

B O N N E V I L L E
P O W E R A D M I N I S T R A T I O N



**Available Transfer Capability
Implementation Document
Version History**

**Bonneville Power Administration
Transmission Services**

Updated: May 15, 2024

ATCID Version History			
Version	Date Revised	Description of Changes	Prepared by
1.0	03/30/2011	BPA ATCID FINAL	S Long L Trolese C Etheridge
2.0	05/11/2011	P.31 Table 2 BPA Flowgates: Corrected the definition of the West of McNary Flowgate by replacing McNary - Horse Heaven 230 kV line with Harvalum - Big Eddy #1 230 kV line in the West of McNary Flowgate Transmission Line Components	L Trolese
3.0	08/11/2011	<p>P. 7 line 114: Revised frequency of hourly calculations from at least three times per hour to at least once per hour.</p> <p>P. 12-13 Table 1 BPA Paths: Added Montana-Northwest to the Path Name; added Garrison 500 kV 1 and 2 to the Transmission Line Components of the West of Garrison E>W and W>E Paths and revised the Montana Intertie Transmission Line Component from Broadview - Garrison 500 kV 1 and 2 to Townsend-Garrison 500 kV 1 and 2 to be effective October 1, 2011.</p> <p>P. 17 lines 395-397: Revised sentence to include Montana Intertie as an ATC Path that is limited by contract.</p> <p>P. 18 lines 440-445: Revised paragraph to include Montana Intertie as an ATC Path where another TOP sets the TTC.</p> <p>P. 19 line 483-486 and P. 40 line 1102: Added forecasted network resources to be included in Network Integration Transmission Service</p> <p>P. 20 line 517: corrected reference from ETC to ATC_{NF}.</p> <p>P. 20 line 531; P. 22 ETC_F variable diagram, P. 25 line 669, P. 26 ETC_F variable diagram, P. 47 line 1324, P. 49 ETC_F variable diagram, P. 53 line 1493 and P. 54 ETC_F variable diagram: Corrected ETC_F formula to subtract SADJ/ETC Adjustments instead of add it.</p> <p>P. 27 lines 724-726 and P. 55 lines 1549-1551: Updated reason for why ROR_F is not included in the real-time horizon.</p>	L Trolese

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		<p>P. 29 line 789: Deleted “implemented” from which schedules impact counterflows.</p> <p>P. 30 lines 798-800: Added a note describing the variable RADJ/Congestion Management and how it impacts ATC calculations.</p> <p>P. 44: Corrected footnote 7 to align it with the reference.</p> <p>P. 47: Deleted language referring to including adjacent TSP reservations in interim ETC_{Fi}.</p> <p>P. 53 lines 1517-1521: Added paragraph describing LETC that was mistakenly left out in Version 1.0 and 2.0.</p> <p>P. 57 line 1604: Deleted “confirmed” from which schedules impact counterflows.</p> <p>P. 58: Replaced table delineating the NERC registered functions of the entities with a bulleted list of the entities.</p> <p>Appendix A: Updated List of Contracts and Specific Paths with Shared Ownership to indicate the Colstrip Project on the Montana Intertie Path will no longer be represented as an allocation agreement after October 1, 2011.</p> <p>Appendix C: Updated the SOL Methodology.</p> <p>Appendix D: Updated BPA’s NITS, GF, and PTP Agreements to include the Colstrip Project and other contracts that have been added since February 3, 2011.</p>	
4.0	09/30/2011	P. 27 lines 720 - 722 and ETC_F variable diagram: added new use for RADJ/ETC Adjustments variable.	L Trolese
5.0	10/20/2011	<p>P. 39 lines 1068-1070, P. 40 lines 1077-1079 and lines 1087-1089: Removed language referring to the month of August.</p> <p>P. 40 lines 1103-1114, P. 41 lines 1118-1128 and P. 48 lines 1325-1331: added paragraph describing how BPA accounts for the impacts of its adjacent TSP firm NITS and PTP Transmission Service.</p>	L Trolese

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6.0	11/1/2011	<p>P.31 Table 2 BPA Flowgates: Added the McNary - John Day #2 500 kV line to the West of McNary Flowgate definition.</p> <p>Appendix C: Updated the SOL Methodology.</p>	L Beckman
7.0	11/10/2011	<p>P. 40 line 1103 and P.41 line 1118: Changed effective date from November 8th to no later than November 15, 2011 for incorporating adjacent TSP TSRs into AFC calculations.</p>	L Beckman
8.0	02/03/2012	<p>P. 35 line 907: Added paragraph describing how BPA prepares for the addition of a flowgate.</p>	L Beckman
9.0	02/13/2012	<p>P. 5, P. 22, P. 29: Defined BPA's TRM practice for the Northern Intertie S>N Path.</p> <p>P. 20 line 528 and P. 23 line 597: Replaced NI Holdout in the ATC_F formula with TRM.</p>	L Beckman
10.0	02/14/2012	<p>P.30-31 Table 2 BPA Flowgates: Corrected the following flowgate definitions: South of Allston Flowgate: replaced Astoria-Seaside 115kV; and Lewis & Clark-Astoria Tap 115kV line with Astoria-Seaside 115kV; and Clatsop 230/115kV line in the South of Allston Flowgate Transmission Line Components. North of John Day Flowgate: replaced Wautoma-John Day 500kV line with Wautoma-Rock Creek 500kV line in the North of John Day Flowgate Transmission Line Components. Cross Cascades North Flowgate: Added the Anderson Canyon-Beverly Park 115 kV line to the Cross Cascades North Flowgate Transmission Line Components. Cross Cascades South Flowgate: replaced Hanford-Ostrander 500kV line with Wautoma-Ostrander 500kV line, replaced McNary-Santiam 230kV line with Jones Canyon-Santiam 230kV line, replaced Parkdale-Troutdale 230kV with Big Eddy-Troutdale 230kV, and added Bethel - Round Butte 230 kV line in the Cross Cascades South Flowgate Transmission Line Components. West of McNary Flowgate: replaced McNary-Santiam 230kV line with Jones Canyon-Santiam 230kV line in the West of McNary Flowgate Transmission Line Components.</p>	L Beckman
11.0	02/22/2012	<p>P. 8 line 166: Removed reference to Northwest Power Pool (NWPP) Outage Coordination Processes, dated 01/29/09.</p>	L Beckman
12.0	03/01/2012	<p>P. 32 Table 2 BPA Flowgates: Added the West of John Day Flowgate and Transmission Line Components.</p> <p>P. 32 Figure 3 BPA Network Flowgate Map: Added the West of John Day Flowgate.</p>	L Beckman

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13.0	03/27/2012	<p>P. 31 Table 2 BPA Flowgates: Removed the Anderson Canyon-Beverly Park 115 kV line from the Cross Cascades North Flowgate Transmission Line Components.</p> <p>P. 4 line 52: Moved MOD 008-01 to the Methodologies Selected section.</p>	L Beckman
14.0	04/11/2012	Appendix A: Updated Portland General Electric's Intertie Agreements to reflect the termination of the AC/DC Exchange Agreement that will be effective on 7/1/2012.	L Beckman
15.0	05/15/2012	<p>P. 38 lines 1013-1015, P. 41 lines 1107-1115, P. 46 lines 1282-1289, P. 50 lines 1402-1407 and P. 50 lines 1422-1427: Moved language regarding the PTDF Analysis impact and percentage used in the Western Interconnection-wide Congestion Management Procedure.</p> <p>P. 40 lines 1084-1093: Added generation estimates as the source of the PTDF weightings.</p> <p>P. 42 lines 1157-1159 and P. 51 lines 1433-1436: Added description of how BPA accounts for schedules in ETC_{Fj}.</p> <p>P. 44-45: Removed the definition of and all reference to the "94th Percentile Method".</p> <p>P. 47 lines 1305-1315 and P. 52 lines 1476-1486: clarified that LRES and SRES include reservations for all of BPA's adjacent TSP areas, filtered to reduce duplicates.</p>	L Beckman L Trolese
16.0	06/27/2012	P. 40 lines 1084-1086: changed sentence to describe that BPA is grouping the generators for all of its adjacent BAAs instead of just a subset.	L Trolese
17.0	08/15/2012	<p>P. 31 Table 2 BPA Flowgates: Added outage conditions flowgate definition for Raver-Paul (N>S).</p> <p>P. 29-30 lines 774,787,799: Replaced RADJ variable descriptions with RADJ/ETC.</p>	L Beckman
18.0	09/20/2012	<p>P. 12 line 299 Table 1 BPA Paths: Removed Transmission Line Components and RAS.</p> <p>P. 23-28 lines 599-607, 633, 750 and 752: Added new Non-firm products to formulas used for calculating Non-firm ETC and Non-firm ATC.</p> <p>P. 50-56 lines 1403-1411, 1428, 1479-1484 and 1604: Added new Non-firm products to formulas used for calculating Non-firm ETC and Non-firm AFC.</p> <p>Appendix C: Updated the SOL Methodology.</p>	L Beckman

