The Pacific Northwest - Southwest Intertie

The Pacific Northwest – Southwest Intertie (Pacific Intertie) is a collection of high voltage transmission lines interconnecting the Pacific West. It allows for power sales, exchanges, and other transactions between the Pacific Northwest and Pacific Southwest regions. Planning for the Pacific Intertie began in 1961 and construction started in 1965. The Pacific Intertie represents a combination of public and private investment and is owned and operated by multiple public and private entities.

What is the Southern Intertie?

The Southern Intertie, a subset of the Pacific Intertie, includes both the Pacific DC Intertie (PDCI) line from the Celilo converter station, near The Dalles, Oregon to the Nevada-Oregon Border (NOB), under BPA ownership, and the Northwest AC Intertie (NWACI) lines from John Day substation, north-central Oregon to the California-Oregon Border (COB).

What is the Northwest AC Intertie?

The NWACI, also a subset of the Pacific Intertie, is located predominantly in Oregon. The NWACI consists of portions of several 500 kV transmission lines and associated substations, facilities, and equipment in central Oregon. BPA is one owner of the NWACI along with PacifiCorp (PAC), and Portland General Electric (PGE). Collectively, these owners are referred to as Facility Owners. The arrangements between the Facility Owners are governed by contracts, providing:

- Facilities or portions of facilities dedicated to the NWACI.
- BPA designated to operate the NWACI as a single system – BPA is the Transmission Operator for the NWACI,
- Operations and maintenance, planning, execution, and cost sharing,
- · Capacity allocations for each Facility Owner,

- Rules and limitations for: scheduling, unused capacity, expansion, modifications, and
- Obligation to maintain the overall capacity of the NWACI.

Following the completion of the 3rd AC Intertie in 1992, BPA sold life-of-facilities capacity rights on the NWACI to several parties (Capacity Owners). The Capacity Owners are Puget Sound Energy, Seattle City Light, Turlock Irrigation District, Snohomish PUD, Tacoma PUD, and PAC. The rights and requirements of the Capacity Owners are established in contracts between BPA and each Capacity Owner.

BPA's remaining capacity on the NWACI is sold and managed under BPA's OATT as part of the Southern Intertie segment.

How does BPA's Segmentation affect the NWACI?

BPA segments its Transmission System for the purposes of equitable cost recovery and rates on the basis of cost causation. BPA considers its portion of the NWACI facilities to be part of the Southern Intertie segment. Some of these facilities are 100% contractually allocated to the NWACI, while other facilities have mixed or shared allocation with the Network Segment—these are known as multi-segmented facilities.

BPA must respect both equitable allocation of costs and the contractual rights of the NWACI Facility Owners and Capacity Owners. In most cases, the actual flow of energy will not directly correspond to the allocation of facility costs used for segmentation due to the complexity of the multiple parallel paths between the



source of energy (Source) and the corresponding load (Sink).¹

How is impact to the NWACI determined?

The NWACI may be impacted by the following common requests:

- Generation Interconnection (GI),
- Transmission Service Request (TSR), or a
- Line or Load Interconnection Request (LLIR).

As the NWACI is not physically isolated from BPA's transmission system, all requests must be studied to determine whether there is a negative impact to the NWACI without considering a plan of service, and if so, what plan of service would be required to maintain the capacity of the NWACI. "Negative impact" means any measurable reduction in capacity or use. There are two broad types of possible impacts to the NWACI:

- Physical impact A plan of service that involves the need to modify, install, or change any physical equipment at a NWACI facility. Consideration is given to the proposed change and whether it will impact any NWACI contractual obligations. This physical impact could be the result of an interconnection request or a project to enable incremental transmission service on BPA's system.
- Capacity impact A plan of service that the study finds is required to prevent a reduction in the overall NWACI capacity in the North to South and/or South to North direction as a result of the proposed request. This check is in addition to the standard evaluation of ATC.

Bonneville will study requests (GI, TSR and LLIR) and develop the best electrical plan of service. Due to the NWACI contractual arrangements which require protecting the rights of the Facility Owners and Capacity owners, any plan of service impacting the NWACI must be agreed upon by the Facility Owners. BPA may not make unilateral decisions about these facilities.

Can the NWACI be used for intra-regional (local) transmission?

The Pacific Intertie, and consequently the NWACI, were established to enable inter-regional transmission, or the transmission of energy between the Pacific Northwest² and regions outside the Pacific Northwest.

As directed by Congress when creating the Pacific Intertie, and as controlled by the various contracts with Facility Owners and Capacity Owners, the NWACI is not intended for transmission within the Pacific Northwest. Intra-regional transmission is accomplished through BPA's Network service.

If a Customer has already secured transmission service on the NWACI, can they use scheduling points other than John Day or COB?

Currently only California Oregon Border (COB) and John Day can be used as scheduling points on the NWACI.

Could a generator interconnect with NWACI facilities owned by the other Facility Owners?

Each Facility Owner has a similar obligation as BPA to preserve the NWACI's function and capacity. Any such request and any resulting plan of service would need to be collectively evaluated by all affected Facility Owners. Some facilities are owned by more than one party, in which case one owner is generally identified as the integrator for interconnection requests. To interconnect into such a facility, the Customer must apply for interconnection service with that identified integrator. If interconnection service is approved with that integrator, it should not be assumed that interconnection service is a possibility with all owners of that particular facility. Service must still be evaluated independently by all Facility Owners.

miles from the area referred to in subparagraph (A), which are a part of the service area of a rural electric cooperative customer served by the Administrator on December 5, 1980, which has a distribution system from which it serves both within and without such region. [Northwest Power Act, §3(14)(A) and (B), 94 Stat. 2700.]" The term was previously defined in the Pacific Northwest Consumer Power Preference Act.

¹ For a list of Southern Intertie facilities, click here.

² Pacific Northwest is defined in the Northwest Power Act of 1980 as: "The area consisting of the States of Oregon, Washington, and Idaho, the portion of the State of Montana west of the Continental Divide, and such portions of the States of Nevada, Utah, and Wyoming as are within the Columbia River drainage basin; and any contiguous areas, not in excess of seventy-five air

Are NWACI rights interchangeable with rights on BPA's Network?

No. BPA is not aware of any flexibility in the contracts allowing interchangeability between NWACI rights and Network rights, or vice versa.

Could the NWACI contracts be changed to allow for different usages of the NWACI?

Proposals to change the purpose of the NWACI, such as to allow intra-regional transfers, would require consent from all the owners, and could require Congressional approval.

BPA cannot make unilateral changes to the NWACI. Any modification to use capacity for different uses or change capacity rights for other purposes is not allowed under the current agreements and would require negotiation with and consent from all Facility Owners and additionally, Capacity Owners. BPA also has agreements with California entities governing coordinated operation of the Pacific Intertie.

The Facility Owners agree that the industry has changed substantially since the contracts were originally drafted. The Facility Owners are planning to begin discussions on if and how to modernize the contracts.