



Peak Reliability (Peak) would like to extend its appreciation to those who provided feedback on the draft Seasonal Operations Planning Coordination Process Rev. 2.0. One additional TOP (Chelan PUD) provided feedback on the second posting. Peak responses are shown in blue type directly below the comment.

Chelan PUD Comments

1. General comment: To confirm, Peak is not performing any sort of internal seasonal studies as part of this study process. While understood, it does not set an ideal precedent. To set a better precedent, Peak may consider including a requirement for Peak to perform some sort of seasonal internal check for all or a selection (possibly rotating) of the IROLs within the RC area. This would both provide a high-level reliability check in the seasonal timeframe as well as examples to industry of how Peak approaches the requirements in their own process.

Peak performs internal studies on a routine basis which are not outage coordination studies or Operational Planning Analyses (OPA), but rather are one-off studies to investigate potential instances of instability, Cascading, or uncontrolled separation. Peak routinely coordinates with the impacted Transmission Operators (TOP) on these studies. These studies are performed outside the RC Seasonal Operations Planning Coordination Process, which is intended to provide a framework for coordinated studies performed by the four subregional study groups. It is not intended to include studies that are performed by Peak engineering staff. That said, Peak will be involved in these studies and will share any relevant information with regard to internal studies that Peak performs.

2. General comment: It would be useful to have a reminder sent to entities to review the contingency lists and performance criteria (voltage limits, etc) posted on the Peak RC site. The experience with these is that they quickly go out-of-date if not reviewed. Such a reminder could be a responsibility of the RC or the role of the Subregional Study Group chair.

Good suggestion.

3. General comment: Section Q addresses facility outages to be included in base cases but does not specify who should submit these. While it is CHPD's experience that the entity responsible for submitting data for base cases should review and submit these outages accordingly, we have observed this frequently does not happen for various reasons. Additionally, when discrepancies are identified and communicated, they are not always shared with all the potentially impacted parties. It may be helpful to have a recommendation that Peak or the Regional Study Chair will run a COS report and publish a list of these outages, or independently review the cases to ensure these outages have been included, as a 'second check' to ensure the all-season outages have been adequately provided in the study model.

The Seasonal Study Plan Outline includes an item to list the outages that will be in effect for the study. The Study Report Outline contains a similar item. Section Q has been modified to include a statement that the determination of outages to be included in any given study is the responsibility of the subregional study group. This modification does not specify how the outages are to be determined. The process should allow for flexibility regarding how that determination is made.

4. General comment: The review process comment submittal form is not ideal. We recommend Peak find a way to also include a marked-up draft copy as a valid means of comment submittal.

Peak is continuously looking for ways to make improvement to processes such as this. While Peak appreciates your perspective, Peak has tried the suggested approach in the past of reviewing mark-ups/redlines, and it proved to be unmanageable. The approach we are using is somewhat consistent with NERC's approach for document review.

5. General comment: With the pending CAISO and SPP RCs introduced to the western interconnect in a relatively short timeframe, Peak may consider how the seasonal operations planning coordination process may need to interface between entity's governed by other RCs. Otherwise, this document will be re-written shortly to address these sorts of issues.

This document will be revised to address multiple RC footprints. The small team made the decision to address this issue at a later time.

6. Page 7, Lines 83-89: Instability, Cascading, or uncontrolled separation risks – It is not clear if it is Peak's expectation that all entities are always required to run this analysis for every seasonal study, or if there are triggers (TOP-to-TOP impact, review of major interfaces) that would indicate these studies need to occur. Please clarify and if appropriate, identify triggers here when entities should run new seasonal studies to identify Instability, Cascading, or

uncontrolled separation risks. This is in support of the language on page 9 “avoid performing routine studies that provide essentially the same results season after season.”

This section is not intended to prescribe what TOPs are always required to do every season. This section simply describes the types of studies that are in-scope as compared with the types of studies that are out-of-scope for this process. The process in general is not intended to dictate what a TOP “is required to do”. Rather, the process in general provides flexibility for TOPs to work together to perform studies that the TOPs and the RC collectively determine to add reliability value.

7. Page 10, Lines 184-185: The study plan development and submittal process is unclear; is the study plan something that, for example, NOPSG would have as a standalone document for all its represented entities (and NOPSG would submit essentially for its members) or is the NOPSG study plan essentially the individual submitted study plans from all the TOPS, and all the individual TOPs are expected to submit those to Peak (not a NOPSG responsibility).