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19.0	10/18/2012	P. 48 and 53, lines 1334 and 1513: Removed language on accounting for Conditional Firm products in the ETC Adjustment.	L Beckman
20.0	10/24/2012	P. 32 Table 2 BPA Flowgates: Added the South of Boundary Flowgate and Transmission Line Components. P. 33 Figure 3 BPA Network Flowgate Map: Added the South of Boundary Flowgate.	L Beckman
21.0	11/14/2012	P. 8, lines 159-167: Updated BPA's allocation processes for the Columbia Injection (N>S) and Wanapum Injection (N>S) flowgates. P. 31 Table 2 BPA Flowgates: Replaced Bettas Road - Covington #1 230kV with Bettas Road - Covington #1 230kV in the Cross Cascades North Flowgate Transmission Line Components. P. 31-33 Table 2 BPA Flowgates: Added the North of Hanford (S>N), South of Allston (S>N), Columbia Injection (N>S), Wanapum Injection (N>S) and West of Lower Monumental (E>W) Flowgates in Transmission Line Components, effective Nov. 30, 2012. P. 45 and 46, lines 1245-1248, 1286-1288 and 1318: Added documentation describing ETC calculation practices for light load ETC Cases. P. 55 and 56, lines 1564, 1574-1576 and 1580: Added RETC variable and definition to calculation formula for ETC _i for the Real-Time Horizon.	L Beckman
22.0	01/31/2013	Appendix A: Updated Seattle City Light's PNW AC Intertie Ownership Agreement to reflect shared ownership, effective 1/31/13.	L Wickizer
23.0	01/31/2013	P. 5 line 61, P. 22 line 579, P. 23 lines 594-596, P. 29 line 786: Removed BPA's TRM practice for the Northern Intertie S>N Path, effective Feb. 13, 2013. P. 31-33 Table 2 BPA Flowgates: Added the North of Echo Lake (S>N) and South of Custer (N>S) Flowgates and removed the Monroe-Echo Lake Flowgate in Transmission Line Components, effective Feb. 13, 2013. P. 32 Table 2 BPA Flowgates: Added John Day - Marion No. 1 500kV in the West of John Day Flowgate Transmission Line Components, effective Feb. 13, 2013. P.33 Figure 3 BPA Network Flowgate Map: Updated location of the North of Echo Lake (S>N) and South of Custer (N>S) Flowgates.	L Wickizer

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24.0	02/12/2013	P. 5 lines 52-57, P. 22 lines 581-584, P. 23 lines 597-601, P. 29 lines 788-793, P. 30 lines 826-830: Added BPA's updated TRM practice for the Northern Intertie Path.	L Wickizer
25.0	03/04/2013	P. 58 lines 1651-1655: Added BPA's practice for Converting AFC to ATC.	L Wickizer
26.0	03/25/2013	P.32 Table 2 BPA Flowgates: Updated flowgate names on OASIS. P. 41 lines 1102-1112: Added documentation for Mid-Columbia generators in the weighted PTDF description.	L Wickizer
27.0	05/01/2013	P. 38-39 lines 993-1002: Updated BPA's process for mapping and incorporating outages into the WECC base case. Appendix A: Updated Avista's West of Hatwai Ownership Agreement number.	L Wickizer
28.0	05/15/2014	P. 7-8 lines 123-127, 131-134, 142-143, 149-150: Language clarification in Limiting Assumptions section. P. 9 lines 178-203: Updated BPA's process for outage planning. P. 10 lines 209 - 222: Language clarification on Daily and Hourly TTC and TFC Calculations. P. 10-11 lines 238 - 272: Language clarification on SOL Priorities Used to Set TTC and TFC. P. 37, lines 884-885, 892: Language clarification on SOL study process. P. 38, lines 952-953: Language clarification on SOL study process. P. 39, line 965: Language clarification on TFC calculation. Appendix C: Updated the SOL Methodology.	M Olczak
29.0	05/31/2014	P. 33 Table 2 BPA Flowgates: Added outage conditions flowgate definition for West of McNary.	M Olczak

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30.0	7/24/2014	<p>P. 32 Table 2 BPA Flowgates: Changed Olympia - South Tacoma 230kV to St. Clair - South Tacoma 230kV in the Raver-Paul section.</p> <p>P. 36 Table 3 Interfaces with BAs Adjacent to BPA: Added Gridforce Energy Management as a BA-BA interconnection.</p> <p>P. 36 Table 3 Interfaces with BAs Adjacent to BPA: Updated to show Portland General Electric and Seattle City Light also have connections accounted for with paths that use the Rated System Path Methodology.</p> <p>P. 5 Clarification on number of BAs within the WECC area</p>	J Ofstead
31.0	09/13/2014	P. 33 Table 2 BPA Flowgates: Updated West of McNary flowgate definition during outages.	J Ofstead
32.0	10/21/2014	P. 7, lines 106-108: Language clarification on ATC and AFC hourly firm calculations	J Ofstead
33.0	12/05/2014	P. 18, lines 410-417: Language updated to reflect the current practice of setting TTCs in the non-prevailing flow direction on BPA's ATC Paths that use the Rated System Path Methodology.	L. Proctor
34.0	06/01/2015	<p>P. 4, lines 32-38: Deleted lines regarding registration amongst other organizations other than NERC.</p> <p>P.5-6, lines 67-101: Deleted section on "BPA's Use of Western Electricity Coordinating Council Base Cases".</p> <p>P. 9, lines 179-238: Added "...and Criteria for TTC and TFC Calculations" to section title and deleted "Timeline" from title. Deleted all content in section except "Outage planned and the policy are posted to the Outage Plans website (http://www.oatiaoasis.com/bpat/index.html) (MOD-001 R3.6.1) (MOD-001 R3.6.2)"</p> <p>P15, lines 319-321: Added language to reflect the tracking and monitoring of the previous 12 months of curtailments due to the issuance of generation limits and inclusion of ATC calculations in Table 1.</p> <p>P.16, lines 347-349: Deleted language to reflect current practices.</p> <p>P. 16, line 350: Added "...and phase shifters".</p> <p>P. 16, lines 352-359: Deleted language regarding phase shifters.</p>	L. Proctor

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		<p>P. 18, lines 362-363: Deleted language regarding BPA engineers running variations on WECC base cases.</p> <p>P.17, lines 371-373: Added language on base cases being updated with a Mid-Season update.</p> <p>P. 17, lines 388-389: Deleted reference to Table 1 for RAS.</p> <p>P. 17, line 391: Deleted language reference to BPA transmission lines with series compensation.</p> <p>P. 18, lines 401-404: Deleted language on modeling contingencies.</p> <p>P. 18, lines 416-417: Deleted language related to Montanan Intertie Path limitation by Colstrip Project and NorthWestern Energy is the TO and set TTC for this ATC Path.</p> <p>P. 18, lines 423-424: Deleted the reference to ATC paths for which BPA expresses TTC by nomogram.</p> <p>P. 18, lines 431-432: Deleted language related to the process defined by WECC’s OTCP.</p> <p>P. 18, line 437: Deleted reference to LaGrande Path.</p> <p>P. 18, lines 438-442: Deleted language related to path ratings.</p> <p>P. 19 lines 460-484: Updated language on TTC ratings.</p> <p>P. 21, lines 538: Deleted reference to Appendix D, which has been deleted from this document.</p> <p>P.30, lines 820-822: Deleted reference to DSO 319.</p> <p>P.31, lines 851-852: Table 2, BPA Flowgates: Deleted facilities monitored during outage conditions for West of McNary.</p> <p>P. 35, lines 863-866: Deleted “History or Flowgates”.</p> <p>P. 35, line 873 and line 87: Replaced “included as” with “protected for by”.</p> <p>P. 36, lines 883-884: Deleted “Note” on multiple interfaces.</p>	
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		<p>P. 39-40, lines 1002, 1007 and 1008: Replaced “WECC” with “Peak”.</p> <p>P. 40, lines 1032-1033: Updated language for accuracy.</p> <p>P. 40, lines 1037 and 1049: Replaced “calculated” with “published”.</p> <p>P. 41, lines 1064: Added “...the PTDF difference is...”.</p> <p>P. 44, lines 1164, 1175, 1190 and 1195: Deleted reference to BPA not having coordination agreements with other TSP.</p> <p>P.45, lines 1199: Added language to reflect BPA does not have coordination agreements with other TSPs.</p> <p>P. 45, line 1213: Deleted reference to Appendix D, which has been deleted.</p> <p>P. 63-64, line 1745 and chart: Deleted ATCID TP distribution list chart and updated language in line 1745 to reflect ATCID TP Distribution List.</p> <p>Appendix A: Updated chart listing contracts and specific paths with shared ownership, specifically Montana-NW/West of Garrison and added Montana Intertie and La Grande.</p> <p>Appendix B: Deleted - Significant Equipment Operating Bulletin 19.</p> <p>Appendix D: Deleted BPA NITS, GF and PTP Agreements list from 2011.</p> <p>Appendix E: Deleted DSO 319</p>	
35.0	08/10/2015	<p>Language updated to reflect completion of the bulk MOD-030 Mitigation Plan.</p> <p>P. 3, lines 7-8: Deleted “or Available Flowgate Capability (AFC)”</p>	L. Proctor

