Bonneville Power Administration

TOPIC

Transmission Operator Integrated Compendium

Processes and Guidelines

Version 9.0

Prepared by the BPA CSRP Team

Effective: October 3, 2022

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BACKGROUND

The Transmission Operator Integrated Compendium (TOPIC) is a collection of documents, processes and procedures, explanations, and other material to provide guidance for implementing and sustaining Transmission Operator (TOP) Services. The development of the TOPIC is intended to be collaborative and transparent between BPA and Customers to ensure successful implementation of the service.

PURPOSE

The Transmission Operator Integrated Compendium documents procedures necessary in order to provide BPA with the ability to carry out its TOP responsibilities as they relate to Customers' Bulk Electric System (BES) equipment. These TOP procedures are required in order to allow BPA to implement TOP authority over the BES equipment and demonstrate compliance with certain mandatory Reliability Standards and requirements. The procedures are mandatory for BPA and TOP Services Customers. These procedures contain, but are not limited to actions which must be taken by Customer prior to changing the status of or taking actions that could impact the control or protection of the BES transmission system associated with the transmission lines owned by Customer; orders, instructions, and other requests BPA may issue and Customer must follow in order for BPA to fulfill its TOP obligations.

OUTAGE COORDINATION (IRO-017-1)

General Overview

BPA will coordinate outages of TOP Services Customers' covered BES equipment in accordance with IRO-017-1. TOP Services Customers must comply with BPA's Outage Coordination Policy. Emergency outages are covered in the Real Time Operating Procedures section below. For purposes of these procedures, a dispatch center is a facility hosting operating personnel that monitors and controls the transmission system in accordance with a Transmission Operator Services Agreement and under the supervision of Bonneville Power Administration except during an emergency condition.

BPA Policy Reference

BPA Outage Coordination Policy:

https://www.bpa.gov/energy-and-services/transmission/outage-coordination

General Responsibilities:

1. BPA Outage Offices (Dittmer or Munro) ensure the work requested can be accomplished safely. In addition, they receive and review outage requests, assure that equipment nomenclature is accurate, assess conflicting outages, communicate with outage requestors, and finalize the outage plans. Finally, BPA Outage Offices ensure compliance with IRO-017-1 (Outage Coordination).
2. An Outage Requestor is the Facility Operator who requests an outage to perform planned maintenance, construction, testing, urgent, or emergency work.

Customers without 24/7 dispatch centers

TOP Services Customers without dispatch centers are expected to coordinate outages with District Personnel, and District Personnel will submit outage requests to Dispatchers/Outage Offices. If the TOP Services Customer worked directly with the Outage Office prior to becoming a TOP Services Customer, continuing to do so is acceptable. Customers can call the Outage Office directly if unable to contact the local district.

Customers with 24/7 dispatch centers

BPA Dispatchers/Outage Offices will coordinate outages with parties having 24-hour dispatch centers. TOP Services Customers with dispatch centers are expected to submit outage requests by providing email notification to the BPA Outage Offices.

5 Month, 2 Month, 21 Day, 14 Day, and 4 Day Equipment

1. Equipment outages must be scheduled through the BPA Outage Offices using Form 6500.15e and according to the timelines in Appendix 2 of BPA's Outage Coordination Policy.
2. Additions/changes to Equipment in Appendix 2: If BPA determines that equipment must be added to the Equipment List in Appendix 2; BPA will coordinate with the Facility Owner/Operator and allow 21 days until the change will be implemented. BPA will distribute the updated Equipment List to TOP Services Customer contacts identified in the TOP Services contract Exhibit C.
3. 5 Month equipment - 500kV transmission equipment & hard to get outages. This process is recommended but not required for lower voltage equipment.
4. 2 Month equipment – Equipment (when taken out of service) that may impact the BES or require a capacity reduction to assure reliable operation on a constrained path.
    a. 2 Month equipment outage requests are required to be submitted to BPA **2 Months prior to the month** the outage is scheduled to start.

   b. A constrained path is an intertie or flowgate on which power flow is monitored to ensure reliable operation of the transmission system. Please see Appendix 4 of the Outage Coordination Policy for a map of the Northwest's current constrained paths.
5. 21 Day equipment – BES equipment outages marked in the equipment list are required to be submitted to BPA 21 days prior to the Outage Week (Monday to Sunday) in which the outage is scheduled to start. This includes outages that may require additional time for Study Engineers to prepare Operating Plans. This includes generation derates of 50MW or greater at the unit or aggregate plant level.
   a. 21 Day equipment outage requests are required to be submitted no later than 1500 hours Pacific Prevailing Time (PPT), **21 days prior to the outage week** in which the outage is scheduled to start.
6. 14 Day equipment – All other BES Planned outages, unless noted in the exception list (See Appendix 1), are required to be submitted 14 days prior to the Outage Week (Monday to Sunday) in which the outage is scheduled to start. This includes generation derates of 50MW or greater at the unit or aggregate plant level.
   a. All BES Planned outage requests are required to be submitted no later than 1500 hours PPT, 14 days prior to the outage week in which the outage is scheduled to start.
7. 4 Day equipment: The equipment and outage categories listed in Appendix 1 of BPA's Outage Coordination Policy, for example, redundant relays and direct control (SCADA), may or may not be considered BES. These are required to be submitted to BPA no later than 1200 hours PPT, 4 business days prior to the day the outage is scheduled to start.
8. Opportunity Outages (Transmission and/or Generation)
   a. Requests made after the Reliability Coordinator's (RC) Short-Range timeline are considered Opportunity Outages, Transmission, or Generation and have the following requirements:
      i. Requested a minimum of 4 business days in advance.
      ii. Cannot be more than one day in length, with some exceptions.
      iii. Cannot require an Operating Plan.
      iv. Cannot be submitted after the Operation Planning Analysis (OPA) Lockdown window (with some exceptions).
   b. Opportunity Outages that do not meet the minimum submission timelines will be assessed and approved at the discretion of the Outage Dispatcher or the Real-Time Dispatcher. Requests made after the OPA Lockdown time must be considered Urgent or Emergency or approved by the Real-Time Dispatcher. Requests made after the OPA lockdown must be studied or assessed by the Real-Time System Study Engineer. The RC must also approve the outage request.
   c. Real-time or Same Day Opportunity Outages must be approved by Real-Time Dispatcher. The Real-Time System Study Engineer must perform the assessment/study. The RC must approve of the outage.

Study Engineer Coordination

1. If a Customer's scheduled outage requires an operating plan, BPA study engineers will coordinate with the Customer's operational contact as listed in Exhibit C of the TOP Services agreement. If the operating plan does not require any action by the Customer, BPA may move forward with the operating plan without additional Customer coordination. If the operating plan requires action by the Customer, BPA will ensure Customer agreement before the outage may proceed.
2. In real time, BPA will implement the operating plan as written or adjust as necessary in real time. If the operating plan changes, BPA will coordinate with affected parties.
3. If system conditions require rescheduling a planned outage, BPA will coordinate with the Customer to reschedule the outage.

4. If a planned outage requires dropping load, BPA will coordinate with the Customer; however, BPA retains the final risk-based decision to drop load or cancel the outage.

Coordination with Third Parties

1. BPA Outage Offices will review submitted outage requests from a reliability/coordination and reporting perspective. Application for Clearances and Hold Orders from foreign utilities requires additional detail specified in Appendix 6, Section C of BPA's Outage Coordination Policy.

2. Customer will be responsible for obtaining clearances from third parties at the time of the outage, unless the third party requires BPA to obtain clearances and BPA is able to facilitate the request.

