



Transmission Services

Equivalent ATC

Why is BPA posting Equivalent ATC?

As part of BPA's filing for reciprocity at FERC and in accordance with both Order No. 890 and 18 C.F.R. § 37.6., BPA committed to converting AFC values for flowgates to path ATC values for all "posted paths" by April 30, 2013. A "posted path" is defined as "any control area to control area interconnection; any path for which service is denied, curtailed or interrupted for more than 24 hours in the past 12 months; and any path for which a customer requests to have ATC or TTC posted." 18 C.F.R. § 37.6(b)(1)(i).

What does Equivalent ATC mean?

BPA uses the formula provided in MOD-030 R11 to convert AFC values for flowgates to path ATC values. The path ATC value produced using this formula is called "Equivalent ATC."

This conversion will enable customers to determine Equivalent ATC for a posted path. Please note that the posted Equivalent ATC values are used for demonstrative purposes only. Transmission Service Requests are not evaluated or granted based on these calculations.

How often will BPA calculate Equivalent ATC?

BPA will calculate Hourly Equivalent ATC at the top of each hour for hours 0 thru 168. Daily Equivalent ATC for days 8 thru 90th, and Monthly Equivalent ATC for months 3 out 10 years will be posted at a minimum twice per day at 00:00 PP and 05:00 PP.

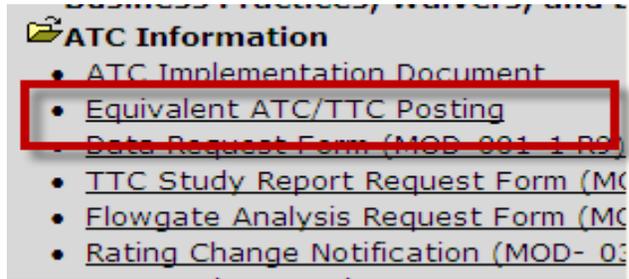
Where is the Business Practice for Equivalent ATC?

There is no Business Practice for Equivalent ATC. There will be an update to BPA ATC ID. BPA ATC ID is located on BPA external website at:
http://transmission.bpa.gov/business/atc_methodology/ → To open the ID, click on ATC Implementation Doc (0-13 Mths).

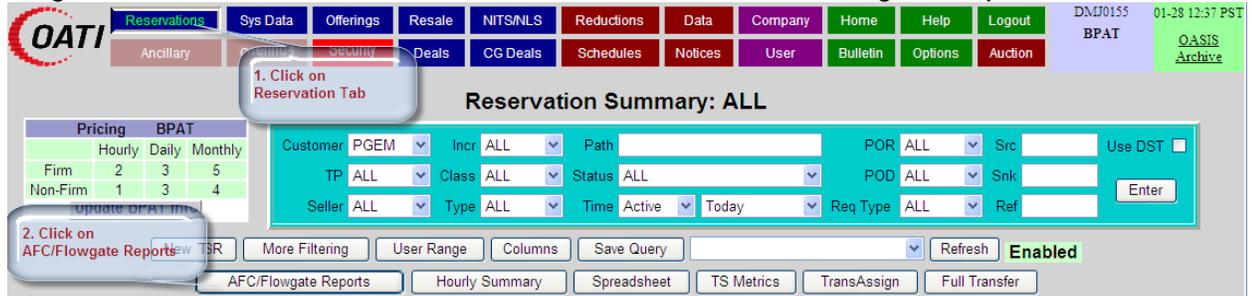
Where is the Equivalent ATC information posted on OASIS?

The Equivalent ATC can be accessed in BPA webOASIS via the home page or by the AFC/Flowgate Reports.

