



July 28, 2011

[Redacted]

Re: Facility Study Report for [Redacted] – Project #367

Dear Ms. [Redacted]

Since you and your team had no comments/revisions to the Draft Facility Study Report (DFSR) dated July 25, 2011, I am issuing the final Facility Study Report (FSR) to you today. This final report will be used to prepare a draft Generator Interconnection Agreement(s) in preparation for construction. [Redacted] will be working with you to finalize the Interconnection Agreement(s).

Before we can begin construction or order materials, you are responsible for contacting Idaho Power's credit department to discuss credit requirements for construction funding. Please contact [Redacted] ([Redacted]) at your earliest convenience. Once we receive funding, or the credit requirement is met, we can proceed with construction of the project.

The actual construction and labor charges will be finalized approximately 90 days subsequent to project completion. We will reconcile any over- or underpayment at that time.

I look forward to hearing from you soon.

Sincerely,

[Redacted Signature]

[Redacted], PE
Project Leader

Attach: [Redacted] FSR, Site Map, Dwgs 21D-37703, 21D-42513

Cc: [Redacted]/IPC [Redacted]/IPC [Redacted]/IPC [Redacted]/IPC [Redacted]/IPC

Generator Interconnection Facility Study Report

for the

[REDACTED] – Project #367

for

[REDACTED]

in

[REDACTED]

July 28, 2011

FACILITY STUDY REPORT (FSR)

[REDACTED]
Project #367

July 28, 2011

1. General Facility Description

The proposed generation project consists of 4.7 MW of power provided by a hydro generator. The Interconnection Customer (IC) will provide all generation, station, and transmission facilities required to deliver power at 69 kV to the Point of Interconnection (POI) at Idaho Power's [REDACTED] Substation. See the accompanying electrical Single Line (dwg. 21D-37703) and General Location (dwg. 21D-42513) for the defined POI. [REDACTED] Substation is located in [REDACTED], Montana – approximately [REDACTED] miles east of [REDACTED] along highway [REDACTED].
Interconnection Customer:

[REDACTED]
[REDACTED]
[REDACTED]
[REDACTED]
[REDACTED]

A Standard Generator Interconnection Agreement(s) under Idaho Power Company's Open Access Transmission Tariff (OATT) or Schedule 72 between Interconnection Customer and Idaho Power Company – Delivery (Transmission Owner) for the [REDACTED] Project, specifically Generator Interconnection Project # 367, will need to be prepared for this project.

1.1 Interconnection Point

The Interconnection Point for the [REDACTED] Project will be the 69 kV transmission line side of the 062 disconnect switch as shown on the attached single line drawing 21D-37703. The Interconnection Point is in [REDACTED], MT: [REDACTED] South side of Section [REDACTED]

1.2 Point of Change of Ownership

The point of change of ownership for [REDACTED] Project is electrically the same as the Interconnection Point. Idaho Power will own the 062C disconnect switch and everything to the station side of it, including the station deadend structure. The IC will own and install the 69 kV line to the station deadend structure, and jumper to the line side of the 062C switch.

1.3 Customer's Interconnection Facilities

The Interconnection Customer will install all generation, station, and transmission equipment required to deliver power at 69 kV to the interconnection point at [REDACTED] Substation. The Interconnection Customer will own and maintain facilities electrically located on the Interconnection Customer side of the Interconnection Point.

1.4 Other Facilities Provided by Interconnection Customer

1.4.1 Telecommunications

No new communication circuits are required for this project. The existing POTS dial-up has an available port and will be used for the revenue metering and SCADA. Idaho Power will install a 69 kV metering package at [REDACTED] Substation.

1.4.2 Ground Fault Equipment

No ground current limitations are required for this project.

1.4.3 Easements

Idaho Power Company requires no easements from the Interconnection Customer.