BPA F 6500.15e
(12-2021)
(This form has combined forms, BPA F 6500.16e & BPA F 6500.17).

U.S. DEPARTMENT OF ENERGY-BONNEVILLE POWER ADMINISTRATION *(BPA)*

TRANSMISSION OPERATOR PROVIDER (TOP)
OUTAGE REQUEST – CUSTOMERS / USBR / COE

1. Requested by *(Name of contact)*	a. Contact Business Phone Number	b. Date

2. Utility / Customer / Powerhouse *(Name)*

3. Circuit / Equipment / Generation Unit:

4. Unit Status:

a. List ALL Unavailable Units | b. Facility Derated to ____ MW

5. Start Date	a. Switch Time	b. Work Time	c. Work Duration	d. Stop Date	e. I / S Time	f. Duration Type
						☐ Continuous ☐ Daily

6. Reason for Request:

a. ☐ Emergency	b. ☐ Urgent	c. ☐ Routine Maintenance

7. Clearance Required: ☐ Yes ☐ No ☐ Information Only

8. REQUIRED NOTIFICATIONS

a. BPA Outage	b. USBR Grand Coulee / Black Canyon / RCC COE:

(Click on below email address) (Attach saved form).

c. Munro Control Center: Outage Coordination:	**d. (509) 466.2409**	**e. e-mail: bpaoutage@bpa.gov**
f. Dittmer Control Center: Outage Coordination:	**g. (360) 418.2274**	**h. e-mail: bpaoutage@bpa.gov**

Outage Coordination Version History

Version	Issue Date	Action/Changes	Approved	Date
Rev. 0	08/14/2017	Initial process creation	J. McNeill	08/01/2017
Rev. 1	01/01/2018	Removed references to IT systems, added definition of Control Center, added requirement to use Form.17, added detail about distribution of Appendix 2.	J. McNeill	01/01/2018
Rev. 2	3/29/2019	Errata change: changed mw to MW, added Form 6500.17e	M. Walden	05/10/2018
Rev. 3	03/29/2019	Bullet and numbering changes	C. Higgins	07/10/2018
Rev. 4	03/29/2019	Changed hours to consistent military time	M. Walden	03/27/2019
Rev. 5	06/10/2020	Removed 45 day outage and added in 2 month and 5 month.	M. Walden	07/15/2019
Rev. 6	05/05/2021	Errata change: removal of extra spaces in background, purpose, outage	S. Hess	04/23/2020
Rev. 7		Updated Outage Coordination Form from 6500.17e to 6500.15e, changed reference from “Control Center” to “dispatch center”	A. Rider	11/29/2021
Rev. 9		Expanded on definition of “dispatch center” as referenced in the TOPIC	A. Rider	9/13/2022

NERC TRANSMISSION AVAILABILITY DATA SYSTEM (TADS) REPORTING

The purpose of the Transmission Availability Data System (TADS) is to implement a uniform approach to reporting and measuring transmission availability, performance, and other related reliability data. NERC will use the information to develop transmission metrics that analyze outage frequency, duration, causes, and many other factors related to transmission outages. NERC will also issue an annual public report showing aggregate metrics for each NERC Region. Each Transmission Owner reporting TADS data will be provided a confidential copy of the same metrics for its facilities. This requirement applies to BES elements only. While this requirement applies to Transmission Owners (TO), BPA provides the information needed for the necessary reporting.

1. BPA will include Customer-owned elements in outage reports posted daily and by calendar year on BPA's website https://www.bpa.gov/energy-and-services/transmission/transmission-availability Customer may download the report and filter by Transmission Owner to acquire information needed for outage reporting. The report will include 'out' date & time, 'in' date & time, and cause.
2. Dates and times will be reported in Pacific Prevailing Time (PPT) and in Coordinated Universal Time (UTC).
3. Reporting Responsibility:
   a. BPA will be responsible for reporting all elements where BPA has 100% ownership interest in such elements, as required. (BPA is TO)
   b. Customer will be responsible for reporting all elements where Customer has 100% ownership in such elements, as required. (Customer is TO)
4. In instances where ownership interest is shared between BPA and Customer, the reporting entity shall be the entity who owns the majority of the element. In these cases, BPA and Customer will share information to complete forms for multiple-owner elements.

NERC Transmission Availability Data System (TADS) Reporting Version History

Version	Issue Date	Action/Changes	Approved	Date
Rev. 0	08/14/2017	Initial process creation	J. McNeill	08/01/2017
Rev. 1	07/10/2018	Errata change added and removed (TO) acronym	M. Walden	05/10/2018
Rev. 2	07/10/2018	Indention changes.	C. Higgins	07/10/2018
Rev. 6	05/05/2021	Errata change adding ' to 1.	S. Hess	04/23/2020

REAL-TIME OPERATING PROCEDURES

Introduction

High levels of coordination will be required between BPA Real-time Dispatchers and TOP Services Customers. The following table describes BPA Real-time Dispatcher and Customer actions under various operating conditions. Actions differ depending on whether Customer maintains a 24/7 dispatch center. For purposes of these procedures, a dispatch center means a facility hosting operating personnel that monitor and control the transmission system in accordance with a Transmission Operator Services Agreement and under the supervision of Bonneville Power Administration except during an emergency condition.

For reference, the format of Operating Instructions issued by BPA is:
This is [Operator Name and Org]. I am instructing you [Entity] & [Operator's Name] on [Date and Time]: to [Action to be taken] by [XXX Hours or within XX Minutes] to mitigate critical system conditions.

	EVENT	ACTION(S)	
		24/7 dispatch center	**No 24/7 dispatch center**
1.	Mitigation required (Real-Time Contingency Analysis SOL exceedance).	BPA will issue Operating Instructions for the involved equipment. If unable to communicate with Customer, BPA may trip at BPA facilities to mitigate (this will generally affect a larger portion of the Customer system).	BPA will notify the Customer (if time allows) then take action via direct control (SCADA). If unable to operate Customer equipment, BPA may trip at BPA facilities to mitigate (this will generally affect a larger portion of the Customer system).
2.	System Operating Limit (SOL) exceeded real-time.	Adjust system limits if better limits are known. If SOL is still exceeded, work with Customer to mitigate exceedance within SOL time frame.	Adjust system limits if better limits are known. If SOL is still exceeded and time allows, work with Customer to mitigate exceedance within SOL time frame or take action via direct control (SCADA).
3.	Customer BES equipment has been or needs to be removed from service in real-time for emergency or urgent maintenance, mitigation, or any other kind of emergency.	If initiated by Customer, Customer will notify BPA Real-Time Dispatcher of need to remove equipment from service, preferably before taking out of service or else without intentional delay. If initiated by BPA, BPA will notify Customer of need, preferably before taking out of service and allow the Customer to remove from service. If Customer unable to remove from service in a timely manner, BPA may have to take action at a BPA controllable device.	If initiated by Customer, Customer will notify BPA Real-Time Dispatcher of need to remove equipment from service, preferably before taking out of service or else without intentional delay. If initiated by BPA, BPA will notify Customer of need, preferably before taking out of service and allow the Customer to remove from service. If Customer is unable to remove from service in a timely manner, BPA may have to take action at a BPA controllable device.