As is described on page 9, the subregional study group collectively determines what should be studied for a given season. Once that decision is made, the subregional study group creates the study plan for each of those studies. The entire RC Seasonal Operations Planning Coordination Process is written to be collaborative in nature – collaborative in determining the studies to be performed and collaborative in developing the plans for those studies. This exercise is a subregional study group exercise – it is not intended to be an exercise in collecting individual TOP study plans.

8. Page 11, Lines 205-216: Is the subregion being required to develop and publish their own case, originating from the WECC operating case? Please clarify. Additionally, if there are case changes that impact multiple subregions, how are those expected to be coordinated?

This language does not require a subregion to develop its own case. If the subregion does make modifications to the WECC Operating Case, those modifications must be completed in a timely manner. In the past and today most of the subregions develop their own case for their subregional use from the WECC base case by truing up generation dispatch and sometimes including outages that are not in the base case. There is no requirement in the document language that these modified cases to be shared with other regions.

9. Page 12, line 224: Consider modifying “reviewed and accepted” to “provided for review and submitted for acceptance in accordance with Section J.” to clarify/point to the process where this is done. Otherwise, it would appear from this section that ‘acceptance’ is based solely upon the act of the review.

Suggested language implemented.

10. Page 12, Line 233: The language “needs to be posted” is passive voice and seems weak. Who is responsible/expected to post this? Subregional entity? TOPs? Please clarify. Maybe revise as “Once the studies and associated study reports are accepted and finalized, the (insert responsible party here) shall post the study documentation on peakrc.org...”

Language was changed to reflect that posting on peakrc.org is a responsibility of the subregional study group.

11. Page 13, Lines 253-254: Consider revising “Impacted TOPs have been identified” to “Impacted TOPs, impacting contingencies, and critical system conditions have been identified” to better clarify the specific issues between TOPs.

12. Comment regarding “impacted” withdrawn internally

Peak assumes this comment means that the previous comment (comment #11) has been retracted.

13. Page 14, line 295: Is it a requirement that the peer review occur through the subregional study group, or could an entity simply send a study out to neighbors and the RC, outside the construct of the subregional study group, for a valid peer review? If this must be through the subregional study group, please specify.

Studies that are performed as part of the RC Seasonal Operations Planning Coordination Process are expected to be accepted in accordance with section J. There is nothing spelled out in the process for studies that are performed outside the RC Seasonal Operations Planning Coordination Process. For such studies, those can be circulated in any manner the TOP prefers. Section K is intended to clarify the distinction between studies that are performed as part of the RC Seasonal Operations Planning Coordination Process versus those that are not.

14. Page 18, line 374: As mentioned in comment #8, it is unclear if the subregional study group is to be developing cases; if so, this may be mentioned as one of the duties for the Chair.

Subregions are not required to develop their own cases however most do. The language in line 374 merely states that if cases are modified that the Chair will coordinate the activities associated with this case development. Most regions do develop their own cases so the Chair is responsible for ensuring that this task is completed within the required timeframes to be available to the members.

15. Page 18, line 383: This would appear it is the Chair’s responsibility to complete

the studies. This should be a responsibility of the TOPs. Please clarify the expectation here on line 383 or remove.

Completion of the studies in time for the development of Operating Plans is not a responsibility of the Chair. It is a responsibility of the subregional study group. The expectations of the Chair are captured in item #1 in this list.

16. Page 19, line 395-417: If a TOP is not identified in any of the studies to be run by the subregional study group or as an impacted/impacting entity, their involvement should be optional, or on an as-needed basis. This could be in the form of a request from the subregional study group or Chair with the specific needs or basis for the entity's involvement. The concern is that if the TOP is not needed to run studies or for additional coordination, then there isn't a purpose for them at these meetings as they can be aware of the subregional issues simply by reviewing the posted materials from these meetings. Likewise, if a TOP has no basis for involvement, their comments and forced involvement in these meetings may result in delays and unnecessary discussion regarding the resolution and coordination of system issues. Mandatory TOP involvement should be in those circumstances where the TOP is providing value towards system reliability.

Peak does not disagree with what is stated. The last paragraph in this section is intended to allow for smaller, less impacted TOPs to play a less prominent role in the process. While the process states that *"it is incumbent on smaller TOPs to participate in their corresponding subregional study group to maintain an awareness of any impacts the seasonal studies might have on their TOP Area"*, the process does not specify what that participation needs to look like.

17. Page 21, line 458: The word "base" should be followed by "case."

Good catch. Change implemented.

18. Page 21, line 459: An additional role of WECC should be to provide notifications of software updates and significant changes to approved models, such as the significant changes to the composite load model. Additionally, Peak may consider a joint role between Peak and WECC to communicate and develop any additional models for operational needs, so these may go through the WECC model approval process and also be included in the WECC base cases. The Peak RC recommended use of the ZLINW model (though not approved for use by WECC) is one such example.