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		<p>P. 4, lines 29-36: Deleted “MOD-001-1, MOD-004-1, MOD-008-1, MOD-028-1, MOD-029-1, and MOD-030-02 variously apply to the Transmission Operator (TOP) and Transmission Service Provider (TSP)”, “Transmission Operator”, and deleted lines 34-36; added “Transmission Operator”, Transmission Service Provider” and “among other registrations”; added “a” to line 38; lines 39-47: deleted “described in NERC Standard as its methodology”, “determine” and “interties, External interconnections and some Paths internal to BPA’s Network”; added “calculate”, “ATC Paths”, “for these paths” and “VIII, and IX”; deleted lines 44-47; line 50: deleted “in its ATC calculation”; line 53: “in its ATC and AFC calculations” and “or Flowgates”; line 54: deleted “Not Selected”; line 55 deleted; lines 56-59: deleted “has elected”, “to”, “described in NERC Standard MOD-028-1 as its methodology to determine ATC for any of its ATC Paths” and “MOD-028-01”, added “does”, “(MOD-028-2), the Flowgate Methodology (MOD-030-2), or a Capacity Benefit Margin (CBM) (MOD-004-1)” and “these standards are”; deleted lines 60-63</p> <p>P. 5: lines 64, 65, 66, 69, 72, 75, 77, 78, 79 and 84: deleted “and AFC”; line 66 deleted “and Flowgate”; line 79-80 “MOD-030-R10”; line 81 deleted “MOD-030 R10.1”; line 82 deleted “MOD-030 R10.2”; line 83 deleted “MOD-030 R10.3”; line 84 deleted “or TFC”; lines 88-89 deleted “The studied assumptions are also used in determining the”, “for ATC purposes” and “and the TFC for AFC purposes”; added to line 89 “BPA uses these SOLs as the”; added to lines 97-100 “BPA may use more recent system condition information in its SOL calculations when the studies are updated after the ETC Cases are performed. However, this is not considered a difference in assumptions.”</p> <p>P. 6: lines 102-120 deleted; deleted “Flowgate” in lines 122-140; added “Network Paths” to lines 130, 134 and 136; added “Transfer” to line 133</p> <p>P. 7: lines 144, 147, 150, 152, 161, 178, and 186 deleted “and TFC”; deleted “or Flowgate” in line 173, 178 and 186; added “Network Paths” in line 174</p> <p>P. 8: deleted “and TFCs” in lines 188, 194, 198; replaced “TFC” with “TTC” in lines 193 and 200; added “Network Path” in line 201; added “for the Paths listed in Table 1” in lines 207-208; deleted line 212</p> <p>P. 11: added “NV Energy” in line 243, and deleted “Sierra Pacific Power Company (SPPC) in line 254</p>	
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		<p>P. 12: line 284 deleted “MOD-029”</p> <p>P. 25: lines 693, 697, 698, 701 and in chart replaced “Flowgate” with “Network Path”; line 694 and 698-699 replaced “Flowgate” with “Rated System Path”; line 696 replaced “30” with “29” and “02” with “1a”</p> <p>P. 26, 27 and 28: replaced “Flowgate” with “Network Path” in chart</p> <p>P. 28: replaced “Flowgate” with “Network Path” in lines 703 and 706; changed “Figure 1” to “Figure 2”; deleted lines 708-712</p> <p>P. 30: deleted lines 713-723 and chart</p> <p>P. 31: deleted lines 724-766</p> <p>P. 32: deleted lines 767-796; replaced “Flowgate” with “Transfer” in line 797 and “TFC” with “TTC”; added lines 798-801; deleted line 801-802 beginning with “BPA establishes.....”; deleted lines 803-806</p> <p>P. 32: deleted lines 807-820; added “(ETC)” to line 821; replaced “AFC” with “ATC” I lines 824 and “Flowgates” with “Network Paths”; deleted “(MOD-030 R5.1) in lines 824; added “base” to line 825; added lines 825-829 beginning with “The assumptions...”; added “to” in line 835; deleted “(MOD-030 R5-2) in line 836; deleted “(MOD 030 R3.1)” in line 843; and deleted “(MOD 030 R3.4)” in line 847</p> <p>P. 33: added “therefore does not” to line 848; deleted “(MOD 030 R3.5)” in line 849-850; replaced “AFC” with “ATC” in lines 853 and 858; deleted “(MOD 303 R3.2)” in line 855; deleted “(MOD 030 R3.3)” in lines 860; added “base” to line 863; and deleted “(MOD 303 R5.2)” in lines 867 and 872</p> <p>P. 34: replaced “Flowgates” with “Network Paths” in lines 900, 902, 904, 906, 907 and 090; added “Network Path” to lines 914 and replaced “AFC” with “ATC”; and deleted “(MOD-030 R1.2.3)” in lines 922</p> <p>P. 35: added “Network Path” and replaced “AFC” with “ATC: in lines 923, 926, 945 and 948; deleted “MOD” reference in lines 928, 932, 937, 942, 944, 950, 954, 959, 963 and 965</p>	
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		<p>P. 36: deleted “MOD” references in lines 975-976, 983, 992 and 1003; replaced “Flowgate” with “Network Path” in lines 995; deleted “as described in” in line 996 and replaced “MOD-030 R6” with “(MOD-030 R5) in line 996</p> <p>P. 37: deleted references to MOD in lines 1008, 1010, 1012, 1030, 1033, 1035, 1037, 1040 and 1041-1042; and replaced “Flowgates” with “Network Paths” in lines 1017-1018, 1027 and 1040</p> <p>P. 38: replaced “Flowgates” with “Network Paths” in lines 1043, 1053 and 1063; added “Network Path” and replaced “AFC” with “ATC” in line 1056; added “base” to line 1064; and deleted MOD references in lines 1066 and 1075</p> <p>P. 39: replaced “Flowgates” with “Network Paths” in line 1082; deleted MOD references in lines 1082 and 1085-1086; deleted “power flow” from line 1093 and added “ETC”</p> <p>P. 40: replaced “Flowgates” with “Network Paths” in lines 1127 and 1129-113-; deleted MOD references in lines 1121-1122, 1126, 113601137, 1141, 1144-1145 and 1147-1149</p> <p>P. 41: added “base” in lines 1151, 1154 and 1157; replaced “Flowgates” with “Network Paths” in lines 1181 and 1183; added “Network Path” in line 1182 and replaced “AFC” with “ATC”; and changed “Table 4” to “Table 3” in line 1187</p> <p>P. 42: replaced “Flowgates” with “Network Paths” in lines 1197, 1200, 1204 and 1206; deleted references to MOD in lines 1198 and 1206; added “Transfer” in lines 1199, 1204 and 1206; replaced “AFC” with “ATC” in lines 1199, 1200, 1202 and 1204; added “(MOD-029 R7) in line 1201</p> <p>P. 43: replaced “Flowgate” with “Transfer” in lines 1208, 1220, 1225, 1229 and 1233; replaced “TFC” with “TTC” in line 1209; replaced “Flowgates” with “Network Path” in lines 1210-1211; and deleted “base” I line 1219</p> <p>P, 44: replaced “Flowgate” with “Network Path” in lines 1246, 1247, 1256, 1258-1259, 1260, 1262, 1263, 1267-1269 and 1269; deleted MOD reference in 1255’ changed “AFC” to “ATC” in line 1264 and 1267</p> <p>P. 45: changed “AFC” to “ATC” in lines 1271, 1278, 1280, 1283 and 1307; replaced “Flowgate” with “Network Path” in lines 1272, 1277, 1278 and 1282; replaced “Flowgate” with “Transfer” in line 1274</p>	
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		<p>P. 46: replaced “Flowgate” with “Network Path” in lines 1309 and 1330; deleted “as described in MOD-030 R7” in line 1311; added “(MOD-029 R6)” to line 1311; and deleted references to MODs in lines 1316, 1322, 1325, 1327, 1337 and 1343</p> <p>P. 47: replaced “Flowgate” with “Network Path” in lines 1346, 1348, 1353-1354 and 1360; removed “(MOD-030 R7.7)” in line 1345; added “Network Path” to line 1356 and replaced “AFC” with “ATC”; replaced “Flowgate” with “Transfer” in line 1358; replaced “AFC” with “ATC” in lines 1358, 1359, 1367, 1369, 1377, 1379 and 1381</p> <p>P. 48: replaced “AFC” with “ATC” in lines 1382, 1385, 1387, 1389 and 1400; replaced “Flowgate” with “Network Path” in lines 1382, 1387-1388, 1391, 1396, 1397-1398; replaced “TFC” with “TTC” in line 1385; replaced “Flowgate” with “Transfer” in lines 1387, 1391, 1393, 1409 and 1414; added “Network Path” to line 1400; and deleted “base” from line 1413</p> <p>P. 49: replaced “Flowgate” with “Transfer” in lines 1418 and 1422; replaced “Flowgate” with “Network Path” in lines 1435 and 1436</p> <p>P. 50: added “Network Path” in lines 1445 and 1467 and changed “AFC” to “ATC”; deleted MOD reference in line 1451; replaced “Flowgate” with “Network Path” in lines 1463 and 1464</p> <p>P. 51: added “Network Path” to line 1481 and replaced “AFC” with “ATC”; and replaced “Flowgate” with “Network Path” in line 1497</p> <p>P. 52: replaced “Flowgate” with “Network Path” in lines 1498, 1499, 1501, 1502, 1507, 1508, 1510, 1519 and 1524; replaced “Flowgate” with “Transfer” in lines 1503 and 1512; replaced “AFC” with “ATC” in lines 1507, 1514, 1519, 1521, 1525, 1527; replaced “TFC” with “TTC” in lines 1521, 1525, 1526 and 1527; and deleted lines 1528-1532</p> <p>P. 53-57: added lines 1339-1516</p> <p>P. 58: deleted “and AFC” in line 1713; changed “Nevada Power” to “NV Energy” in line 1726; deleted “(PAC)” from line 1729; and deleted “Sierra Pacific Power Company” from line 1740</p>	
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ATCID Version History			
		P. 59: replaced “Flowgates” with “Network Path” in line 1762; deleted “and Flowgates” in line 1766; and deleted line 1767	
36.0	8/28/15	Moved Appendix B: System Operating Limit Methodology for the Operations Horizon; Appendix 1 - TPL-001-0.1 System Performance Under Normal Conditions; and Appendix 2 - TPL-001-WECC-RBP-2.1 into a separate document titled “System Operating Limit Methodology for the Operations Horizon “ and posted on the same website as the ATCID at: http://www.bpa.gov/transmission/Doing%20Business/Pages/default.aspx under the ATC Methodology.	L. Proctor
37.0	9/29/15	Deleted reference to the Appendix B SOL in line 253 and added the SOL website address on BPA’s ATC Methodology website in lines 255-257; deleted lines 258-263 regarding prevailing and non-prevailing directions of flow (MOD-029 R2.2) and inserted new language; removed reference to Appendix B: SOL in line 253 and added link to the SOL in line 25; and deleted in Appendix A for the COI, under the Contract Party Seattle City Light “EDF Trading North America LLC and Southern California Edison Company (Effective 1/31/2013)”, under Contract Number deleted “13ZZ-15826 (formerly)” and added under Contract Description, Consent Agreement, Contract Party “Under consent agreement and EDF Trading North American LLC”.	L. Proctor
38.0	11/02/15	Removed reference to Appendix B in line 298 and added link to SOL; updated Table 2, BPA Network Paths table beginning on line 656 for the North of John Day On OASIS: NOJDAY path changed from Wautoma-Ostrander to Wautoma-Knight and the Cross Cascades South on OASIS: C-CACS_S changed from Wautoma-Ostrander to Knight-Ostrander and deleted in Appendix A the Contract Party Seattle City Light Consent Agreement Contract Number 10TX-15107 from the COI path.	L. Proctor
39.0	12/07/15	Updated Outage Plan website link in line 104-105 from OASIS http://www.oatioasis.com/bpat/index.html to http://www.gpa.gov/transmission/Reports/Pages/Proposed-Outages.aspx ; moved “(MOD-001 R3.6.1) (MOD-001 R.3.6.2)” to line 115; and added outage language in lines 106-115.	L. Proctor