	EVENT	ACTION(S)	
		24/7 dispatch center	No 24/7 dispatch center
4.	Customer is ready to work on Planned outage.	Customer will notify BPA real-time Dispatcher prior to starting outage. BPA will assess if outage can move forward based upon real-time system conditions. BPA gives approval for work to commence. Customer calls BPA when switching is complete to give switching times. Customer calls BPA before restoring to get approval to restore. Customer calls BPA when restoration complete to give switching times.	Customer will notify BPA real-time Dispatcher prior to starting outage. BPA will assess if outage can move forward based upon real-time system conditions. BPA gives approval for work to commence. Customer calls BPA when switching is complete to give switching times. Customer calls BPA before restoring to get approval to restore. Customer calls BPA when restoration is complete to give switching times.
5.	Customer BES equipment trips out of service and locks out for unknown reasons.	Customer follows their operating procedures and notifies BPA. If any BES equipment cannot be returned to service within 30 minutes, another notification to BPA is required.	BPA notifies Customer of equipment out of service, BPA takes control action(s) at the request of the Customer (test/restore equipment if requested). Customer notifies BPA if any BES equipment cannot be returned to service within 30 minutes.
6.	BPA owned line to Customer BES trips out of service.	Coordinate testing/restoration with Customer.	BPA tests line (after patrol, if patrol is prudent), and restores line if test result is good. BPA notifies Customer if line tests bad. BPA notifies Customer if patrol finds trouble, if performed.
7.	Customer owned BES line to BPA terminal trips out of service.	Coordinate testing/restoration with Customer.	At Customer request, BPA tests line (after Customer patrols, if patrol is prudent), and restores line if test result is good. BPA notifies Customer if line tests bad. Customer notifies BPA if patrol finds trouble, if performed.
8.	Customer owned BES line to foreign utility trips out of service and locks out.	Customer coordinates testing/restoration with foreign utility. Notify BPA Real-Time Dispatcher afterward to provide out-of-service time and either in-service time or notification that line tested bad.	Coordinate testing/restoration with Customer.

	EVENT	ACTION(S)	
		24/7 dispatch center	No 24/7 dispatch center
9.	Foreign utility requests Customer terminal of BES line from them to be opened/closed.	Customer notifies BPA then coordinates with foreign utility.	Coordinate operation with Customer.
10.	Foreign utility requests switching/tagging at Customer terminal of BES line from them.	If BPA is notified, BPA will notify Customer.	If BPA is notified, BPA will notify Customer.
11.	Customer requests that BPA operate their BES equipment.	Not Applicable	BPA will operate Customer equipment as requested.
12.	Customer up-rates or de-rates the facility rating of their BES equipment.	Customer will notify BPA as soon as practicable. If the de-rate is done in real-time, notify the real-time Dispatcher.	Customer will notify BPA as soon as practicable. If the de-rate is done in real-time, notify the real-time Dispatcher.
13.	BPA receives alarms on Customer BES equipment.	Not Applicable	BPA will notify Customer of need to investigate and advise BPA of status of equipment.
14.	BPA receives voltage alarm on Customer bus.	Customer will monitor and control voltage. Customer must notify BPA Real-Time Dispatcher if it observes a voltage deviation of ± 10% of nominal voltage sustained for ≥ 15 continuous minutes.	BPA will assess alarm(s) and determine if further action is needed using prudent Dispatcher judgment.
15.	BPA requires operation of Customer BES equipment for BES operation (such as voltage/load control).	BPA issues Operating Instruction to Customer on their BES equipment.	BPA notifies Customer and issues Operating Instruction or takes action via direct control (SCADA).
16.	Station needs to be manned, either due to emergency or planned outage.	BPA calls out Customer personnel to man the station, unless an operating agreement between BPA and Customer states otherwise.	BPA calls out Customer personnel to man the station, unless an operating agreement between BPA and Customer states otherwise.
17.	RC issues Operating Instruction on Customer Equipment.	BPA will issue Operating Instructions for the involved equipment.	BPA will notify the Customer, if time allows, then take action via direct control (SCADA).
18.	Operating Instructions issued to foreign utility Balancing Authorities (BA) for Transmission Operator issues on Customer Equipment.	BPA will issue Operating Instructions to the BA for Customer equipment as needed (typically will apply only if Customer has generation).	BPA will issue Operating Instructions to the BA for Customer equipment as needed (typically will apply only if Customer has generation).

	EVENT	ACTION(S)	
		24/7 dispatch center	No 24/7 dispatch center
19.	Foreign utility Balancing Authorities (BA) issuing Operating Instructions to BPA on Customer BES equipment.	Foreign utility BAs may issue BPA, as the TOP, Operating Instructions on Customer equipment. BPA will issue Operating Instructions to the Customer as needed.	Foreign utility BAs may issue BPA, as the TOP, Operating Instructions on Customer equipment. BPA will notify the Customer, if time allows, and will operate Customer equipment via direct action (SCADA).
20.	Changes to Outage duration (equipment will not be removed from/returned to service as scheduled).	Customer will notify BPA Real-Time Dispatcher, as soon as practicable, when the timeframe for an outage on their BES equipment changes.	Customer will notify BPA Real-Time Dispatcher, as soon as practicable, when the timeframe for an outage on their BES equipment changes.
21.	EOP-004 Reporting Event (see Event Reporting Process).	Customer will notify BPA for any event that requires EOP-004 reporting on their BES equipment. In most cases, Customer will complete event reporting and send BPA a courtesy copy. See Event Reporting Procedure for more detail.	Customer will notify BPA for any event that requires EOP-004 reporting on their BES equipment. In most cases, BPA will complete event reporting and send Customer a courtesy copy. See Event Reporting Procedure for more detail.
22.	Planned telemetry or control equipment outages (BPA Real-Time Dispatcher will approve/disapprove outage, but will not be involved in Customer switching process).	Customer will notify BPA Real-Time Dispatcher prior to starting outage (BPA will assess if outage can move forward based upon Real-Time system conditions).	Customer will notify BPA Real-Time Dispatcher prior to starting outage (BPA will assess if outage can move forward based upon Real-Time system conditions).
23.	Planned relay or other equipment outages (BPA Real-Time Dispatcher will approve/disapprove outage, but will not be involved in Customer switching process).	Customer will notify BPA Real-Time Dispatcher prior to starting outage (BPA will assess if outage can move forward based upon Real-Time system conditions).	Customer will notify BPA Real-Time Dispatcher prior to starting outage (BPA will assess if outage can move forward based upon Real-Time system conditions).
24.	Unplanned telemetry or control equipment outages (includes failure of Remote Terminal Units (RTUs)).	Customer will notify BPA Real-Time Dispatcher of any unplanned telemetry or control equipment outages longer than 30 minutes in duration. BPA will work with Customer on plan of action pending restoration of equipment for outages longer than 30 minutes in duration.	BPA receives indication of loss of telemetry and control equipment. BPA notifies Customer of equipment failure. BPA will work with Customer on plan of action pending restoration of equipment for outages longer than 30 minutes in duration.