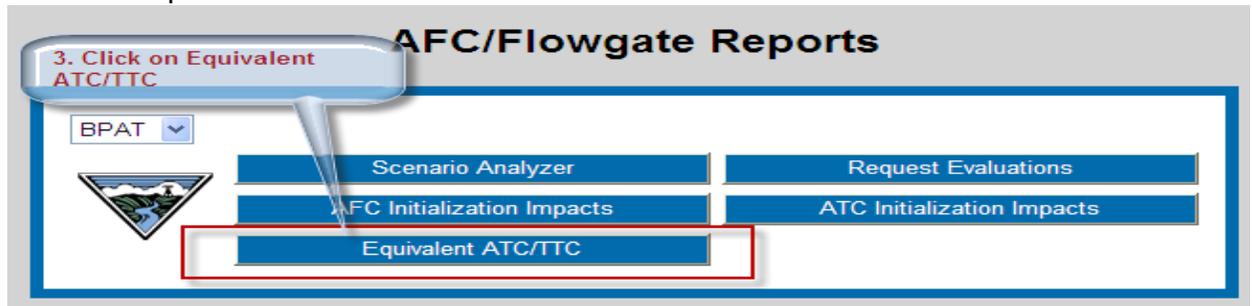
1. From BPAT home page in OASIS under the ATC information folder on left side → Click on Equivalent ATC/TTC Posting



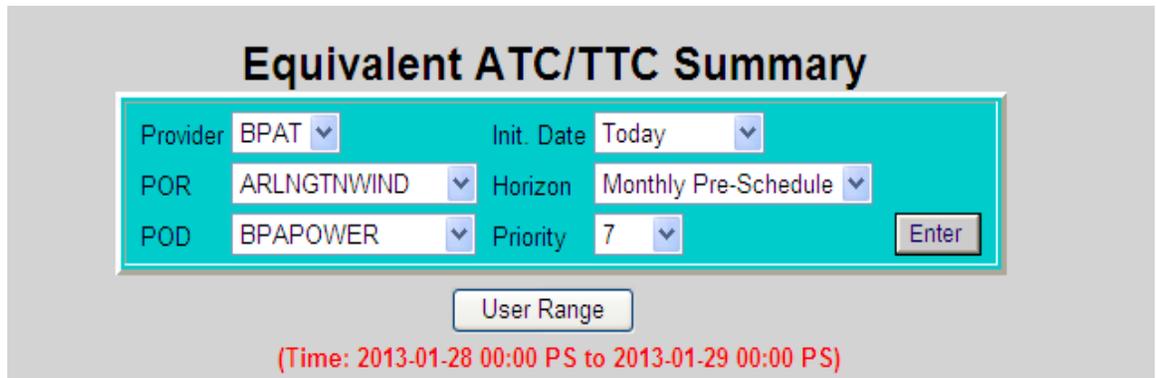
Or go to: webOasis → Reservation Tab → Click on AFC/Flowgate Reports:



Click on Equivalent ATC/TTC tab:



2. The following screen will appear whether accessed from Home page or AFC/Flowgate Reports:



Customer must enter in the following fields:

- POR
- POD
- Int. Date: Should be set to "Today". The date reflect the date the report was written
- Horizon : Depends on the date the customer is looking for Equivalent ATC
 - Hourly Real Time - Current Day

- Hourly Preschedule - Tomorrow plus 7 days
- Daily Preschedule- 8th day to 90th day
- Monthly Preschedule - 3rd month out to 10 years
- Priority: This is NERC priority on the Reservation which is directly associated with priority on an e-tag (only exception is Conditional Firm).
 - 0 = BPA does not use zero priority
 - 1 = 1-NS Secondary Hourly PTP Non Firm (used when Firm Redirects to Non Firm. BPA lowest non firm)
 - 2 = 2-NH Primary PTP Hourly Non Firm
 - 3 = 3-ND Daily PTP Non Firm
 - 4 = 4-NW Weekly PTP Non Firm
 - 5 = 5-NM Monthly PTP Non Firm
 - 6 = 6-NN Network Non Firm (Hourly, Daily, Weekly, Monthly)
 - 7 = 7-F or 7-FN Firm either PTP or NT

