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		Last Revised	10-15-2007
		Effective Date	04-01-2007

General Information

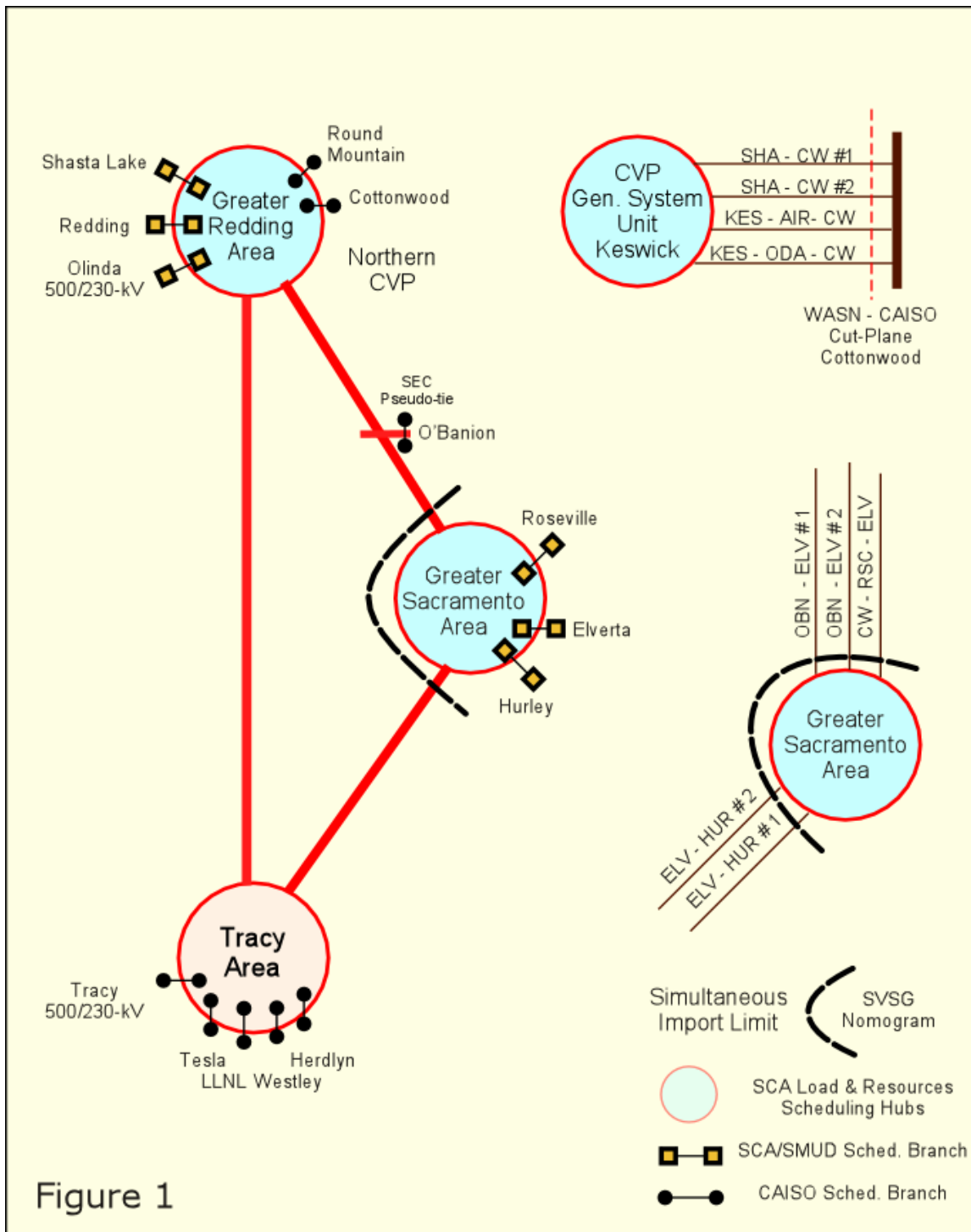
The following are the base assumptions for the determination of the Available Transmission Capability (ATC) on Western Area Power Administration Sierra Nevada Region's (WASN) Central Valley Project (CVP) 230-kV Transmission network to be posted on the WASN OASIS. The CVP transmission includes the WASN owned share of the 500-kV California-Oregon Transmission Project (COTP) between Olinda and Tracy in addition to the federally owned CVP transmission network. The CVP transmission is operated as a fully integrated transmission network; not as a rated or controlled path. The only known exception for the CVP transmission network is the simultaneous import into the greater Sacramento area during summer and certain operating conditions that are governed by a simultaneous operating Nomogram.