	EVENT	ACTION(S)	
		24/7 dispatch center	**No 24/7 dispatch center**
25.	Unplanned relay or equipment failures.	Customer will notify BPA Real-Time Dispatcher of unplanned relay or equipment failures that impact their BES.	BPA receives indication of loss of relay protection or equipment failures that impact Customer BES. BPA will notify Customer of failure/loss.
26.	Protection Scheme Status (Local Area Protection Schemes (LAPS), Auto-sectionalizing schemes (AS)).	Customer will inform BPA if protection schemes are taken out of service or fail.	Customer will inform BPA if protection schemes are taken out of service or fail.
27.	BPA loses communications with the Customer (cannot issue Operating Instructions).	BPA will treat this as an unplanned loss of control and report if outage is longer than 30 minutes in duration.	BPA retains control of Customer BES equipment via direct control (SCADA).
28.	Customer makes a change in ability for BPA to control via SCADA	Customer will schedule planned work through BPA Outage office. For urgent/emergency work Customer will schedule with BPA real-time Dispatcher. Customer will notify BPA real-time Dispatcher prior to any switching. Customer will provide a contact phone number in case BPA needs the device operated. Customer calls BPA real time Dispatcher prior to restoring control.	Customer will schedule planned work through BPA Field operations. For urgent/emergency work Customer will schedule with BPA real-time Dispatcher. Customer will notify BPA real-time Dispatcher prior to any switching. Customer will provide a contact phone number in case BPA needs the device operated. Customer calls BPA real time Dispatcher prior to restoring control.
29.	Customer to issue a Hold Order on customer equipment to non BPA personnel and BPA has ability to control the equipment (this is not a BPA issued Hold Order)	Customer will schedule planned work through BPA Outage office. For urgent/emergency work Customer will schedule with BPA real-time Dispatcher. Customer will notify BPA real-time Dispatcher prior to any switching or issuance of the hold order. Customer will disable BPA ability to control the device. Customer will provide a contact phone number in case BPA needs the device operated. Customer calls BPA real time Dispatcher prior to restoring control.	Customer will schedule planned work through BPA Field operations. For urgent/emergency work Customer will schedule with BPA real-time Dispatcher. Customer will notify BPA real-time Dispatcher prior to any switching or issuance of the hold order. Customer will disable BPA ability to control the device. Customer will provide a contact phone number in case BPA needs the device operated. Customer calls BPA real time Dispatcher prior to restoring control.

Real-Time Operating Procedures Version History

Version	Issue Date	Action/Changes	Approved	Date
Rev. 0	08/14/2017	Initial process creation	J. McNeill	08/01/2017
Rev. 1	01/01/2018	Removed redundant rows, added voltage deviation reporting requirement, added clarifying edits to identify Customer-owned equipment and BPA dispatcher.	J. McNeill	01/01/2018
Rev. 2	08/10/2018	Put LAP and AS in ( ), corrected typos.	M. Walden	05/10/2018
Rev. 3	08/10/2018	Errata changes, defining RTU	M. Walden	08/10/2018
Rev. 4	12/20/2018	Defined who the Customer should be notifying within BPA		
Rev. 5	02/01/2019	Added a numbers column for easy reference	M. Walden	01/31/2019
Rev. 6	03/29/2019	Added the format of Operating Instructions issued by BPA template language.	J. McNeill	03/27/2019
Rev. 7	05/05/2021	Errata changes	S. Hess	04/23/2020
Rev. 8	05/05/2021	Added Event 28 and 29 per Operations' direction	M. Granath	03/11/2021

EVENT REPORTING (EOP-004-4 and OE-417)

General Responsibilities

1. This Event Reporting process only applies to Customers' BES Equipment listed in Exhibit A - BES Equipment Subject to this Agreement of the TOP Services Agreement.
2. Only one entity should report each event, and the reporting entity should provide a copy of the report to any other responsible entity. Copies of Customer reports should be emailed to disturbances@bpa.gov.
3. Coordination on any reporting shall occur as appropriate. BPA will contact the Operations representative listed in Exhibit C - Notices of the Customer's contract unless an alternate contact is specified.
4. If Customer files a DOE Form OE-417, Customer shall call the BPA Real-time Dispatcher. In addition, copies of Customer reports should be emailed to disturbances@bpa.gov.
5. BPA reserves the right to make a final decision regarding whether or not an event requires reporting as a TOP.

EOP-004-4 Event Reporting Responsibility

Event Type	Entity with Reporting Responsibility	Threshold for Reporting	Reporting under TOP Services Agreement
Damage or destruction of a Facility	RC, BA, TOP	Damage or destruction of a Facility within its RC Area, Balancing Authority Area or Transmission Operator Area that results in action(s) to avoid a BES Emergency.	BPA
Damage or destruction of its Facility	TO, TOP, GO, GOP, DP	Damage or destruction of its Facility that results from actual or suspected intentional human action. It is not necessary to report theft unless it degrades normal operation of its Facility.	Customer
Physical threats to its Facility	TO, TOP, GO, GOP, DP	Physical threat to its Facility excluding weather or natural disaster related threats, which has the potential to degrade the normal operation of the Facility. OR Suspicious device or activity at its Facility.	Customer
Physical threats to its BES control center	RC, BA, TOP	Physical threat to its BES control center, excluding weather or natural disaster related threats, which has the potential to degrade the normal operation of the control center. OR suspicious device or activity at its BES control center.	BPA

Event Type	Entity with Reporting Responsibility	Threshold for Reporting	Reporting under TOP Services Agreement
Public appeal for load reduction resulting from a BES Emergency	BA	Public appeal for load reduction to maintain continuity of the BES.	N/A
System-wide voltage reduction resulting from a BES Emergency	TOP	System wide voltage reduction of 3% or more.	BPA
Firm load shedding resulting from a BES Emergency	Initiating RC, BA, or TOP	Firm load shedding ≥ 100 MW (manual or automatic).	BPA
BES Emergency resulting in voltage deviation on a Facility	TOP	A voltage deviation of =/> 10% of nominal voltage sustained for ≥ 15 continuous minutes.	BPA
Uncontrolled loss of firm load resulting from a BES Emergency	BA, TOP, DP	Uncontrolled loss of firm load for ≥ 15 minutes from a single incident: ≥ 300 MW for entities with previous year's peak demand ≥ 3,000 MW OR ≥ 200 MW for all other entities	BPA
System separation (islanding)	RC, BA, TOP	Each separation resulting in an island ≥ 100 MW.	BPA
Generation loss	BA	Total generation loss, within one minute, of: ≥ 2,000 MW in the Eastern, Western, or Quebec Interconnection OR ≥ 1,400 MW in the ERCOT Interconnection. Generation loss will be used to report Forced Outages not weather patterns or fuel supply unavailability for dispersed power producing resources.	N/A
Complete loss of off-site power to a nuclear generating plant (grid supply)	TO, TOP	Complete loss of off-site power (LOOP) affecting a nuclear generating station per the Nuclear Plant Interface Requirements	BPA
Transmission loss	TOP	Unexpected loss within its area, contrary to design, of three or more BES Facilities caused by a common	BPA

Event Type	Entity with Reporting Responsibility	Threshold for Reporting	Reporting under TOP Services Agreement
		disturbance (excluding successful automatic reclosing).	
Unplanned evacuation of its BES control center	RC, BA, TOP	Unplanned evacuation from its BES control center facility for 30 continuous minutes or more.	BPA
Complete loss of Interpersonal Communication and Alternative Interpersonal Communication capability at its staffed BES control center	RC, BA, TOP	Complete loss of Interpersonal Communication and Alternative Interpersonal Communication capability affecting its staffed BES control center for 30 continuous minutes or more.	BPA
Complete loss of monitoring or control capability at its staffed BES control center	RC, BA, TOP	Complete loss of monitoring or control capability at its staffed BES control center for 30 continuous minutes or more.	BPA

Event Reporting Version History

Version	Issue Date	Action/Changes	Approved	Date
Rev. 0	08/14/2017	Initial process creation	J. McNeill	08/01/2017
Rev. 1	01/01/2018	Added Customer reporting responsibility if the Customer is the initiating entity in certain events.	J. McNeill	01/01/2018
Rev. 2	05/24/2018	Clarified applicability of process	J. McNeill	05/24/2018
Rev. 3	02/01/2019	Indention changes	C. Higgins	07/10/2018
Rev. 4	02/01/2019	Adding full title to Exhibit references, adding specific contact info for BPA, and updating table for new version of standard.	J. McNeill	09/14/2018
Rev. 5	03/29/2019	Corrected DOE form title and clarified that BPA has the right to make the final call as a TOP.	M. Walden	03/27/2019
Rev. 6	5/5/2021	Errata	S. Hess	04/24/2020
Rev. 7	5/5/2021	In the Event Reporting Section, added 'In addition, copies of Customer reports should be emailed to disturbances@bpa.gov' under bullet 4.	S. Hess	04/28/2021

VISIBILITY OR CONTROL EQUIPMENT REPAIR EXPECTATIONS

Loss of Visibility and/or Control

In the event that BPA loses a single piece of data or a single control point on Customer-Owned equipment covered by TOP Services, BPA may consider allowing Customers' response to wait until normal working hours, based on the BPA dispatcher's judgment. Should BPA lose more than a single piece of data or a single control point but less than an entire station, the appropriate Customer response would be up to the judgment of the BPA's Senior Dispatcher dependent upon system conditions. In the event that BPA loses visibility and/or control of an entire station or group of stations owned by Customer and covered by TOP Services, BPA requires an immediate response (24/7) from Customer to troubleshoot and initiate corrective action and may require Customer to call out operations staff to man the station(s) that were lost.