1.4.4 Generator Output Limit Control (“Re-dispatch” or “GOLC”)

The Project will be allowed to deliver the net output of 4.7 MW at the Interconnection Point subject to reductions directed by Idaho Power Company Grid Operations during transmission system contingencies. When outages occur, the Project will be subject to Generator Output Limit Control (“GOLC”) and have equipment capable of receiving signals from Idaho Power for GOLC. Generator Output Limit Control will be a signal from Idaho Power to the Project indicating maximum output allowed during transmission contingencies.

1.5 Idaho Power Company’s Interconnection Facilities

Idaho Power will install a new 69 kV line bay and metering package at [REDACTED] Substation. This includes a deadend structure, two disconnect switches, a power circuit breaker, a line side PT, high bus, 3 metering quality PT’s, 3 meter quality CT’s, a 69 kV revenue meter in a box, and a SCADA RTU. The existing yard must be expanded which included earthwork, grounding, gravel, and fencing.

1.6 Interconnection Facilities Cost Estimate

The following good faith estimates are provided in 2011 dollars:

Description	Ownership	Cost Estimate
<i>Interconnection Facilities:</i>		
New line bay and metering at [REDACTED] Substation	IPC	\$765,000
<i>SUBTOTAL</i>		<i>\$765,000</i>
<i>See Section 6 for Project Grand Total</i>		

2. Milestones

Date	Milestones
TBD	<i>Construction Funds Received by IPCO</i>
*10 Months after Construction Funds Received by IPCO	<i>IPCO Construction Complete</i>
1 Month after IPCO Construction Complete	<i>IPCO Commissioning Complete</i>
	<i>Commercial Operation Date [tbd by seller]</i>

These milestone dates assume that material can be procured and that outages to the existing transmission line are available to be scheduled. Additionally, any permitting issues outside the immediate control of Idaho Power could also influence the Commercial Operation Date.

*69 kV line outages which are required for the interconnection are unavailable during the winter months (typically November thru January)

3. Operating Requirements

The project is required to comply with the applicable Voltage and Current Distortion Limits found in IEEE Standard 519-1992 *IEEE Recommended Practices and requirements for harmonic Control in Electrical Power Systems* or any subsequent standards as they may be updated from time to time.

The [REDACTED] Project will be allowed to deliver the net output of 4.7 MW at the Interconnection Point subject to reductions directed by Idaho Power Grid Operations during transmission system contingencies.

Interconnection Customer will be able to modify facilities on the Interconnection Customer side of the Interconnection Point with no impact upon the operation of the transmission or distribution system whenever the generation facilities are electrically isolated from the system via the Disconnect Switch 062C or other approved methods by Idaho Power system operations.

4. Reactive Power

This project must be capable of +/- 0.95 power factor. If the 69 kV bus voltage at the generation site is between 1.0 and 1.05 (69 kV and 72.5 kV), the generator will maintain unity power factor +/- 200 kVar. If the voltage falls outside the 1.0 – 1.05 bandwidth, the generator will deploy the required reactive, up to all available reactive to maintain the voltage within the 1.0 to 1.05 bandwidth.

5. Upgrades

5.1 Transmission Upgrades

The Interconnection Customer will build, maintain, and own the 69 kV line to the Point of Interconnection at [REDACTED] Substation.

6. Total Estimated Costs

The following good faith estimates are provided in 2011 dollars:

Description	Ownership	Cost Estimate
<i>Interconnection Facilities:</i>		
New line bay and metering at [REDACTED] Substation	IPC	\$765,000
<i>SUBTOTAL</i>		\$765,000
<i>Upgrades to Transmission:</i>		
69 kV Transmission Line to [REDACTED] Substation	Interconnection Customer	\$0
		\$0
		\$0
<i>SUBTOTAL</i>		
<i>GRAND TOTAL</i>		\$765,000

Note Regarding Transmission Service:

This Facility Study is a Network Resource Interconnection Facility Study. This study identifies the facilities necessary to integrate the Generating Facility into Idaho Power's network to serve load within Idaho Power's balancing area. Network Resource Interconnection Service in and of itself does not convey any right to deliver electricity to any specific customer or Point of Delivery.