WECC has an established process for determining what changes are made in the dynamics data and Peak should not impose changes. The ZLINW model did go through the formal review and approval process before it was placed into the official WECC dynamics file. Peak has been proactive in communicating known changes that are occurring but Peak is not the owner of this process and is not

always aware of all of the changes.

19. Page 21, line 471: Other than delay, there can also be significant changes published by WECC to system data after the case is published, or significant system events (such as the shutdown of SONGS after the San Diego event) that may warrant revisions to the seasonal timeframes as well. Please include language to support delays based on significant changes to base case data or other significant system events.

The reasons for the delays are not the issue – the fact of the delay is the concern addressed in the RC Seasonal Operations Planning Coordination Process. Accordingly, Peak sees no need in expanding on potential reasons for delays.

20. Page 21, line 473 – Please add “and communicate any changes to the group members.” to ensure these changes are communicated to those entities potentially performing studies based on such models and in accordance with such timeframes.

Good suggestion. Change implemented.

21. Page 22, line 477-478: Please clarify whose contingencies are to be included. Is this solely the TOP performing the study? Neighboring TOPs? All of WECC? Some clarifying language is needed here to identify “whose” contingencies are to be selected, and system scope.

Because each study can vary, “whose” Contingencies need to be included in a given study also vary. This is a decision that needs to be made for each study.

22. Page 22, line 486: Who is responsible for this? TOPs? Subregional study group? Peak? Please indicate whose responsibility this is. As mentioned in the general comments, an independent review of the outages included in the case by Peak or the subregional study group, in CHPD’s experience, would help improve case build quality.

Language was added to provide clarity for this responsibility.

23. Page 23, line 517: Consider replacing “Contingencies” with “Impacted TOPs, impacting contingencies, and critical system conditions” to clarify who is involved and under what conditions these are seen, in addition to the triggering events.

Good suggestion. Language changes implemented.

24. Page 27, Appendix II. Study Criteria Item 2: After “Transient performance criteria,” please add “(if more restrictive than the RC SOL methodology)” to

remind engineers of the transient performance criteria already posted in the RC SOL methodology. If less restrictive, than the RC SOL methodology automatically governs.

This should not be changed. This requires entities to explicitly state what transient performance criteria they are using. If they are following Peak's SOL Methodology then they simple need to state "XXX adheres to the transient performance requirements of Peak Reliability's SOL Methodology version 8.1". This language requires an affirmative statement without an assumption having to be made.

25. Page 28, Appendix II. Types of studies to be performed item 2: Please add the word "IROL" in front of N-1-1 or N-1-2 analysis to remind engineers and Peak that the N-1-1 and N-1-2 analysis are in the IROL portion of the SOL methodology.

Language changes implemented.

26. Page 28, Appendix II. Appendix item 4: Please clarify further. Is this asking for the IROL N-1-1/N-1-2 type of events, true planning P1+P1 events, or other? The scope and intent of this request is not clear, nor is the use of this list.

Peak agrees. This item has been removed.

27. Page 30, Seasonal Operations Planning Coordination Study Report, Study Scope/Description item 3 – Please include an alternative of "or system area one lines" for entities who do not wish to provide or do not have geographical overview diagrams. System area one lines provide a similar level of value.

Language changes implemented.

28. Page 32, Seasonal Operations Planning Coordination Study Report, Transient Stability Assessment, item 6: Could Peak provide technical guidance on how they are envisioning this to be done? Examples in PowerWorld and PSLF would be appreciated. I am aware of multiple ways to perform this calculation, with different results possible for the same simulation. For example, intentional load shed by relay (UFLS/UVLS) action, total load dropped by composite load model, load remaining out of service after composite load model contactor restoration, etc. Peak should give more clarity to obtain consistent results.

While there are no changes to the document in response to this comment, there may be a need to have related follow-up discussions. The requirements referenced were in the prior SOL methodology and were strictly transferred over. As actions by remedial action schemes, UVLS, UFLS are permitted as described in the SOL Methodology. The load referenced here is as stated in the TPL standard non consequential load. Load reduction by the composite load

model is not considered load lost due to instability.

29. Page 32, Seasonal Operations Planning Coordination Study Report, Conclusions, item 3: The Operating Plan is done after the study report. As this template is for the study report, the Operating Plan will likely not be complete, so it is not valuable to include this item. Perhaps of value in the conclusion is an identification of any Operating Plans that need to be developed for the upcoming season.

Language changes implemented.