Visibility or Control Equipment Repair Expectations Version History

Version	Issue Date	Action/Changes	Approved	Date
Rev. 0	08/14/2017	Initial process creation	J. McNeill	08/01/2017
Rev. 1	01/01/2018	Clarified responsible parties	J. McNeill	01/01/2018
Rev. 2	02/01/2019	Capitalizing Customer	M. Walden	08/10/2018
Rev. 3	05/05/2021	Errata	S. Hess	04/24/2020

BPA PLANNING COORDINATOR ANNUAL DATA EXCHANGE PROCESS

General Overview

The Western Electricity Coordinating Council (WECC) develops a series of power flow and dynamics simulation models which are used by BPA and its Customers for performing planning and operational reliability and economic studies needed to fulfill various North American Electric Reliability Corporation (NERC) and Tariff compliance obligations.

Pursuant to Requirement 1 of MOD-032-1, BPA established a set of common procedures for submitting data needed for developing the WECC interconnection planning models, found in the BPA MOD-032 Model Data Requirements & Reporting Procedures document. This document outlines these data reporting procedures needed to support the development of power flow and dynamics simulation base case models in a manner compliant with MOD-032 that realistically simulate steady state and dynamic behavior of the transmission system. This data exchange might also include additional data requirements. TOP Services Customers shall comply with the Annual Data Exchange format and schedule(s) issued by BPA.

BPA Policy Reference

TOP Customers are expected to comply with BPA's MOD-032 Model Data Requirements & Reporting Procedures, available at the following link:
https://www.bpa.gov/energy-and-services/transmission/reliability-nerc-standards

Equipment Changes

Per the obligations under the TOP Services Agreement, changes to any equipment identified in Exhibit A – BES Equipment Subject to this Agreement must be communicated immediately by following the Contract Exhibit Update Process. Examples include:

- Line rating memo
- Any changes to previously submitted CSRP Annual Data Exchange requests

BPA Planning Coordinator Annual Data Exchange Process Version History

Version	Issue Date	Action/Changes	Approved	Date
Rev. 0	08/14/2017	Initial process creation	L. Jones	08/01/2017
Rev. 1	11/10/2017	Added in Mid-Year changes portion	L. Jones	10/03/2017
Rev. 2	03/28/2018	Removed the term "Mid-Year"	M. Walden	03/27/2018
Rev. 3	02/01/2019	Adding full title to Exhibit letter	M. Walden	08/10/2018
Rev. 4	02/01/2019	Added in Customer providing data requests within BPA format and schedule	C. Higgins M. Walden	12/20/2018
Rev. 5	02/01/2019	Changed title to align with Annual Data Exchange. Also, added blurb about facility ratings.	M. Walden	01/11/2019
Rev. 6	05/05/2021	Errata	S. Hess	04/24/2020
Rev. 7	09/30/2022	Errata	A. Rider	09/13/2022

CONTRACT EXHIBIT UPDATE PROCESS

General Overview

The process for updating a contract exhibit within a TOP contract is triggered by a change in equipment, cost, contact information, and/or Implementation Plan. The purpose of this process is to ensure that TOP contract exhibits are updated in a timely and consistent manner.

Annually in calendar year Q3, CSRP will validate the accuracy of all data within all exhibits and update as necessary.

Exhibit A, BES Equipment Subject to this Agreement Updates

Customer shall notify CSRP by submitting the System/Equipment Change Form posted on the external website prior to any change in BES equipment. Please CC your Customer Service Engineer (CSE). BPA will coordinate with the Customer on BES determination. A change in BES equipment may include, but is not limited to:

- Adding new equipment
- Replacing or rebuilding existing equipment which would result in a change in equipment ratings
  - *Note: This does not include equipment maintenance that retains existing equipment ratings*
- Reconfiguring existing facilities (such as sectionalizing, bypassing, or modifying the layout of a substation)
- Adding, modifying, or removing remedial action schemes or special protection systems or other automatic controls that affect the BES
- Retiring or removing equipment
- Altering the status of a Transmission dispatch center to a NERC defined Control Center

Customer's official notice of change must occur a minimum of 210 days and/or as formally agreed prior to the expected equipment energization date except for equipment changes that are the result of a like-for-like replacement (i.e. replacing a mis-operating circuit breaker with equal or greater interrupting capabilities or re-conductoring a portion of a transmission line with no change to the rated capability of the line). More notice is preferred to ensure timely coverage of equipment in the planning or operations horizon. BPA will update Exhibit A – BES Equipment Subject to this Agreement to reflect equipment changes, share a draft with Customer to ensure changes are captured accurately, and offer a revised exhibit for signature.

Exhibit B, Billing Determinants Updates

Exhibit B updates will be driven by the annual cost reconciliation and cost allocation processes. Customers will have the opportunity to review draft budget numbers at the annual customer meeting in fall/winter. Exhibit revisions reflecting updated costs for the following calendar year will be issued by October 1st.

Exhibit C, Notices Updates

Exhibit C – Notices updates can be triggered by either party any time there is an update to contact information. If Customer information changes, Customer will notify CSRP by submitting the Notices Change Form found on the external site. CSRP will update the exhibit and issue the revision. If BPA contact information changes, CSRP will issue a revised exhibit.

Exhibit D, Implementation Plan Updates

CSRP shall work with Customer prior to any change in Implementation Plan actions. External regulatory impacts or feedback may necessitate updates to the Implementation Plan. CSRP will update Exhibit D to reflect Implementation Plan changes, share a draft with Customer to ensure changes are captured accurately and minimize impact and costs to Customer, and provide a revised exhibit.

Contract Exhibit Update Process Version History

Version	Issue Date	Action/Changes	Approved	Date
Rev. 0	08/14/2017	Original	TOPCAT	08/01/2017
Rev. 1	07/10/2018	Added in "in calendar Q3" timeframe. Errata change; turned first sentence from fragment to complete sentence.	M. Walden	05/10/2018
Rev. 2	07/10/2018	Added new language to the "Exhibit A, BES Equipment Subject to this Agreement Updates" section regarding customer coordination and customer notice of change. Language also aligns with the TPIP document.	C. Higgins	07/10/2018
Rev. 3	02/01/2019	Added in Ex. A / Ex. C form submission process	C. Higgins M. Walden	12/20/2018
Rev. 6	06/10/2020	Changed 90 day notice to 160 day notice per RC West timeline	M. Walden	03/31/2020
Rev. 6	05/05/2021	Changed annual customer meeting timeframe to fall/winter from late summer per Step 8 of Cost Reconciliation process, errata	S. Hess	04/24/2020
Rev. 7	09/30/2022	Modified system equipment change process: • Changed from 160 to 210 days to accommodate RC West requirements • Modified language to account for 'emergency' projects "210 days and/or as formally agreed" • Modified the equipment change form to capture: "Altering the status of a Transmission dispatch center to a NERC defined Control Center"	T. Daufel/L. Cardoza	6/7/2022
Rev. 8	09/30/2022	Clarification on Exhibit A equipment timeline: • Added note for like-for-like equipment maintenance Modified equipment change form to capture "Change in equipment ratings?"	A. Rider	9/13/2022

COST ALLOCATION

General Overview

TOP services costs are allocated across participating Customers based upon peak load, the number of BES lines and buses covered under the contract, and the base charge spread across all Customers.