ATCID Version History			
40.0	1/03/16	<p>p. 12, lines 241-255: Replaced “beyond two weeks” with “from the next day and beyond” and “periods within the next two weeks” with “the Real-time horizon” and added “On West of Garrison” and “On Northern Intertie South to North, for the seasons or time periods in which the seasonal studies have not been completed, the last year’s seasonal study results will be used for setting the TTC for the relevant Path. ”</p> <p>p. 17, lines 430-435: Added “BPA also uses SADJ adjustments on the Northern Intertie Path 3 S>N. These adjustments are used to account for uncertainties on the path caused by simultaneous interaction with paths COI and NOH. The SADJ is being used temporarily while BPA tests and implements an additional 450MW TRM value for this path. BPA will stop using SADJ for this purpose on NI S>N once testing of the additional TRM value is complete and it is implemented.”</p> <p>p. 21, lines 564-569: Added “In addition, BPA uses SADJ adjustments on the Northern Intertie Path 3 S>N. These adjustments are used to account for uncertainties on the path caused by simultaneous interaction with paths COI/NOH. The SADJ is being used temporarily while BPA tests and implements an additional 450MW TRM value for this path. BPA will stop using SADJ for this purpose on NI S>N once testing of the additional TRM value is complete and it is implemented.”</p> <p>p. 24, lines 647-649: Added “50 MW “ and “However, BPA does release the additional 450 MW TRM for the Northern Intertie Path S>N as non-firm capacity.”</p>	L. Proctor
41.0	9/06/2016	<p>p. 11, line 243: Added “On West of Garrison,”; line 249: Added “On Northern Intertie South to North,”; lines 252-253: Added “from the next day and beyond.” and “the Real-time horizon”</p> <p>p. 16, line 430-431: Added “SADJ” and “reflect the TRM across this path that”; deleted lines 433-436</p> <p>p. 20, line 565: Added “SADJ”, “reflect the TRM across this path that” and “and”; deleted lines 567-570</p> <p>p. 23, Deleted lines 648-650; added in lines 650-652: “BPA does not release the TRM Due to simultaneous path interactions for the Northern Intertie Path S>N as non-firm capacity, but does not release the remaining TRM as non-firm capacity”</p>	L. Proctor

ATCID Version History

42.0	11/01/2016	<p>Table of Contents: Deleted section IX. BA to BA Interconnection Methodology per BPA decision to no longer utilize this methodology</p> <p>p. 26, Table 2, BPA Network Paths starting on line 693: Added to Paul-Allston on OASIS: PAUL_ALSN, column Transmission Line Components “During outage conditions of the Paul-Allston #2 500kV line with either of the Paul-Napavine #1 or Napavine-Allston #1 500kV lines, the following lines are monitored: Napavine-Allston #1 500kV; Paul-Allston #2 500kV; Longview-Chehalis #1 & #3 230kV; Holcomb-Naselle #1 115kV</p> <p>p.34, lines 930-931: Deleted “and light load ETC Cases for the month of January”</p> <p>p. 36-37, lines 967-1001: Replaced “90th Percentile Method” with “Nameplate Adjusted Method”; replaced “each project’s 90th percentile of historic generation by project and month” with “the nameplate for each project and then adjusting such nameplates by outages forecasted for the particular plants. Next in the month of August, the Lower Snake plants (Lower Granite, Lower Monumental, Little Goose and Ice Harbor) are capped at the observed project outflow over the past ten Augusts.”; deleted lines 975-986; added lines 986-995; deleted lines 998-1001</p> <p>p. 37, lines 1007-1011: Replaced “modeled at up to 80 percent of the wind generators’ contract Demands for BPA’s area and all adjacent TSP area” with “set at the greater of the following: Modeled on the 100 percent of the contract demand for the wind generator; or Modeled off and replaced by the “Balancing Logic Method”</p> <p>p. 37, line1020: Replaced “90th Percentile” with “Nameplate Adjusted” and “on p. 35” with “above</p> <p>p. 37, lines 1032-1035: Deleted “the Mid-Columbia Hydro Projects by 50 percent of the excess generation and FCRPS generation by the other 50 percent of the; added “Prorata, except for the stress FCRPS zone, see below”; and replaced “90th Percentile” with “Balancing Logic”</p> <p>p. 38, lines 1039-1041: Deleted lines</p>	L. Proctor
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ATCID Version History			
		<p>p. 38, 1043-1051: Replaced “two” with “three”; replaced “NITSfi” with “PTPfi and NITSfi” and “and stressing the three different zones of the FCRPS. For the FCRPS scenarios, the three “zones” that are stressed individually in the scenarios are made up of the following projects: (i) Upper Columbia zone includes Grand Coulee and Chief Joseph; (ii) Lower Snake zone includes Lower Monumental, Lower Granite, Little Goose, and Ice Harbor; and (iii) Lower Columbia zone includes McNary, John Day, The Dalles, Bonneville.</p> <p>p. 38, lines 1055-1056 and lines 1059-1060: Replaced “90th Percentile” with “Nameplate Adjusted”</p> <p>p. 38, lines 1062-1063: Deleted “NITSfi” and replaced “p. 39” with “above”</p> <p>p. 38-39, lines 1064-1086: Replaced “four” with “12”; updated scenarios on lines 1066-1077; deleted lines 1078-1080; added language starting in line 1080-1086 ; deleted line 1092</p> <p>p. 41, Added lines 1135-1142</p> <p>p. 46, Added lines 1322-1329</p> <p>p. 49-53, lines 1376-1553: Deleted section IX. BA to BA Interconnection Methodology per BPA decision to no longer utilize this methodology.</p>	
43.0	11/14/2016	<p>p. 9, lines 185-192: Deleted language regarding the tracking and monitoring of issuance of gen limits. Modified language in regards to adding new ATC paths to be more general.</p> <p>p. 9. Lines 190-192: Added “if new” and “are identified and implemented. Table 1 will be updated to reflect the new ATC Paths.”</p> <p>p.34, lines 925-926: Added “and light load ETC Cases for the month of January”:</p>	L. Proctor
44.0	4/1/2017	<p>p.7, Line 136: Remove “and TFC,” to correct an oversight when changes were made in version 35 to remove all references to flowgates, TFCs and AFCs.</p>	A. Heredia

