

U.S. DEPARTMENT OF ENERGY – BONNEVILLE POWER ADMINISTRATION (BPA)
LINE AND LOAD INTERCONNECTION REQUEST

WHO SHOULD FILE THIS FORM: Utility customers expressing an interest in connecting transmission line or loads to the Bonneville Power Administration's (BPA) Transmission System (TS). This application should be completed as soon as possible and emailed to Interconnection@bpa.gov in order to begin processing the request.

INFORMATION: This application will be used by BPA to determine the level of planning study required for the interconnection request. These studies are used to determine the connection point location, equipment requirements (*Requester and BPA*), system modifications, etc. to connect transmission lines and/or loads to BPA-TS.

SECTION 1 – INTERCONNECTION REQUESTER AND CONTRACTORS

A. Requester/Owner Information

Company Name _____
Mailing Address _____
City _____ State _____ ZIP Code _____
Phone Number _____ Email Address _____ Contact Name _____

B. Technical Contact (*If different from Requester*)

Company Name _____
Mailing Address _____
City _____ State _____ ZIP Code _____
Phone Number _____ Email Address _____ Contact Name _____

C. Engineering Consultant (*As Applicable*)

Company Name _____
Mailing Address _____
City _____ State _____ ZIP Code _____
Phone Number _____ Email Address _____ Contact Name _____

This Line and Load Interconnection Request is submitted by:

Title	Name (<i>First, Last</i>) (<i>Please Print or Type</i>)
Requester Signature	Date

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SECTION 2 – GENERAL SPECIFICATIONS, LOCATION, AND DIAGRAMS FOR CONNECTION

Preliminary Review Information

A. Maturity:

No Developer (*utility customer is seeking exploratory study*)

Preliminary (*utility customer has had discussions with a developer, but no commitments*)

Contractual Commitments (*developer has executed contracts with utility customer, purchased property, initiated state or local permitting processes, etc.*)

Comments:

B. Type of Connection:

Configuration:	Customer Type at Interconnection Location:
Radial Load	Point to Point Transmission Service (PTP)
Network Connection with Other Sources Present	Network Integration Transmission Service (NITS/NT)
Operating Voltage (kV): _____	Has the load addition been forecasted in NITS customers Load and Resources Collection (LaRC) Process:
Requested Energization Date _____	Yes No If yes, date of LaRC submittal _____
	Balancing Authority Area: _____

Comments:

C. Proposed Point of Interconnection (POI) and Alternate POI Location(s) – Identify the BPA-TS Line or Substation (*Note in comments if request is for additional load behind an existing connection to BPA-TS*):

D. Type of Load: Identify the characteristics which best describe the type of load to be served.

Residential

Commercial

Industrial

Industrial load type:

Computer Processing – Server Farm

Chemical Processing Plant

Aluminum Smelter

Steel Mill

Semiconductor Manufacturing Plant

Power Plant Aux Load

Industrial – Other

Comments:

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SECTION 2 (CONTINUED) – GENERAL SPECIFICATIONS, LOCATION, AND DIAGRAMS FOR CONNECTION

E. Load Data (In the table below, identify the load addition at the time of energization and every year for 10 years)

Value for Year:	1	2	3	4	5	6	7	8	9	10
Projected Peak Load [MW]										
Summer Peak Load [MW]										
Winter Peak Load [MW]										
Anticipated Power Factor										

(If this request will also be transferring load from other locations indicate the MW amount or percentage(s) from each substation.
Example: Transfer 10% of load from X Substation and 25% of load from Y Substation)

F. Quality of Service (Special requirements such as redundancy, power quality, frequency and duration of outages, etc.):

G. Future Plans (Where known: Provide information on future plans to build out this project beyond this request):

H. Electrical One-Line Diagram and Geographic Information

Attach an electrical one-line diagram of the project. Show the breaker and switching arrangements, proposed protective relaying, connection to BPA-TS, and any assumed electrical equipment parameters for the connection.

Provide geographic information of project location (such as address, latitude/longitude coordinates, or attach a GIS map with project location identified):

SECTION 3 – STUDY DATA REQUIREMENTS

A. Network Power Flow Model (As required) (Enclose a model using approved WECC format)

B. Interconnecting Transmission Line(s) or Cable (Provide all parameters in **physical** units if applicable):

Nominal voltage [kV] _____ Length (Miles) _____

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SECTION 3 (CONTINUED) – STUDY DATA REQUIREMENTS

Transmission Line Impedances		
Quantity		
Series Resistance, R Ω		
Series Reactance X Ω		
Shunt Susceptance, B μS (or $\mu\Omega^{-1}$)		
Will this line be built on common structures with other circuits?	Yes	
	No	
Will this line be transformer-terminated at either end? If "yes", state which end(s) and the transformer identifier.	Yes	End: _____
	No	Transformer: _____

C. Transformers (Provide parameters if applicable)

Identifier _____ Number of Windings _____ Autotransformer? Yes No

Winding	Nominal Voltage [kV]	Configuration (Δ or YG)	Nameplate MVA	/	/
H:			H to X:	/	/
X:			H to Y:	/	/
Y:			X to Y:	/	/

Tap Information:

Winding (H, X, or Y) Values: Operational [kV] Available Taps [kV]
 _____ / _____ / _____ / _____ / _____

D. System Data – Only applicable where generation resources are present or if the connection includes another network source. Provide a system equivalent ($R1$, $X1$, $R0$, $X0$ in per unit on a 100 MVA base) at the proposed Connection Point looking into the connecting system. These values should be determined such that the system model does not include the physical connection to the BPA System. Assuming there are no other connections to the BPA System at any other point, these quantities are available by computing a single line-to-ground "bus fault" at the proposed Connection Point.

E. Generation (If applicable, provide information about onsite back-up generation when connection to the transmission system is lost):

F. Reactive Equipment (Location, size, and rated voltage) More specific information is required for reactive with dynamic capability (SVC, TCSC, Sync Condensers, etc.):