The total costs to be recovered in each calendar year are based upon the forecast cost of incremental resources BPA hires to implement the service. Program costs will not include any penalties or fines assessed to the TOP. The incremental resource cost is adjusted annually to reflect actual costs and projected changes for the upcoming calendar year. Based upon this adjustment, the program determines a net cost to be allocated across participating Customers.

Each calendar year's cost to be collected is split across four billing determinants. For example, in 2018, 39 percent of the total cost is allocated to the base rate, 20 percent of the total cost is allocated based upon Customer load, and the remaining 41 percent is split equally between lines and buses. Based upon the sum of all participating Customers' loads and equipment, rates are derived per megawatt, per line, and per bus.

The derived rates are applied to each Customer's specific load and equipment, the base charge is included, and the total becomes the Customer's share of the annual cost.

Charges for BES equipment changes outside the annual billing cycle will be prorated, beginning when the asset is energized. The BES Equipment List (Exhibit A) and Billing Determinants (Exhibit B) will be updated to reflect the Customer asset changes. Changes will only apply to the asset owner and will not affect the overall cost allocation to each participating TOP services Customer until the next year's billing cycle.

Process Steps

Step 1 – CSRP to pull the cost adjustment (over/under payment) from previous year(s) to update the Cost Spreadsheet
Step 2 – CSRP will seek validation from internal organizations with allocated resources. Each organization will forecast their resource needs for the upcoming calendar year.
Step 3 – CSRP to confirm Customer assets with the Customer and the Customer Service Engineer (CSE)
Step 4 – CSRP to update the calendar year Cost Spreadsheet:

Example:

TITLE	2018 COSTS	2019 COSTS	2020 COSTS
Project Annual Cost	965,000	$965,000	965,000
Actual Collected Cost	---	$775,000	$1.02 M
Over/Under payment from previous calendar year	<165,000> (2017 due to over collection)	+25,000 (2018 due to under collection	<30,000> (2019 due to over collection)
Adjusted Calendar Year Projected Cost	800,000	990,000	935,000

Step 5 – The Cost Spreadsheet will calculate the new billing rates per:

a) MW/cost (pulled from the previous calendar year FERC 714 report)
b) Number of lines
c) Number of buses

* Base cost stays constant

Step 6 – CSRP will update and distribute all participating Exhibit B – Billing Determinants no later than October 1st annually.

a) CSRP will roll out draft numbers in the late Summer timeframe to the TOP Customers.
b) CSRP will answer cost-related questions at the Fall/Winter TOP Working Group Session.

Step 7 – Exhibit B – Billing Determinants will be effective on January 1st

Reference Material

- BPA FERC 714 Report
  https://transmission.bpa.gov/Business/Operations/FERC714/

FERC-714 Use

The FERC-714 Annual Power System Reports is a collection of annual reports to FERC including generation capabilities & peaks, Balancing Authority area loads & interconnections, scheduled and actual interchange, Customer load peaks, and system load forecasts. For TOP Services contractual costs, BPA uses the highest peak demand (MW) load shown on the "PT III, Sch1" tab as part of the calculation for determining Customer annual rate.

General Responsibilities

The CSRP Program Manager has been assigned by the Tier II Manager whose organization has lead responsibility for sustaining, maintaining, and updating the Customer costs associated to the TOP Services performed by BPA for the life-cycle of the contractual agreement. The Program Manger:

a) Establishes the Rate for each calendar year.
b) Ensures TOP costs are communicated in a clear transparent manner.
c) Provides continual emphasis on BPA's position of "Net-0."

Cost Allocation Version History

Version	Issue Date	Action/Changes	Approved	Date
Rev. 0	08/14/2017	Initial process creation.	L. Jones	08/01/2017
Rev. 1	11/02/2017	Process updated in response to Customer feedback.	L. Jones	10/06/2017
Rev. 2	01/01/2018	Added BES equipment charges language to describe the general overview of the process.	L. Jones	01/01/2018
Rev. 3	06/07/2018	Clarified mid cycle equipment updates and associated charges	L. Jones	06/07/2018
Rev. 4	06/26/2018	Added a new step 2 for seeking organization/management validation for what their resource needs for the upcoming calendar year. Errata changes.	L. Jones	06/26/2018
Rev. 5	02/01/2019	Changed Segment to Sections to align with language in Exhibit A – Equipment List	M. Walden	08/10/2018
Rev. 6	06/10/2020	Added in the NERC line definition and BPA's – to be revised at a later date.	M. Walden	07/15/2019
Rev. 7	06/10/2020	Based on internal discussions, removed the NERC/BPA line definitions.	M. Walden	10/02/2019
Rev. 8	06/10/2020	Removed summer meeting option, just going to one meeting in the fall/winter timeframe	M. Walden	03/31/2020
Rev. 9	05/05/2021	Errata changes	S. Hess	04/27/2020

COST RECONCILIATION

General Overview

This is the process for identifying how costs and revenue (net zero) are reconciled from one year to the next. The purpose of this process is to ensure reconciliation of costs are performed consistently, to demonstrate the mechanics of how costs are reconciled, and to add transparency between BPA and its TOP Services Customers.

Reference Document

- BPA FERC 714 Report
  https://transmission.bpa.gov/Business/Operations/FERC714/

Process Steps

Step 1: Annually beginning in June, CSRP will begin the Cost Reconciliation process.
Step 2: CSRP requests from Budget Office the allocated actuals (incremental to rate case) for CFTE/BFTE.
Step 3: CSRP requests Customer Billing to run a report against the TOP Services contract number correlating to individual Customers.
  a) CSRP to Q/A Exhibit B (Billing Determinants) against participating transmission bill(s).
Step 4: CSRP to seek validation from the internal organizations with allocated resources. Each organization will validate their resource expenditures for the current calendar year.
Step 5: Each year, CSRP to compare numbers and maintain Cost Spreadsheet.
Step 6: CSRP to calculate the over/under collection to be applied to the following calendar year.
Step 7: The next year's rates will be estimated by July and locked down by October 1 annually.
Step 8: CSRP will roll out draft numbers and answer any cost-related questions in the Fall / Winter TOP Working Group Session.

General Responsibilities

The CSRP Program Manager has been assigned responsibility by the Tier II Manager for sustaining, maintaining, and updating the Customer costs associated to the TOP Services performed by BPA for the life-cycle of the contractual agreement. The Program Manger:

d) Establishes the Rate for each calendar year.
e) Ensures TOP costs are communicated in a clear transparent manner.
f) Provides continual emphasis on BPA's position of "Net-0"rate.