ATCID Version History			
		<p>pps. i, 5 - 9, 14-16, 27: All other modifications are made to incorporate changes to align the ATCID with changes resulting from 1) revisions to Peak Reliability’s SOL Methodology v.8.1; and 2) changes in TOP and IROL standards that are effective April 1, 2017. As of April 1, 2017, BPA will continue to use SOLs as TTCs for ATC calculations for stability limited paths; various system conditions will be used to develop TTCs for thermally limited paths.</p> <p>Appendix A: Removed.</p>	
45.0	9/19/2017	<p>p. 11, Added lines 335-336</p> <p>p. 12, line 339: Added “When modeling contingencies”</p> <p>p. 12, lines 343-349: Added “When modeling contingencies” and “until flows exceed emergency Facility Ratings or voltages fall outside emergency system voltage limits (i.e., the post-Contingency state) and deleted “one of the following reliability constraints is encountered: 1) In the pre-Contingency state, flows exceed normal Facility Ratings or voltages fall outside normal system voltage limits; or (2) In the post-Contingency state, flows exceed emerging Facility Ratings or voltages fall outside emergency system voltage limits.” and “The contingencies studied to determine the post-Contingency state are posted on Peak Reliability’s secure website https://www.peakrc.org.”.</p>	L. Proctor
46.0	4/01/2018	<p>p. 4, line 111: Deleted “See Appendix A for a list of contracts and specified Paths with shared ownership.”</p> <p>p. 11, lines 308-312: Deleted “BPA uses the minimum SOL from the relevant seasonal studies to set the TTC of the Path for periods beyond two weeks.”; “within the next two weeks”; “maximum”; “mw”; “SOL”; and “seasonal” from “seasonal studies”. Added “all time”; “MW”; “value” and “seasonal” to “seasonal TTC”. Line 332 deleted “always credible”.</p> <p>p. 34, line 999: Removed “June”.</p>	L. Proctor

ATCID Version History			
		<p>p. 38-39, lines 1111-1136: Changed “12” to “6”. Removed “CER modeled one/” from lines 1113-1118; Deleted lines 1119-1124; Deleted “two seasonal groupings” and “Early and”. Added “with CER modeled off” and “with CER modeled on for the last 3 scenarios”. Lines 1127, 1128 and 1130: Replaced “24” with “15”. Table, row month June, under “Base ETC Values Used” column, changed “June” to “May”.</p> <p>p. 40, line1179: Deleted “June”.</p> <p>p. 46, line 1366: Deleted “June”.</p>	
47.0	10/12/2018	p. 23, lines 711-713: Minor simplification of language for clarity.	M. Olczak
48.0	10/31/2018	p.16 and p.20, removed references to TRM values being accounted for as SADJ. BPAT will no longer use SADJs to account for TRM beginning 11/1//2018.	M. Olczak
49.0	06/01/2019	p. 49, lines 1460 – 1465: added a section on adjustments to ATC values on Network Paths when testing in BPA’s production systems is necessary.	M. Olczak
50.0	08/14/2019	<p>P.16, line 505 and P.23, line 701 – detail of how BPA implements TRM has been removed from the ATCID. See the TRMID for TRM information.</p> <p>p.23, line 712 – BPA has updated its “PostbacksNF for the Real-time Horizon” section. BPA will no longer be using a Miles City postback, due to the implementation of the TRM across West of Garrison E>W.</p> <p>BPA is discontinuing the use of RETC in BPA’s ETC calculation. References to the RETC variable have been removed from the document.</p>	M. Olczak
51.0	09/10/2019	<p>p.29 – removed references to BPA’s Outage to Base Case Mapping document. The mapping of outages to the WECC base case is contained in BPA’s Transmission Reference Entity Data system.</p> <p>p.30, line 802 – specifies that BPA updates its Hourly PTFDs at least once per day for hourly ETC calculations</p>	M. Olczak

ATCID Version History			
		<p>p.30, line 808 – clarifies that BPA uses Daily PTDFs published for hour ending 11 of each day in its Daily ETC calculations</p> <p>p.30, lines 812 – 814 and 816 – 819 – clarifies which generation and transmission outages are included in BPA's daily and monthly ETC calculations</p>	
52.0	11/01/2019	<p>p.11: deleted the statement related to West of Garrison that read “For all time periods, when there are no studied outages, BPA uses a TTC of 2000 MW E>W and the maximum value from the relevant studies to set the seasonal TTC of the Path W>E.” This statement is no longer applicable as of 8/14/2019. Please see OASIS for TTC values.</p> <p>p.12, lines 333 – 335 and 342, p.13, lines 388-393: changed Peak RC references to RC West</p> <p>p.13, lines 377 – 387: clarification on study process for ATC Paths with Ratings that were established, known and used in operation since January 1, 1994</p> <p>p.15, Calculating Firm Available Transmission Capability section: removed ATC Firm formulas from end of section since the formula is already stated in line 465</p> <p>p.18, Calculating Non-Firm Available Transfer Capability section: removed ATC Non-Firm formulas from end of section since the formula is already stated in line 601</p> <p>p.29, lines 774 – 777: removed references to Peak RC from this section and clarified the modeling data included in the WECC base cases</p>	M. Olczak
53.0	11/13/2019	<p>ATCID has been updated to reflect that BPA will be calculating base ETC for West of Hatwai using flow-based studies. As such, the following changes have been made:</p> <p>p. 7, removed West of Hatwai from Table 1</p> <p>p. 24, added West of Hatwai to Table 2</p> <p>p. 24, added column to Table 2 entitled “Case used for base ETC calculation.” This column identifies whether BPA is using heavy or light load studies to establish base ETC_{F1} for each path.</p>	M. Olczak

ATCID Version History			
		<p>p. 33, line 932: BPA has renamed this section “Determining Base ETC_{Fi} for Heavy Load Base Cases.” All information on light load cases has been removed from the section.</p> <p>p. 35, line 1018: BPA has renamed this section “Sensitivity Studies for Heavy Load Base Cases” to clarify that these sensitivity studies only apply to heavy load cases.</p> <p>p. 37, line 1059: BPA has added a section entitled “Determining Base ETC_{Fi} and Sensitivities for Light Load Base Cases.” This section provides information on the assumptions and sensitivities for BPA’s light load case studies.</p> <p>BPA has removed references to adjustments that BPA had been making for West of Hatwai to hold out NITS capacity for the Western Montana hydro projects; these obligations are now included in BPA’s base ETC_{Fi} studies for West of Hatwai and the adjustments are therefore no longer needed.</p> <p>Maps of BPA paths have been removed from the ATCID.</p> <p>Upon evaluation, BPA has determined that the SADJ/ETC adjustments across the West of Garrison path are no longer appropriate. BPA has removed references to these adjustments throughout the document.</p> <p>p. 36, lines 1052-1053: clarification that the difference between the highest and lowest seasonal base ETC_{Fi} values is used to establish a commercial uncertainty margin.</p>	
54.0	01/28/2020	<p>p.12, line 396: corrected email address</p> <p>p.13, line 399: corrected link</p> <p>p.27, lines 716-717 and lines 720-721: simplified wording</p> <p>p.27 – 28: deleted the following language in the “Use of WECC Base Cases to Determine ETC” section, as the language does not reflect BPA’s current process:</p> <p>“BPA updates the relevant WECC base cases with equipment outages which are known and mapped to the WECC base case, as well as newly-energized generation and Transmission for ATC calculations at least once per day for intra-day, next day and days two through 30.</p>	M. Olczak

ATCID Version History

		<p>BPA updates the relevant WECC base cases with equipment outages which are known and mapped to the WECC base case, as well as newly-energized generation and Transmission for ATC calculations at least once per month for months two through 13.”</p> <p>p.29: In the “PTDF Analysis and De Minimis” section, deleted the sentence reading “Ten percent is the percentage used to curtail in the Western Interconnection-wide congestion management procedure.” This is a simplification of this section and does not impact the methodology related to this topic.</p> <p>p.32: deleted the following language in the “Determining Base ETC_{Fi} for Heavy Load Base Cases” section, as the language does not reflect BPA’s current process:</p> <p>“In ETC Cases, BPA models all of its own NITS_{Fi}, GFF_{Fi} and PTP_{Fi} Long-Term Reservations, as well as those of its adjacent TSPs, active at the time the ETC Cases are produced.</p> <p>To model the impact of PTP_{Fi} long-term reservations for all of its adjacent TSPs, BPA queries a list of PTP_{Fi} long-term reservations from the OASIS of its adjacent TSPs. To model the impact of GFF_{Fi} and NITS_{Fi} long-term obligations for all of BPA’s adjacent TSPs, BPA contacts its adjacent TSPs and requests a list of their GFF_{Fi} obligations and a list of their NITS_{Fi} with a list of designated network resources with the MW amounts designated to serve Network Service and Native Load.</p> <p>BPA models the NITS_{Fi}, GFF_{Fi} and PTP_{Fi} Long-Term obligations of all of its adjacent TSPs to the extent that there are sufficient firm Transmission rights on BPA’s or its adjacent TSPs’ Transmission Systems to serve the Load.”</p> <p>p.49, line 1480: corrected link</p>	
55.0	03/24/2020	<p>p.27, line 720: added the word “seasonal” to clarify which WECC cases BPA uses for its ETC studies</p> <p>p.27, lines 722-724: clarified which load forecasts BPA is using in its ETC studies</p> <p>p.28: streamlined section with removal of sentence stating “See “Determining Base ETC_{Fi}” section for a description of how BPA develops its ETC Cases”</p>	M. Olczak

