to test if it meets the water requirement for the salmon species
 - 4E condition – installation of screen and ladder for trout at Hendricks diversion
 - 401 certification – study fish migration barriers
 - 4E condition – boat ramp extension
 - Wet meadow funding (PG&E objected to wet meadow funding because it is outside of the FERC boundary)
- What was the estimated cost of the wet meadow license condition?
 - Not called out in license conditions; the estimated cost/scope would be developed with Forest Service

Recreation & Land Use

- FERC License recreation includes and campground and day use area at Philbrook, group day use area at De Sabla Reservoir and public fishing and use at Philbrook and DeSabra
- The public has historically used canals and elevated walkways without PG&E authorization to do so
- Increased focus on public safety, PG&E is working to eliminate the use on elevated walkways
- PG&E has worked to post signs to try to keep people off of elevated walkways
- PG&E is assessing all elevated walkways throughout our system and in some areas have fenced and gated
- PG&E's canal land rights are for hydro operations, not for public use

Conservation Commitment

- As a part of our bankruptcy settlement, PG&E agreed to permanently protect against development around our hydro facilities through the donation of PG&E owned lands and conservation easements
- For any land that PG&E retains, we will have conservation easements recorded that will protect our ability to operate the projects while still protecting core beneficial public values of the land (e.g. cultural, environmental, open space, etc.)
- Are the Conservation Easements recorded on the DeSabra project?
 - Not yet, but this will be completed before a transfer of the license occurs; currently in progress
 - A Conservation Easement needs to be placed on the land before the sale occurs; PG&E cannot sell the project without a CE
- Does the CE allow for improvements on the land?
 - Yes, we have the ability to make operational decisions on the land and to take actions necessary for continued operation of the facilities, including the right to implement Project improvements
- Does PG&E have ability to change the language in the CE?
 - We have a pro forma agreement and try to stick to it as much as possible
 - All CEs require recommendation from an 18-member Stewardship council board, then approval from the FERC and California Public Utilities Commission
 - We do not expect a future owner of the Project to participate in the development of the CE
- What's the burden on PG&E to do this?
 - We have 3-4 people who manage implementation and compliance with CE requirements for all of the 100,000+

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acres of watershed lands at PG&E

- Have any of the CE's been transferred to new owners? Only one FERC-licensed project has been sold recently, and it included the PG&E CE.
- Is the HPMP a requirement?
 - PG&E develops HPMPs per Section 106 requirements

Next Steps:

- If we decide to step into PG&E shoes (i.e., take over the existing license and the pending license application), would this be the FERC Orphan Project process?
 - No, this would be a normal commercial transfer/sale of assets under PG&E's control, but ultimately subject to FERC and CPUC approval
 - If this Statement of Interest process does not yield an expression of third-party in taking over the existing license and pending license application, PG&E may need to resubmit its Notice of Withdrawal and the FERC could choose to implement its Orphan Project process, pursuant to which they would seek a new licensee. The Orphan Project process is driven by the FERC and PG&E's role in that process is fairly limited. Although not the expected path, the FERC could also choose to order PG&E to surrender its license and develop a decommissioning plan.
- After the FERC evaluates Statements of Interest received through this process, we expect to receive guidance on next steps. Should the FERC extend the 60-day period to allow PG&E to pursue a sale of the Project, we anticipate initiating a commercial auction process in June or July
- Would the sale be restricted to only those agencies who submitted interest to FERC?
 - Our goal is to ensure that our customers and shareholders receive fair market value for the facilities, so we expect to conduct a commercial auction, pursuant to which all interested parties could make proposals for the acquisition of the Project from PG&E. Marketing for this auction is likely to include a much broader set of potential buyers than may have submitted Statements of Interest to the FERC through this process.
 - The FERC needs to approve the transfer of the project, but they would not select the buyer in a sale by PG&E. We understand the FERC's key criteria regarding the acceptance of a new licensee will be the demonstration of financial capacity to fulfill all license requirements

Follow-up Questions:

- What is the annual GWh project for each powerhouse?
- Provide maps of relevant PG&E ownership (attached)
- Share pro forma Conservation Easement agreement (PG&E Pro Forma CE attached)
- Is there temperature monitoring for Butte Creek water vs. Hendricks water?
- Provide historic expense & capital costs for the project. Detailed costs will not be provided at this time. Additional information will be provided if and when a sale proceeds.
- Provide a list of water rights associated with the project (attached)
- What are the next steps in the project? See Next Steps above.