Figure 1 shows the simplified CVP transmission network and the three major load and resource hubs including the lines, connecting the hubs, which form a cut-plane. ATC for the radial and looped portion of the northern and central CVP hubs will not be posted unless specific request is received.



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WASN does not have a state-estimator tool for managing the network transmission service. Therefore, the following methodology will be used for the determination of the CVP Network ATC. It should be noted that this approach is not an exact methodology but a proxy and does not reflect the actual operating conditions. It is intended to provide transparency and it is to be used for scheduling of energy when transmission capacity is available. WASN may revise the CVP Network ATC posting and reservation methodology when a practical and cost effective tool is available.

ATC Methodology for CVP Network Transmission

1. The Total Transmission Capability (TTC) for the CVP Network transmission will be based on the sum of the thermal limit(s) of a line or group of lines at a cut-plane into a load center as shown in Figure 1. The simultaneous import into the Sacramento area will be governed by the Sacramento Valley Study Group (SVSG) Nomogram.


Using the SVSG study base case the flow distribution on lines and the total flow into a load center will be used to determine the distribution factors among lines and account for post-contingency ATC. To calculate a cut-plane capability, the total thermal limits of all lines will be used as TTC. When an operational limitation(s) or operational reliability is identified the lower limit such as the simultaneous import limit will be used as TTC for the cut-plane.

2. The existing transmission service obligations or the Committed Uses (CU) is then distributed among the lines in a cut-plane using the same flow distribution factors.
3. The difference of actual n-0 cut plane flow and the total obligations (CU) will be used as an appropriate measure for Transmission Reliability Margin (TRM) for WASN's CVP transmission network. The 2006, SVSG study (n-0 base) simultaneous import into the greater Sacramento area (WASN transmission network only) is used to determine TRM for the CVP transmission which is estimated to be $(1 - CU/TTC) \times 100$ or

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about twelve percent (12%) for the calendar year 2007 for the CVP transmission network.

4. WASN's Capacity Benefit Margin (CBM) for the CVP transmission Network is assumed to be zero (0) MW at this time. However, WASN may revise its policy when necessary.
5. In general ATC for a line or cut-plane is defined by the algebraic sum of: $ATC = TTC - TRM - CBM - Committed\ Uses$. However, the ATC for portion of the CVP network that is/are not congested will be based on the smallest of; Thermal Rating - (TRM+Flow) or Thermal Rating - (Comm. Use + TRM). WASN may revise the TRM methodology based on actual operating experience on an on-going basis for transmission reliability and security.
6. Folsom/Nimbus power plants are designated network resources along with the Roseville and SMUD generation that are considered as a part of the greater Sacramento area load center. The Sutter Energy Center is designated as a network resource and it is dynamically transferred into the California ISO Balancing area under the pseudo-tie operating protocols.
7. WASN will use the same TRM (12%) for all other CVP transmission network lines or cut-planes that are not currently congested.
8. In addition to Calpine's Sutter Energy Center, all of CVP power plants are designated as network resources and assumed to be located at Keswick as (CVP Gen a system unit or a virtual unit) only for federal power allocation and resource management.
9. The ATC will be governed by the actual transmission network operating condition and the simultaneous flow limits.
10. The simultaneous import into the greater Sacramento area over WASN 230-kV lines is limited and governed by the on-going Sacramento Valley Study Group (SVSG) simultaneous operating Nomogram.