ATCID Version History			
		<p>p.32, section titled “Determining Base ETC for Heavy Load Base Cases”: changes throughout the section to reflect BPA’s transition to monthly base ETC studies</p> <p>p.35, lines 1013-1017: removed references to seasonal cases to support BPA’s transition to monthly base ETC studies</p> <p>p.35, lines 1028-1029: changed wording to reflect BPA’s transition to monthly base ETC studies</p> <p>p.35, lines 1030-1033: changes to reflect that BPA uses the highest base ETC to calculate firm ATC and lowest base ETC to calculate non-firm ATC; reference to commercial uncertainty margin removed</p> <p>p.35-36, lines 1034-1039: changes to reflect BPA’s transition to monthly base ETC studies</p> <p>p.36, lines 1041-1047: changes to reflect BPA’s transition to monthly base ETC studies</p> <p>p.37, lines 1060-1064: change to reflect that BPA uses the highest base ETC to calculate firm ATC and lowest base ETC to calculate non-firm ATC; reference to commercial uncertainty margin removed</p> <p>p.38, SAdj/ETC Adjustments section: removed references to SAdj for the commercial uncertainty margin, as this process has been discontinued</p> <p>p.44, SAdj/ETC Adjustment section: removed references to SAdj for the commercial uncertainty margin, as this process has been discontinued and clarified that an SAdj is used to account for BPA’s use of the lowest base ETC in the non-firm ATC calculation.</p>	
56.0	05/20/2020	<p>p.1, lines 23-26: modified the “Long-Term Reservation” and “Short-Term Reservation” definitions to clarify that all requests (including Network Integration) fall into each definition based on duration</p> <p>p.27, lines 721-728: clarification on load and generation forecasts used in BPA’s ETC cases</p> <p>p. 28, lines 750-751: slight rewording to clarify PTDF calculation process</p>	M. Olczak

ATCID Version History

		<p>p.29: removed sentence reading “The source used in BPA’s Network Path ATC calculations of transactions for all adjacent TSPs is obtained from the source field if a source is identified, or the POR field if only the POR is identified.” This no longer applies with the elimination of adjacent TSP impact functionality in OATI.</p> <p>p.30: removed sentence reading “The sink used in BPA’s Network Path ATC calculations of transactions for all adjacent TSPs is obtained from the sink field if a sink is identified, or the POD field if only the POD is identified.” This no longer applies with the elimination of adjacent TSP impact functionality in OATI.</p> <p>p.30: removed section on the weighted PTDF for FCRPS generation in the Idaho Power Company BAA. This no longer applies with the elimination of adjacent TSP impact functionality in OATI.</p> <p>p.31, line 855: conformed the formulas/definitions in the “Calculating Firm Existing Transmission Commitments” section to MOD-029 (section referenced MOD-030 formulas/definitions, which BPA no longer uses). References to calculations of adjacent TSP impacts have been deleted, due to elimination of adjacent TSP impact functionality in OATI.</p> <p>p.32, lines 896-897, 905-906, and 911-912: revised to reflect BPA has transitioned from Summer seasonal ETC study to monthly ETC studies for June through October.</p> <p>p.35, line 1002: revised to reflect BPA has transitioned from Summer seasonal ETC study to monthly ETC studies for June through October</p> <p>p.35-36, Table 3: revised to reflect BPA has transitioned from Summer seasonal ETC study to monthly ETC studies for June through October</p> <p>p.36, lines 1040-1041: removed reference to adjacent TSPs from section. This no longer applies with the elimination of adjacent TSP impact functionality in OATI.</p> <p>p.37, lines 1060-1061: Simplification of LRES and SRES definitions, to account for the elimination of adjacent TSP impact functionality in OATI</p> <p>p.39, lines 1116-1120: documentation that BPA will use zero as the base ETC when the ETC cases result in a negative base ETC value.</p>	
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ATCID Version History			
		<p>p.40, line 1145: conformed the formulas/definitions in the “Calculating Non-Firm Existing Transmission Commitments” section to MOD-029 (section referenced MOD-030 formulas/definitions, which BPA no longer uses). References to calculations of adjacent TSP impacts have been deleted, due to elimination of adjacent TSP impact functionality in OATI.</p> <p>p.42, lines 1221-1222: Simplification of LRES and SRES definitions, to account for the elimination of adjacent TSP impact functionality in OATI</p> <p>p.43, lines 1262-1265: updated definitions for SCH^{+7} and ASC^{+7} to account for the elimination of adjacent TSP impact functionality in OATI</p> <p>p.44, lines 1279-1280: updated definition for $RRES_{NF}$ to account for the elimination of adjacent TSP impact functionality in OATI</p> <p>p.44, lines 1291-1294: updated definitions for $SCH^{+6,5,4,3,2,1}$ and $ASC^{+6,5,4,3,2,1}$ to account for the elimination of adjacent TSP impact functionality in OATI</p> <p>p.45, lines 1322-1324: updated definition for $Counterflows_{NF}$ to account for the elimination of adjacent TSP impact functionality in OATI</p> <p>p.45-46, lines 1325-1331: documentation that BPA will use zero as the base ETC when the ETC cases result in a negative base ETC value.</p> <p>Throughout the document: conformed ETC and AFC formula terms and definitions from MOD-030 to MOD-029 (i.e. PTP_{FI} to PTP_F) and replaced any references to “flowgates” with the term “network paths.”</p>	
57.0	09/16/2020	<p>p.2, line 38: added Satsop Injection to the list of ATC Paths for which BPA has a TRM</p> <p>p.7-8, Table 1: Added Satsop Injection to the table of BPA's 1:1 ATC Paths</p> <p>p.7, line 235: clarified that this section applies to BPA's 1:1 ATC Paths. Paths listed in this section will be referenced by BPA as 1:1 ATC Paths going forward. References to these paths have been conformed to this new naming convention throughout the ATCID.</p>	M. Olczak

ATCID Version History			
		p.23, line 708: clarified that this section applies to BPA's Flow-Based ATC Paths. Paths listed in this section will be referenced by BPA as Flow-Based ATC Paths going forward. References to these paths have been conformed to this new naming convention throughout the ATCID.	
58.0	09/30/2020	<p>Throughout document, changed references from MOD-029-1a to MOD-029-2a to match current effective NERC standard.</p> <p>p.27: moved some of the language pertaining to how BPA models generation in its ETC base cases from "Use of WECC Base Cases to Determine ETC" section to p.32, lines 916-917. Language has been modified to better reflect process that BPA uses (process has not changed; this is a documentation change only).</p> <p>p.37, line 1081: language describing the LETC variable has been clarified</p> <p>p.42, line 1240: language describing the LETC variable has been clarified</p>	M. Olczak
59.0	10/21/2020	<p>p.9, line 263: Updated name to match NERC registry</p> <p>p.27, lines 727-735: Added information on loads used in BPA's Winter light load ETC base cases for both BPA's Balancing Authority and outside of BPA's Balancing Authority</p> <p>p.32, lines 905-921: revised to reflect BPA has transitioned from a Winter seasonal ETC study to monthly ETC studies for November through February.</p> <p>p.35, line 1013-1024: revised to reflect BPA has transitioned from a Winter seasonal ETC study to monthly ETC studies for November through February.</p> <p>p.36, "Determining Base ETC and Sensitivities for Light Load Base Cases" section: removed outdated verbiage regarding the balancing of the case.</p>	M. Olczak
60.0	02/17/2021	p.1, lines 6-9: purpose statement has been revised to clarify that BPA's ATCID also documents BPA's Postback Methodology, as required by the NAESB Wholesale Electric Quadrant business practice standards.	M. Olczak

ATCID Version History

		<p>p.14, line 460: removed page number references to streamline document</p> <p>p.15, line 495: removed page number reference to streamline document</p> <p>p.16, lines 504-507: slight rewording to better align with the NAESB Postback Methodology requirements in the Wholesale Electric Quadrant business practice standards; there has not been a change to BPA's Postback Methodology.</p> <p>p.17, line 563: removed page number reference to streamline document</p> <p>p.20, line 640: removed page number reference to streamline document</p> <p>p.21, line 654: removed page number reference to streamline document</p> <p>p.21, line 670: removed page reference to streamline document</p> <p>p.22, lines 684-698: slight rewording to better align with the NAESB Postback Methodology requirements in the Wholesale Electric Quadrant business practice standards; there has not been a change to BPA's Postback Methodology.</p> <p>p.27, lines 731-732: clarifies that BPA uses the loads in the WECC light load cases for BPA's Balancing Authority</p> <p>p.27, lines 734-735: clarifies that BPA uses the loads in the WECC light load and heavy load cases outside of BPA's Balancing Authority</p> <p>p.32, line 905: revised to reflect that BPA has fully transitioned to monthly base ETC cases.</p> <p>p.32, lines 911-14: revised to reflect that BPA has fully transitioned to monthly base ETC cases.</p> <p>p.35, lines 1012-1013: revised to reflect expanded scenarios for March through May</p> <p>p.35, Table 3: Table 3 has been deleted; Table 3 is no longer applicable as BPA has fully transitioned to monthly base ETC cases</p>	
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ATCID Version History			
		<p>p.35, lines 1022-1024: documents the starting point for BPA's Summer light load cases and that the Summer light load ETC case is used to set the base ETC for April through October.</p> <p>p.37, lines 1074-1075: change to reflect that the CER PTDF adjustment is only being used for June through October</p> <p>p.38, lines 1101-1104: slight rewording to better align with the NAESB Postback Methodology requirements in the Wholesale Electric Quadrant business practice standards; there has not been a change to BPA's Postback Methodology.</p> <p>p.40, line 1174: removed page number reference to streamline document</p> <p>p.41, lines 1231-1232: change to reflect that the CER PTDF adjustment is only being used for June through October</p> <p>p.44, lines 1302-1306: slight rewording to better align with the NAESB Postback Methodology requirements in the Wholesale Electric Quadrant business practice standards; there has not been a change to BPA's Postback Methodology.</p>	
61.0	02/26/2021	<p>p.20, lines 631-636: clarification of the SCH and ASC variables, and where energy versus transmission profiles are used</p> <p>p.20-21, lines 661-676: clarification of the SCH and ASC variables, and where energy versus transmission profiles are used</p> <p>p.29, lines 801-804: removed reservation evaluation and de minimis criteria from the ATCID, and added reference to the Transmission Service Requests Evaluation business practice, which now defines BPA's processes for evaluating Transmission Service Requests.</p> <p>p.32, lines 904-905: clarifies that BPA deems de minimis impacts to be zero when calculating firm ETC using reservations.</p> <p>p.37, lines 1094-1096: minor clarification to language</p> <p>p.40, lines 1175-1178: clarifies that BPA deems de minimis impacts to be zero when calculating non-firm ETC using reservations.</p>	M. Olczak