Cost Reconciliation Version History

Version	Issue Date	Action/Changes	Approved	Date
Rev. 0	08/14/2017	Initial process creation.	L. Jones	08/01/2017
Rev. 1	03/28/2019	Errata change: Made first line into full sentence.	M. Walden	05/10/2018
Rev. 2	03/28/2019	Errata changes. Numbering changes. Changed language in section "Process Steps/Step 4" for seeking organization/management validation for what their resource needs are for the current calendar year.	C. Higgins	07/10/2018
Rev. 3	06/10/2020	Removed Summer meeting option, moving to just one fall/winter one	M. Walden	03/31/2020

TOP BPA – CUSTOMER COORDINATION SESSIONS

General Overview

BPA will host focused annual coordination sessions for each TOP Services customer, with representation from System Operations and Field Operations personnel. The sessions are intended to review any topics as they pertain to the Transmission Owner or Transmission Operator.

BPA's Annual Coordination Sessions

Who

Customer

Operation Staff, Dispatch Supervisor, Operations Manager, Lead Field Personnel (those who perform switching)

BPA

District Manager, Chief Substation Operator, System Operations, Substation Operations, System Protection and Control Representatives, Customer Service Engineer, and Account Executive

What

Annual session to review the TO – TOP relationship
Each session will be completely customized to that customer, their system, and our needs

Session Agenda

Review any operational issues from the last refresher training with the customer
(BPA to pull operational items from the logs).

Other Suggested Agenda Items:

- Review TOPIC Roles and Responsibilities
- Line and Equipment Jurisdiction
- Outage Coordination
    - Validate and discuss outage coordination process
        - Refresher on Appendix 2 of the Outage coordination policy
    - New OMS implementation and customer associated timeline
    - Day-of changes to Planned Outages
    - Planned, Urgent, and Emergency Outage Requests
- Trouble Reporting (when, who, what)
- Communication
    - Terminology and Nomenclature
    - COM-002 – Three-part communication
- Switching and Tagging Procedures for Clearances
- Switching and Tagging Procedures for Hold Orders
- Review of Protection Schemes
- Review Customer System
    - Prints and Diagrams

  - Inflight review – TOP customer projects
  - Equipment and Line Ratings
  - Submitting to BPA
  - Requesting from BPA
- Review Modeling Changes
  - BPA
  - Customer

Version History

Version	Issue Date	Action/Changes	Approved	Date
Rev. 0	8/6/2021	Initial process creation.	L. Cardoza	8/6/2021
Rev. 1		Explicitly called out reviewing equipment categorization in Appendix 2 of the BPA Outage Coordination Policy	L. Cardoza	6/7/2022

TOP ANNUAL LETTER PROCESS

General Overview

This process governs the creation and execution of the Annual TOP Services letter. The letter validates BPA has successfully performed the Transmission Operator function per the NERC Standards on behalf of qualifying Customers. This letter is in addition to and does not replace BPA's Annual System Review (ASR) letter.

BPA's Annual TOP Compliance Letter to Customers

For the Transmission Operator Role, BPA is providing services under a Customer executed contract. BPA will provide a letter certifying compliance to the Customer, stating that BPA performed the TOP function as described in NERC Reliability Standards:

- BPA's self-certification period is the calendar year.
- CSRP validates compliance status (including event driven standards) and prepares letter for signature – January timeframe.
- CSRP sends executed Section 4c compliance letter to Customer by March 31st annually per contract provision.

TOP Annual Letter Process Version History

Version	Issue Date	Action/Changes	Approved	Date
Rev. 0	11/02/2017	Replaced placeholder language with process.		10/06/2017
Rev. 1	07/10/2018	Defined acronym ASR and removed February timeframe.	M. Walden	05/10/2018
Rev. 2	07/10/2018	Indention and bullet changes.	C. Higgins	07/10/2018
Rev. 3	03/28/2019	Capitalized Reliability Standards	M. Walden	08/10/2018
Rev. 4	03/28/2019	Revised language on intent of the letter and removed general rules, as they were redundant.	L. Jones	01/31/2019
Rev. 5	06/10/2020	Added section specifications to the compliance letter	M. Walden	03/31/2020
Rev. 6	05/05/2021	Errata changes. Changed preformed to performed	S. Hess	04/27/2020

TOPIC REVIEW & UPDATE PROCESS

General Overview

The process for updating the TOPIC is driven by:

- A change to Reliability Standards applicable to the TOP
- Customer requests a new process or a change to an existing process
- BPA identifies a need to change an existing process or to create a new process

The purpose of this process is to ensure consistent management of TOPIC processes and guidance that set expectations for BPA and Customers under TOP Services. The result of this management will be increased user visibility, transparency, collaboration, ownership, clarity in roles, and responsibility.
The TOPIC is a collection of processes and guidance documents used for the sole purpose of providing guidance, instruction, and reference to the Transmission Operator Services Agreement(s) between BPA and its Customer.

Transmission Operator Integrated Compendium (TOPIC) Definition

"Transmission Operator Integrated Compendium" or "TOPIC" documents TOP procedures necessary in order to provide BPA with the ability to carry out its TOP responsibilities as they relate to Customer's BES equipment listed in Exhibit A – BES Equipment Subject to this Agreement.

Version Control of the TOPIC

The TOPIC has a summary of changes at the end of the document that will track programmatic changes using a whole number version control (i.e. Version 1, Version 2, etc.). Examples of programmatic changes include but are not limited to:

1. Cost allocation process changes
2. Contract exhibit update process changes
3. Additions and/or changes to definitions
4. New standards applicable to the TOP

Each process will have separate version control that will track changes in standards, requirements, or compliance processes and will use decimals (e.g. Version 1.1, Version 1.2) The TOPIC version control process will mimic the NERC Standards versioning process; errata changes will use sub-numbering and content changes will use whole numbering. Examples of process changes include but are not limited to:

1. Existing standard or requirement changes, requiring an update of the associated process
2. Retirement of standard or requirement
3. Data request time frames are altered by BPA

Establishment of New or Updated TOPIC Process

New or updated process/guidance is required:

- BPA Customer Service Reliability Program (CSRP) requests or approves need for new process/guidance and assigns individual process owner.
- BPA Customer requests a new process/guidance or revision/update to current process/guidance.
- BPA CSE/AE requests a new process/guidance or revision/update to current process/guidance.

Owner Determination & Guidance

Process Owner is determined in part by organizational impact and knowledge; and is ultimately assigned by the CSRP team.

Write Process/Guidance

Individual Process Owner and CSRP will work in collaboration to establish new process/guidance.

- Use TOPIC process templates to establish process.
- Follow consistent established format for supporting process.
- For other guidance (e.g. flowcharts, cheat sheets, etc.) that is deemed worthy of maintaining over time, the following critical elements much be present:
    - Purpose/General Overview
    - Version
    - Date approved
    - Date last changed
    - Date last reviewed
    - Review Period

BPA and Customer Collaboration

CSRP will facilitate collaboration with BPA Customer by:

- Communicating process/guidance via email
- Post draft process on TOP external website for 30-day Customer comment period, as applicable
    - BPA will post both a redline version as well as a clean version to aid in comparison
- CSRP will respond to Customer comments
- Reviewing process/guidance at the annual TOP Customer meeting

Finalize and Establish Review Period

CSRP performs the following:

- Finalizes process/guidance document with approval date
- Post final process/guidance to the BPA TOP external website
- Send out communication when document is final

Periodic Review

CSRP is responsible to periodically review the TOPIC document to ensure all processes and guidance documents are current and adequate.