3. After clicking "Enter" the following reports appear below the query field:

Init. Date	Horizon	Provider	POR	POD	Priority	Reports
2013-02-12 00:10:09 PS	Monthly Pre-Schedule	BPAT	ARLNGTNWIND	BPAPOWER	7	2013-04-30
2013-02-12 05:06:28 PS	Monthly Pre-Schedule	BPAT	ARLNGTNWIND	BPAPOWER	7	2013-04-30
2013-02-12 05:39:49 PS	Monthly Pre-Schedule	BPAT	ARLNGTNWIND	BPAPOWER	7	2013-04-30
2013-02-12 05:44:24 PS	Monthly Pre-Schedule	BPAT	ARLNGTNWIND	BPAPOWER	7	2013-04-30
2013-02-12 05:51:37 PS	Monthly Pre-Schedule	BPAT	ARLNGTNWIND	BPAPOWER	7	2013-04-30
Total: 5 Equivalent ATC/TTC Reports						

Click on the date (which is a blue hyperlink) under Reports column to see a very big/long Report.

Equivalent ATC/TTC Report

The results below are reported in the Transmission Provider's prevailing time zone.

Hovering over the Equivalent ATC value per time will bring up a pop up box showing the

Init. Id	Init. Date	Provider	Horizon	POR	POD	Priority	Report Date
14652770	2013-02-12 00:10:09 PS	BPAT	Monthly Pre-Schedule	ARLNGTNWIND	BPAPOWER	7	2013-04-30

Start Date	Stop Date	Equivalent ATC	Equivalent TTC	AFC NOHANF_S>N	AFC WOJD_E>W	AFC SBNDRY_IN>S	AFC WANAPM_IN>S	AFC W_LOMO_E>W	AFC SCSTER_IN>S	AFC N_ECCL_S>N	AFC SOALSII_S>N	AFC CLMBIA_IN>S	PTDF NOHANF_S>N	PTDF WOJD_E>W	PTDF SBNDRY_IN>S	P
2013-05-01	2013-07-01	682	4797	400.67	400.23	400.92	400.68	400.16	400.98	400.60	400.94	400.35	0.2432	0.0322	0.0028	-
2013-07-01	2013-10-01	681	4797	400.09	400.93	400.41	400.93	400.87	400.90	400.37	400.96	400.25	0.2432	0.0322	0.0028	-
2013-10-01	2013-11-01	680	4797	400.48	400.14	400.63	400.44	400.48	400.02	400.54	400.97	400.11	0.2432	0.0322	0.0028	-
2013-11-01	2023-05-01	?	?	400.90	400.90	400.00	400.90	400.90	400.00	400.90	400.90	400.90	.	.	.	-

4. How to read the above Report:
Each report is a snap shot in time.

Equivalent ATC/TTC Report

The results below are reported in the Transmission Provider's prevailing time zone.

Init. Id	Init. Date	Provider	Horizon	POR	POD	Priority	Report Date
14652770	2013-02-12 00:10:09 PS	BPAT	Monthly Pre-Schedule	ARLNGTNWIND	BPAPOWER	7	2013-04-30

Column Headers

- Init. Id = Report ID only
- Init. Date = The time and date the report was generated.
- Provider = BPAT
- Horizon = Based on filter under Horizon
- POR
- POD
- Priority

o

Report Date

Start Date	Stop Date	Equivalent ATC	Equivalent TTC	AFC BORANF_S>H	AFC WQJD_E>W	AFC SBNDRY_N>S	AFC WIAHAPM_N>S	AFC W_LOMO_E>W	AFC SCSTER_N>S	AFC H_ECGL_S>H	AFC SOALSH_S>H	AFC CLMBIA_N>S	PTDF BORANF_S>H	PTDF WQJD_E>W	PTDF SBNDRY_N>S
2013-05-01	2013-07-01	682	4797	400.87	400.23	400.52	400.88	400.16	400.98	400.80	400.94	400.35	0.2432	0.0322	0.0028
2013-07-01	2013-10-01	681	4787	400.09	400.93	400.41	400.93	400.87	400.90	400.37	400.96	400.25	0.2432	0.0322	0.0028
2013-10-01	2013-11-01	680	4797	400.48	400.14	400.63	400.44	400.48	400.02	400.54	400.97	400.11	0.2432	0.0322	0.0028
2013-11-01	2023-05-01	?	?	400.90	400.90	400.00	400.90	400.90	400.00	400.00	400.90	400.90			