ATCID Version History			
		<p>p.42, lines 1253-1254: clarifies that BPA deems de minimis impacts to be zero when calculating firm ETC using reservations.</p> <p>p.42, lines 1264-1268: clarification of the SCH and ASC variables, and where energy versus transmission profiles are used</p> <p>p.43, lines 1284-1285: clarifies that BPA deems de minimis impacts to be zero when calculating non-firm ETC using reservations.</p> <p>p.44, lines 1295-1308: clarification of the SCH and ASC variables, and where energy versus transmission profiles are used</p>	
62.0	04/08/2021	<p>p.15, lines 490-491: added clarification that BPA uses SADJ across NI S>N to account for a portion of the firm TRM across this path. This is a process clarification and not a change to how the TRM or ATC calculations are performed.</p> <p>p.15, lines 477-480: clarified that the LETC variable is used for $NITS_F$, GF_F, PTP_F and ROR_F in the ETC_F calculation. This is a clarification and not a change to BPA's process.</p> <p>p.15, Table between lines 497 and 498: aligned ETC variables with the OATI variables. This is a formula clarification and not a change to how the ETC calculation is performed.</p> <p>p.19, lines 621-624: clarified that the LETC variable is used for $NITS_F$, GF_F, PTP_F and ROR_F in the ETC_F calculation. This is a clarification and not a change to BPA's process.</p> <p>p.20, Table between lines 629 and 630: aligned ETC variables with the OATI variables. This is a formula clarification and not a change to how the ETC calculation is performed.</p> <p>p.42, Table between lines 1260 and 1261: aligned ETC variables with the OATI variables. This is a formula clarification and not a change to how the ETC calculation is performed.</p>	M. Olczak

ATCID Version History			
63.0	05/12/2021	<p>p.3, footnote: removed reference to North of John Day, as this path has been de-activated; also matched up the names of the paths listed in the footnote to those used in Table 2 on Page 24</p> <p>p.11, line 347 and content previously found between lines 351-352: deleted references to North of John Day, as this path has been de-activated</p> <p>p.24, Table 2: removed North of John Day from table, as this path has been de-activated</p>	M. Olczak
64.0	05/19/2021	<p>p.28, "Outages in ETC Calculations" section: deleted sentences on generation outages in ETC calculations; BPA does not include generation outages in its ETC calculations</p> <p>p.30, lines 848-853: added specificity that the weighted FCRPS PTDF calculation is based on the stress scenario per path, and clarified the time frame for which generation forecasts are used in the calculation of this PTDF</p> <p>p.33, lines 931-939: revised to explain BPA's transition to a new methodology for modeling the Willamette Valley projects in its ETC cases</p> <p>p.35, line 1019: revised to reflect the scenarios BPA is currently running in the heavy base ETC cases</p> <p>p.37 and p.41: deleted references to CER SADJs, as these SADJs have been replaced by additional base ETC scenarios</p>	M. Olczak
65.0	09/15/2021	<p>Extensive re-organization of the ATCID to combine the 1:1 and Flow-based ATC Path sections into one.</p> <p>p.17, lines 438-444: language addition to account for new OASIS functionality for short-term Redirects to comply with FERC policy adopted in Order 676-I</p>	M. Olczak
66.0	09/29/2021	<p>p.22, p.23 and p.31: removed references to ST non-firm ATC adjustments for lowest base ETC (these adjustments have been replaced with a new non-firm ATC variable, NFETC)</p> <p>p.30, line 891: replaced reference to LETC with new non-firm ATC variable, NFETC</p> <p>p.31, lines 907 and 911: replaced references to LETC with new non-firm ATC variable, NFETC</p>	M. Olczak

ATCID Version History			
		p.31, line 921: replaced references to LETC in the chart with new non-firm ATC variable, NFETC	
67.0	10/20/2021	<p>p.1, line 13: added reference to NAESB WEQ-000</p> <p>p.20, lines 514 and 516: revised to explain BPA's transition to a new methodology for modeling the Willamette Valley projects in its ETC cases</p> <p>p.22, line 601: added the months of November through February for the CER off scenarios</p> <p>p.22, lines 615-619: added specificity to the modeling of Montana loads in the light load cases</p>	M. Olczak
68.0	01/07/2022	<p>Whole document: replaced "ATC Path" with "path" unless section has been directly copied from MOD-029-2a; replaced "SOL" with "TTC"; removed website links; removed contract numbers</p> <p>p.3, line 68, "Limiting Assumptions" section: references to stability and thermally limited paths were eliminated and duplicative language was deleted; language added to clarify how BPA complies with MOD-001-1a R6 and R7.</p> <p>p.4, line 122, "Priorities Used to Set TTC" section: references to stability and thermally limited paths were eliminated and duplicative language was deleted</p> <p>p.10, line 184, "Data and Assumptions" section: references to stability and thermally limited paths were eliminated and duplicative language was deleted</p> <p>p.12, line 255, "Process to Determine TTC" section: references to stability and thermally limited paths were eliminated and duplicative language was deleted</p> <p>p.16, line 394, "Use of WECC Base Cases to Determine Base ETC" section: deleted content related to what WECC includes in their seasonal base cases</p> <p>p.18, lines 470-476: clarification on the actions BPA takes to solve the power flow model</p> <p>p.18-19, lines 489-494: clarification on how BPA models the CER in heavy load scenarios</p>	M. Olczak

ATCID Version History			
		<p>p.19, lines 517-522: language added to reflect change discussed at the December 16, 2020 customer meeting</p> <p>p.21, line 584, “Source/POR and Sink/POD Identification and Mapping” section: deleted language that is found in the TSR Evaluation Business Practice and language related to MOD-030 R4 requirement; additional information on weighted PTDFs provided.</p>	
69.0	01/26/2022	<p>p.7, Table 1: removed Paul-Allston from table, as this path has been de-activated</p> <p>p.12-13, lines 272-286: rewording of section for clarity</p> <p>p.20, lines 565-568: added information on the PTDFs calculated and used for the Raver-Paul path when the Raver-Paul 500 kV line is out of service</p>	M. Olczak
70.0	02/16/2022	<p>p.17, line 426-429: revised to incorporate BPA’s new methodology for modeling the Willamette Valley projects in ETC cases</p> <p>p.19, line 507: updated to reflect current suite of scenarios being run in heavy load ETC cases</p>	M. Olczak
71.0	05/03/2022	<p>p.3-4, “Allocation Processes” section: section has been re-structured and re-worded for clarity</p> <p>p.4, lines 119-120: updated link to outage plans</p> <p>p.7, Table 2, BPA’s Flow-Based Paths: numerous changes to the Transmission Line Components column so that lines reflect directionality of flow being studied; also changes for accuracy and consistency.</p> <p>p.24, lines 712-715: simplified list of BPA’s non-firm transmission products</p> <p>p.24, lines 719-725: added ETC_{NF} formulas for the six non-firm products that BPA sells</p> <p>p.24, line 739: language clarified to reflect BPA’s process.</p> <p>p.25, lines 748-749: language on the treatment of de minimis impacts in ETC_{NF} has been relocated to other sections of this document</p>	M. Olczak