Responsibilities

CSRP Program Manager is responsible for:

- Overall vision and direction of the TOPIC Review and Update Process

TOPIC Review and Update Process Version History

Version	Issue Date	Action/Changes	Approved	Date
Rev. 0	08/14/2017	Initial process creation		08/01/2017
Rev. 1	03/28/2018	Included adding the redline and clean version of the TOPIC	L. Jones	03/27/2018
Rev. 2	07/10/2018	Errata change: Made the first line a complete sentence. Changed TOPCAT for consistency throughout the document	M. Walden	05/10/2018
Rev. 3	07/10/2018	Changed language under “General Overview” for what drives changes in the TOPIC. Added new language for “Version Control Of The	C. Higgins	07/10/2018

		TOPIC". Language changes/additions align with TPIP.		
Rev. 4	03/28/2019	Added bullet to send out the TOPIC after has been finalized	M. Walden	08/10/2018
Rev. 5	06/10/2020	Removed TOPCAT reference, defined CSRP, errata changes	M. Walden	03/31/2020
Rev. 6	05/05/2021	Errata changes	S. Hess	04/27/2020

FAILURE TO ADHERE TO TOPIC PROCESSES

Purpose: In the event that a participating TOP Service entity fails to follow processes or procedures outlined in the TOPIC, BPA will take the following steps. This process applies to failure to follow processes or procedures in the same topical/subject area (the topical/subject areas are outlined within the TOPIC). It is important to note that failure to follow processes or procedures that compromise safety or reliability will result in immediate action.

Order of Escalation for contract violations (please note that the order of escalation will be based on the same violation occurring in a repetitive fashion):

1st Occurrence: Customer receives:

a. Email notification of the issue to the Operations and Compliance managers – outlining the entities inaccuracy in following the TOPIC
b. Refresher training from BPA, if appropriate

This step is intended to refresh the entity of the relevant processes or procedures

2nd Occurrence: Customer will:

a. Receive a formal letter to their General Manager, Operations Manager, and Compliance Manager (as applicable) – outlining the entities 2nd instance of not following processes and/or procedures in the TOPIC
b. Training refresher – mandatory

3rd Occurrence: Escalate to Transmission Vice Presidents for next steps

a. Dependent on the situation, the Transmission Vice President will engage the entity to discuss the issues and any potential concerns.

****Each situation is treated as case by case**

Failure to Adhere to TOPIC Processes Version History

Version	Date Edited	By	Approved by:	Summary of Changes
Rev. 1	04/15/2019	Lorissa Jones, Kammy Rogers-Holliday, Allen Chan, Dena Sauer, Kelly Johnson	TOP Executive Sponsors	Creation
Rev. 2	10/03/2019	M. Walden	M. Walden	Revised title so not to match the penalty charge title BPA has for outside TOP Services
Rev. 3	04/27/2020	S. Hess	S. Hess	Errata and question posed

CIP Concern Version History

Version	Issue Date	Action/Changes	Approved	Date
Rev. 0	08/14/2017	Initial process creation		08/01/2017
Rev. 1	01/01/2018	Added enclosures from the 03/23/2016 WECC workshop	L. Jones	01/01/2018
Rev. 6	06/10/2020	Removed Memo and WECC/CIP information	M. Walden	03/31/2020
Rev. 9		Removed legacy reference to CIP concerns on a low BCS connecting to BPA that could potentially change the low BCS designation	L. Cardoza	06/14/2022

SUMMARY OF HISTORY LOG

General Overview

The Summary Table provides a high level view of the changes made throughout the document.

Summary Table

PROCESS	SECTION	ACTION/CHANGES	DATE
Outage Coordination	Throughout	Bullet and numbering changes	07/10/2018
NERC Transmission Availability Data System (TADS)	Throughout	Indention changes	07/10/2018
Event Reporting	Throughout	Indention changes	07/10/2018
Contract Exhibit Update Process	Exhibit A, "BES Equipment Subject to this Agreements Update"	Added new language to the "Exhibit A, BES Equipment Subject to this Agreement Updates" section regarding customer coordination and customer notice of change. Language also aligns with the TPIP document.	07/10/2018
Cost Allocation	Process Steps	Added a new step 2 for seeking organization/management validation for what their resource needs are for the upcoming calendar year. Errata changes.	07/10/2018
Cost Reconcilliation	Process Steps	Errata changes. Numbering changes. Changed language in section "Process Steps/Step 4" for seeking organization/management validation for what their resourcee needs are for the current calendar year.	07/10/2018
TOP Annual Letter Process	Throughout	Indention changes	07/10/2018
TOPIC Review and Update Process	General Overview; Transmission Operator	Changed language under "General Overview" for what drives changes in the TOPIC. Added new language for "Version	07/10/2018

	Integrated Compendium (TOPIC) Definition	Control Of The TOPIC." Language changes/additions align with TPIP.	
Event Reporting	Real-Time Operating Procedures	Numbered each section to make easier reference to.	01/31/2019
General Responsibilites	EOP-004-4	Added new steps and clarity to event reporting per change to standard.	01/31/2019
Version control of the TOPIC	TOPIC Review and Update Process	Added in what drives a change to the TOPIC to align language with the TP –TPIP document	01/31/2019
Real Time Operating Procedures	Real-Time Operating Procedures	New template language for Operating Instructions issued by BPA	03/27/2019
Cost Allocation	Cost Allocation	Added in NERC/BPA's line definition	07/12/2019
Failure to Comply	Failure to Comply	Created Process	06/18/2019
Outage Coordination	Outage Coordination	RC timeline	08/01/2019
Line Definition	Cost Allocation	Removed NERC/BPA's line definition	10/02/2019
Protection System Oversight	Protection System Oversight	Removed entire section due to the PRC-001 standard retired on March 31, 2021	03/11/2021
Real-Time Operating Procedures	Real-Time Operating Procedures	Operations added events 28 and 29	03/23/2021
Event Reporting	Event Reporting	Added 'In addition, copies of Customer reports should be emailed to disturbances@bpa.gov' under bullet 4.	04/28/2021
Process creation	TOP BPA – Customer Coordination Sessions	Initial process creation	8/6/2021
CIP	Low BCS to High BCS	Removed legacy reference to CIP concerns on a low BCS connecting to BPA that could potentially change the low BCS designation	6/14/2022

Version History

Version	Issue Date	Action/Changes	Approved	Date
Rev. 0	07/10/2018	Added a "Summary of History Log" to track overall changes within the TOPIC document.	C. Higgins	07/10/2018
Rev. 1		Added in new history for Version 4	M. Walden	01/31/2019
Rev. 2	08/01/2019	Added in failure to comply and line definitions. Also, updated new RC outage timeline.	M. Walden	07/31/2019
Rev. 5	10/02/2019	Removed NERC/BPA's line definition	M. Walden	10/02/2019
Rev. 7	05/05/2021	Removed Protection System Oversight Section due to PRC-001 retired on 3/31/2021, Added events 28 and 29 to Real Time Operating Procedures	M. Granath	03/11/2021
Rev. 7	05/05/2021	In the Event Reporting Section, added 'In addition, copies of Customer reports should be emailed to disturbances@bpa.gov' under bullet 4.	S. Hess	04/28/2021
Rev. 8	8/6/2021	Initial process creation for TOP BPA – Customer Coordination Sessions	L. Cardoza	8/6/2021
Rev. 9		Changed language of "Control Center" To "dispatch center"throughout document and added definition used for TOPIC purposes. Updated Outage Coordination table 6500.17e to 6500.15e. Modified system equipment change process: • Changed from 160 to 210 days to accommodate RC West requirements • Modified language to account for 'emergency' projects "210 days and/or as formally agreed" • Modified the equipment change form to capture: "Altering the status of a Transmission dispatch center to a NERC defined Control Center" and "Change in equipment ratings?" Explicitly called out reviewing equipment categorization in Appendix 2 of the BPA Outage Coordination Policy Removed legacy reference to CIP concerns on a low BCS connecting to BPA that could potentially change the low BCS designation	T. Daufel	6/10/2022