The first 4 columns are the most useful (Start, Stop, Equivalent ATC, and Equivalent TTC). All the other columns are displayed (transparent) in case a customer would like to re-create the Equivalent ATC.

Column Headers:

- The start/stop time should be self explanatory
- Equivalent ATC
 - o Max capacity available at the time the 'REPORT" was written
 - If a customer submitted a TSR from POR X to POD Z, this is the max available for that Start/Stop time. This is based on a formula in NERC ATC MOD-030-02 R11
- Equivalent TTC
 - o Is the TTC/SOL for POR X to POD Z. This is based on using a similar formula in NERC ATC MOD-030-02 R11
- AFC per flowgate (the report will display all active flowgates)
 - o This is max AFC per flowgate
- PTFD value (the report will display all active flowgates)
 - o PTFD/PUF value per flowgate used in calculation of Equivalent ATC (POR PTFD - POD PTFD = PUF).

What are the posted paths a customer can query?

The posted paths available in the Equivalent ATC have been limited to those utilized in the last 24 months. This is to negate performance issues and the management of POR's and POD's. This limits the combination to ~1875 vs the ~500,000 for all paths on FCRTS.

If a POR or POD is not available in the drop down, please email the request to TXCBS@bpa.gov

The system will return the following message if the POR/POD combination is not available.

No Records matching your criteria search were found

There are specific paths that do not have Network impacts. If queried, the above message will occur. At this time, the following POR/POD combinations below do not have MOD-030-02 impacts:

POR	POD
BIGEDDY	NOB
COB	JOHNDAY
COB	KFALLS
HILLTOP345	MALIN230
JOHNDAY	COB
JOHNDAY	KFALLS
KFALLS	COB
KFALLS	JOHNDAY
MALIN230	HILLTOP345
NOB	BIGEDDY
TOWNSEND	GARRISON

The formula to convert AFC to Equivalent ATC per NERC ATC MOD-030-02 R11:

On BPA external site there is a link to MOD -30-02.

http://transmission.bpa.gov/business/atc_methodology/default.cfm?page=nerc_atc →
click on MOD-030-2 Flowgate Methodology scroll down to R11.

R11. When converting Flowgate AFCs to ATCs for ATC Paths, the Transmission Service Provider shall convert those values based on the following algorithm: [Violation Risk Factor: To Be Determined] [Time Horizon: Operations Planning]

$$ATC = \min(P)$$

$$P = \{PATC_1, PATC_2, \dots, PATC_n\}$$

$$PATC_n = npnDFAFC$$

Where:

ATC is the Available Transfer Capability.

P is the set of partial Available Transfer Capabilities for all "impacted" Flowgates honored by the Transmission Service Provider; a Flowgate is considered "impacted" by a path if the Distribution Factor for that path is greater than the percentage used to curtail in the Interconnection-wide congestion management procedure used by the Transmission Service Provider on an OTDF Flowgate or PTDF Flowgate.

$PATC_n$ is the partial Available Transfer Capability for a path relative to a Flowgate n.

AFC_n is the Available Flowgate Capability of a Flowgate n.

DF_{np} is the distribution factor for Flowgate n relative to path p

NOTE: A negative DF denotes counter flow on a flowgate. The formula will ignore a flowgate with a negative DF when determining Equivalent ATC for the requested path.

If Equivalent ATC per a flow gate is negative or zero a - is posted

A similar formula is used to determine equivalent TTC.