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11. Except for the simultaneous limitations of the Northern California Hydro and the California-Oregon Intertie (COI) simultaneous Import, there are no known simultaneous limits on the Northern portion of the CVP transmission network.
12. The thermal limit(s) of the lines is used for calculation and posting of ATC in the greater Redding area.

Scheduling:

1. Transmission schedules must be tagged from the same POR/POD combinations as identified in the OASIS reservation.
2. Transmission schedules that do not match POR/POD as identified in OASIS will not be allowed and the e-tag will be denied.

Constrained Path:

The CVP transmission network that is accounted for in the simultaneous import into the greater Sacramento area includes the following transmission lines, also shown in Figure 1:


1. O'Banion – Elverta 1 and 2
2. Cottonwood – Roseville
3. Tracy – Hurley 1 and 2

Energy Schedules:

All pre-scheduled energy transactions must have an approved e-tag. WASN will not accept the energy transactions without a valid e-tag and all e-tags must be submitted in accordance with NERC Interchange Standards

Curtailment:

All new short-term firm and non-firm transmission service into the greater Sacramento area are subject to curtailment first prior to the long-term committed uses due to the simultaneous import limitations. WASN firm transmission curtailment will be made according to its Open Access

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Transmission Tariff, section 13.6:

http://www.oatioasis.com/WASN/WASNdocs/OATT_Clean_5-1-07.pdf

Acceptance of OASIS Requests

OASIS requests will be granted when uncommitted ATC exists based on operational feasibility and system conditions prevail on day-ahead schedules.

Acceptance of the ATC Requests

Effective immediately five (5) or more requests for the same posted Point of Receipt (POR) and Point of Delivery (POD) by the same customer within One (1) clock hour will be considered abuse of WASN OASIS and will be rejected. If the customer submits five (5) or more requests within any one (1) clock hour, all of those requests will be denied.

Monthly Firm Requests:

Not offered during the period beginning at 00:00 on June 1st thru 24:00 on October 31st and may be offered only when available based on the expected operating conditions. Here is Western Area Power Administration - Sierra Nevada Region's rates web site:

<http://www.wapa.gov/sn/marketing/rates/>

Weekly Firm Requests:


Starting with the period beginning at 00:00 from November 1st thru May 31st WASN may post the ATC depending on the operating conditions when no transmission outages are planned.

Daily Firm Requests:

OASIS request made no later than 10:00 A.M. PPT twenty four hours (24) ahead of the actual operating day will be granted based on prevailing operating condition.

Non-Firm Transmission Service requests

All reservations for non-firm transmission services must be made through the WASN OASIS node with valid e-tag.

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Unauthorized Use of WASN Transmission

Unauthorized use of WASN transmission is defined as unscheduled or untagged capacity, energy and ancillary services exceeding the reserved transmission capacity between any given POR and POD. Unauthorized use may also include the transmission customer's failure to curtail when directed by the WASN dispatcher.

The transmission customers including WASN's merchant affiliate WAMP will be charged 150 percent of the firm transmission costs.


Expanded Transmission Service

Redirect will be offered only on firm transmission reservations when available and will include all firm transmission service obligations. Redirect requests shall be made as Secondary Hourly request from alternate POR/POD.

Partial Service: If WASN cannot accommodate the request in its entirety, counteroffer will be made if transmission is available.

Transmission Loss Collection

Transmission losses of 1.6% will be assessed on all pre-scheduled and real-time transactions on CVP 230-kV transmission network. The current WASN practice for transmission loss accounting is return in-kind energy to settle loss obligations in WASN SCA;

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DOCUMENT CONTROL

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0	Original Document	N.A.	4/1/2007	
1	Minor Modifications	10/15/2007	10/15/2007	M. Mirzadeh