ATCID Version History			
		<p>p.25-26, “Calculating Non-Firm Available Transfer Capability” section: substantial re-organization for clarity; formulas for the six types of ATC_{NF} that BPA calculates have been added; table comparing the ATC_{NF} calculation between the Beyond Real-time and Real-time horizons has been added</p> <p>p.26, lines 776-778: detail on the ETC_F calculation for Beyond Real-time horizon has been added</p> <p>p.28, lines 816-818: detail on the ETC_F calculation for Real-time horizon has been added</p> <p>p.29, lines 841-843: detail on the ETC_{NF} calculation for Beyond Real-time horizon has been added</p> <p>p.29, lines 853-856: detail on the ETC_{NF} calculation for Real-time horizon has been added</p> <p>Version History: moved to separate document</p>	
72.0	08/17/2022	<p>p.15, lines 404-405: Added information on POD/POD combinations of 1:1 ATC paths that impact ETC_F</p> <p>p.25, lines 747-748: Added information on POD/POD combinations of 1:1 ATC paths that impact ETC_{NF}</p>	M. Olczak
73.0	09/30/2022	p.29, lines 863 and 870: Added the words “pending and”	M. Olczak
74.0	10/19/2022	<p>Throughout document: changed “California-Oregon AC Intertie” to “AC Intertie (NWACI)”, “Northern Intertie Total” to “Northern Intertie”, “Montana-Northwest/West of Garrison” to “West of Garrison” and “Rock Creek” to “Rock Creek Wind” to properly reflect BPA’s path names in this document</p> <p>p.4, lines 108-110: added language that BPA will begin allocating base ETC across the Cross Cascades North path starting with the November 2022 base ETC studies and going forward</p> <p>p.6, line 188 (Table 1, BPA’s 1:1 Paths): reformatted Table 1 to include a separate column with “1:1 OASIS Path Name” information</p> <p>p.6, line 189 (Table 2, BPA’s Flow-Based Paths): reformatted Table 2 to include a separate column with “Flow-based OASIS Path Name” information; updated OASIS names where needed</p>	M. Olczak

ATCID Version History			
		p.19, lines 572-574: this wording was relocated from the “Hourly ETC Calculations” section, as it applies to all PTDF calculations	
75.0	01/20/2023	p.13, lines 322-323: Added clarification that BPA establishes TTC at the lesser of the value calculated in MOD-029 R2 or any System Operating Limit for that ATC path.	M.Olczak
76.0	05/17/2023	<p>p.3, line 92 and p.4, line 102: renamed sections</p> <p>p.4, lines 103-108: streamlined wording in the “Allocations - base ETC” section</p> <p>p.4, lines 109-113: created “Allocations - PTDFs” section and added details on how PTDFs for Cross Cascades North, Columbia Injection, and Wanapum Injection are calculated</p> <p>p.6, line 188 (Table 1, BPA’s 1:1 Paths): changed the name of the Reno-Alturas NW Sierra path to Reno-Alturas; added “PDCI” acronym after Pacific DC Intertie</p> <p>p.7-10, line 189 (Table 2, BPA’s Flow-Based Paths): added North of Grizzly path; added “West of LoMo” acronym after West of Lower Monumental; corrected the line owned by Chelan PUD in the Columbia Injection Transmission Line Components</p> <p>p.9, footnote 4: added implementation details for the North of Grizzly path</p> <p>p.14, lines 357-365: clarified how BPA encumbers ETC for its NITS_F obligations</p> <p>p.16, line 430: replaced “heavy load” with “peak load” for clarity</p> <p>p.17, lines 440-442: added information on how the generation levels at the Libby, Hungry Horse, Dworshak and Albeni Falls projects will be determined, starting with June 2023</p> <p>p.19, line 541: streamlined wording on Montana loads</p> <p>p.32, lines 928-934: clarified the instances where BPA makes adjustments to flow-based path ATC values</p> <p>Whole document: aligned the path names in the ATCID with the path names found in Table 1 (BPA’s 1:1 Paths)</p>	M.Olczak

ATCID Version History			
77.0	09/27/2023	<p>p.1, lines 7-9: added reference to NAESB WEQ-023</p> <p>p.2, lines 38-41: removed references to the specific paths where BPA implements TRM. Please see the TRMID for information on BPA's TRM methodology and impacted paths.</p>	M.Olczak
78.0	10/23/2023	<p>p.9, Table 2, BPA's Flow-Based Paths: removed footnote associated with North of Grizzly</p> <p>p.10, Table 2, BPA's Flow-Based Paths: added North of Pearl path</p> <p>p.10, footnote 4: added implementation details for the North of Pearl path</p> <p>p.11, lines 220-221: clarification that the cases used to calculate TTCs include transmission additions and retirements</p> <p>p.11, line 222: added "planned"</p> <p>p.12, lines 231-232: clarification that BPA models expected generation in the cases used to calculate TTCs</p> <p>p.12, line 264: added "and planned outages"</p> <p>p.13, line 270-271: clarification that BPA includes reliability constraints requested by another Transmission Operator in the cases used to calculate TTCs</p> <p>p.13, lines 278-279: additional language on how BPA determines TTCs</p> <p>p.13, lines 282-283: clarification that BPA does not take transmission uses into account when determining TTCs.</p> <p>p.19, lines 492-501: rewrite of section to capture update to BPA's methodology on how excess generation is reduced to balance the heavy load ETC cases</p> <p>p.25, lines 714-715: minor rewording for clarify</p> <p>p.32, line 909: minor rewording for clarity</p> <p>P.32, line 914: minor rewording for clarity</p>	M.Olczak
79.0	12/15/2023	<p>p.9, Table 2, BPA's Flow-Based Paths: added Rapids-Columbia #1 230k line to Columbia Injection Transmission Line Components</p>	M.Olczak

ATCID Version History			
		p.9, Table 2, BPA's Flow-Based Paths: removed footnote associated with North of Pearl	
80.0	02/01/2024	<p>Throughout document: removed all references to specific NERC ATC MOD requirements (MOD-001, MOD-008 and MOD-029)</p> <p>p.1, Purpose section: removed references to NERC ATC MODs</p> <p>p.2, Methodology Selected section: clarified that BPA uses the Rated System Path Methodology WEQ-023-2.2</p> <p>p.2, Methodologies Not Applicable to BPA section was deleted</p> <p>p.2, ATC Calculations section: deleted language on Limiting Assumptions, as associated NERC ATC MOD requirements were not migrated to WEQ-023</p> <p>p.2-3, Allocation Processes section: deleted language related to MOD-001, R3.5, stating BPA does not allocate to address forward looking congestion management and seams coordination, as associated NERC ATC MOD requirement was not migrated to WEQ-023</p> <p>p.9, BPA's Paths section: deleted language stating that BPA will use the Rated System Path Methodology for any future paths that are implemented</p> <p>p.9-10, Data and Assumptions section: deleted information on what WECC base cases include and deleted list of TOP areas contiguous with BPA's TOP area, as associated NERC ATC MOD requirements were not migrated to WEQ-023</p> <p>p.10-12, Process to Determine TTC section: deleted language stating how TTC values for the non-prevailing direction of flow would be established for BPA's paths if needed; deleted language on TTC Study Report Requests; in both cases, associated NERC ATC MOD requirement were not migrated to WEQ-023</p> <p>p.12, lines 254-256: aligned language on how TTC is established with requirements of WEQ-023</p> <p>p.12, line 275: added definition for ETC_F</p> <p>p.12, lines 276-278: aligned definition for NL_F with WEQ-023</p>	M.Olczak

ATCID Version History			
		<p>p.13, lines 296-298: aligned definition for GF_F with WEQ-023</p> <p>p.18, Outages in PTDF Calculations section: deleted statement that BPA has no executed coordination Agreements with other TSPs, as associated NERC ATC MOD requirement did not migrate to WEQ-023</p> <p>p.21, lines 589-590: aligned definition for ATC_F with WEQ-023</p> <p>p.21, lines 592-593: aligned definition for ETC_F with WEQ-023</p> <p>p.22, lines 634-635: aligned definition for Postbacks_F with WEQ-023</p> <p>p.23, line 669: added definition for ETC_{NF}</p> <p>p.23, lines 670-672: aligned definition for NITS_{NF} with WEQ-023</p> <p>p.23, lines 676-678: aligned definition for GF_{NF} with WEQ-023</p> <p>p.25, lines 712-713: aligned definition for ATC_{NF} with WEQ-023</p> <p>p.25, lines 716-717: aligned definition for ETC_F with WEQ-023</p> <p>p.27, lines 778-779: aligned definition for ETC_{NF} with WEQ-023</p> <p>p.29, lines 829-830: aligned definition for Postbacks_{NF} with WEQ-023</p> <p>p.30, Data Sources and Recipients: section deleted as associated NERC ATC MODs requirements were not migrated to WEQ-023</p> <p>p.30-31, Responding to Methodology/Documentation Clarifications and/or Data Requests section: revised to align with requirements of WEQ-023</p> <p>p.31, ATCID Revisions section: revised to align with requirements of NAESB WEQ-001</p>	
81.0	02/13/2024	p.3, Allocations – TTC and Allocations – base ETC sections: deleted references to South of Allston S>N, as path has been retired	M.Olczak

ATCID Version History			
		<p>p.6, Table 2: deleted South of Allston S>N from table, as path has been retired</p> <p>p.10-11, lines 217-223: deleted South of Allston from list of bi-directional paths, as South of Allston S>N has been retired</p> <p>p.14: FCRPS modeling section (starting on line 360): removed information on how generation levels at Libby, Hungry Horse, Dwirshak and Albeni Falls were set prior to June 2023</p>	
82.0	05/15/2024	<p>p.5, Table 1: added footnote for West of Garrison, clarifying that BPA treats West of Garrison with the same rating as the Montana to Northwest path</p> <p>p.10, line 215: removed the word “studied” from sentence, as some TTCs are determined per contract rights</p> <p>p.21, lines 606-609: updated language to clarify which variables BPA uses to account for Conditional Firm reservations when calculating ATC</p> <p>p.26, lines 749-752: updated language to clarify which variables BPA uses to account for Conditional Firm reservations when calculating ATC</p>	M.Olczak